Surgical observations : containing a classification of tumours, with cases to illustrate the history of each species : an account of diseases which strikingly resemble the venereal disease : and various cases illustrative of different surgical subjects.

SURGICAL
OBSERVATIONS.

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CONTAINING

A CLASSIFICATION OF TUMOURS, WITH CASES TO ILLUSTRATE THE HISTORY OF EACH SPECIES;—AN ACCOUNT OF DISEASES WHICH STRIKINGLY RESEMBLE THE VENEREAL DISEASE;—AND VARIOUS CASES ILLUSTRATIVE OF DIFFERENT SURGICAL SUBJECTS.

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AN

ATTEMPT

TO FORM

A CLASSIFICATION OF TUMOURS

ACCORDING TO

THEIR ANATOMICAL STRUCTURE.

THE obſervations which I have had an opportunity of making in St. Bartholomew's Hoſpital, on the various tumours which occur in the human body, have been ſo numerous, that I have almoſt felt myſelf under the neceſſity of forming ſome claſſification of thoſe diſeaſes. This claſſification I have attempted according to their anatomical ſtructure, which allows, at the ſame time, of a correſponding arrangement of thoſe practical remarks that have been promiſcuouſly collected. I have long felt ſo ſenſibly the advantages reſulting from an orderly arrangement of this extenſive ſubject, that I have

taught it for ſome years in my Lectures in the manner exhibited in the following pages. I am far, however, from being ſatisfied with the method which I have adopted, but it is the beſt that I have been able to deviſe; and, at leaſt, it has this utility, that it admits of a number of important caſes being arranged in a perſpicuous manner, and prevents that obſcurity which a total want of order neceſſarily creates.

My motives for laying this paper before the Public are; firſt, a conviction, that an extenſive knowledge of this ſubject, ſuch a knowledge as would lead to an attempt at claſſification, and to aſcertaining the peculiarities which characterize the different ſpecies of tumours, can only be obtained by thoſe who have very ample opportunities of obſervation. But it is probable that, when the ſubject in general has been ſurveyed, and its parts pointed out, that thoſe parts may be diſcriminated and examined with accuracy and advantage, by perſons who have not had opportunities of contemplating the whole. 2dly, The

minds

minds of medical men having of late been laudably excited to inveſtigate the nature of cancer, in hopes of diſcovering ſomething ſerviceable in that dreadful diſeaſe. It becomes therefore right to remark, and it will appear from the following account, that there are many local tumours and ulcers, as intractable in their nature, and deſtructive in their progreſs as cancer, which are liable to be confounded with that diſeaſe, but which ought to be diſtinguiſhed from it, before any progreſs can be made in this difficult part of medical ſcience. The ſociety for the inveſtigation of the nature of cancer have enquired about the anatomical ſtructure of that diſeaſe, and about other diſorders which have a reſemblance to it. In the preſent paper I have attempted to reply to ſuch interrogations, as far as my knowledge enables me. It appears to me, that, in order fully to inveſtigate any ſubject with advantage, a great deal of collateral knowledge is required, which ſerves, like light ſhining from various places, to illuminate the object of our reſearches. I am not without hopes that this paper will

tend to point out the required diſtinctions, and furniſh ſuch collateral knowledge.

In engaging in a new undertaking, I am likely to expoſe my own deficiencies of information; and by adopting a new and perhaps injudicious arrangement, and employing new and perhaps unfit terms, I may lay myſelf open to criticiſm and cenſure. I am not unwilling, however, to encounter theſe riſks, when I have it in view to bring a difficult and intereſting ſubject fairly before the public; in hopes that, by exciting the attention and engaging the labours of many perſons, it may, at length, acquire that perfection of which it is ſuſceptible, and which could never be brought about by the exertions of a few individuals.

The ſubject of tumours occupies a conſiderable ſpace in the works of the antient writers on medicine. They ſeem, however, to have conſidered the ſubject, rather with regard to its name than its nature; for we find a great variety of diſſimilar diſeaſes collected,

lected, I cannot ſay arranged, under the ſame general title. The error has deſcended to us, and even in Dr. Cullen's Noſology we find diſeaſes of arteries, veins, glands, tendons, joints, and bones, brought together under one order, and deſignated by the ſame name of *tumours*. Some of theſe alſo are merely enlargements of natural parts; whilſt others are entirely new productions, having no exiſtence in the original compoſition of the body. We have, I believe, ſufficient knowledge of the nature of theſe diſeaſes to claſs them more ſcientifically; and as this has not yet, as far as I know *, been done, I ſhall endeavour to ſupply the deficiency.

In the definition which I mean to give of tumours, I ſhall treſpaſs as much againſt the uſual import of the word, as noſologiſts have hitherto done in their claſſifications againſt

* Plenck publiſhed, 1767, a work intitled "Syſtema Tumorum," which I have not ſeen, but I conclude that it does not reſemble the preſent attempt; ſince no arrangement, like that which I have made, is to be met with in the Encyclopédie Methodique.

the nature of the diſeaſe. For I ſhall reſtrict the ſurgical ſignification of the word "Tumour" to ſuch ſwellings as ariſe from ſome new production, which made no part of the original compoſition of the body; and by this means I ſhall exclude all ſimple enlargements of bones, joints, glands, &c. Many enlargements of glands are however included in the definition, as they are found to be owing to a tumour growing in them, and either condenſing the natural ſtructure, or cauſing the abſorption of the original gland. Sometimes alſo the diſeaſe of the gland ſeems to produce an entire alteration of ſtructure in the part; the natural organization being removed, and a new-formed diſeaſed ſtructure ſubſtituted in its ſtead. In either of theſe caſes the diſeaſe of the gland is deſigned to be included in the definition; and the practical remarks which follow will equally apply to the ſame kind of diſeaſed ſtructure, whether it exiſts ſeparately by itſelf, or occupies the ſituation of an original gland. The ſtructure of tumours is alſo a part of morbid anatomy which deſerves to be examined; ſince (as it

did

did not come within the ſcope of the undertaking) it has not been fully diſcuſſed by Dr. Baillie in his very valuable treatiſe on that ſubject. Yet as he has given repreſentations of glandular parts enlarged by a diſeaſed ſtructure of an entirely new formation; ſo I ſhall have the advantage of referring the reader to his accurate and expreſſive repreſentations of ſome of thoſe appearances which it is my purpoſe to deſcribe. There is an obſervation of this judicious and accurate writer which I ſhall take the liberty of inſerting, ſince it juſtly appreciates the degree of utility of inveſtigations like the preſent: he obſerves, "that the knowledge of morbid ſtructure does not lead with certainty to the knowledge of morbid actions, although the one is the effect of the other; yet ſurely it lays the moſt ſolid foundation for proſecuting ſuch enquiries with ſucceſs. In proportion, therefore, as we ſhall become acquainted with the changes produced in the ſtructure of parts from diſeaſed actions, we ſhall be more likely to make ſome progreſs towards a knowledge of the actions themſelves, although it muſt be very ſlowly."

The incipient ſtate of tumours will naturally firſt engage our attention; and thoſe which perhaps form the beſt example and illuſtration of the ſubject, are thoſe which hang pendulous into cavities from the membranous ſurfaces which form their boundaries. The cauſe of tumours having a pendulous attachment attracted the attention of Mr. Hunter, who made the following remarks on the formation of one on the inner ſurface of the peritoneum, as is related by Mr. Home in the Tranſactions of a Society for the Improvement of Medical and Chirurgical Knowledge, Vol. i. p. 231. "The cavity of the abdomen being opened there appeared, lying upon the peritoneum, a ſmall portion of red blood recently coagulated; this, upon examination, was found connected to the ſurface upon which it had been depoſited by an attachment half an inch long, and this neck had been formed before the coagulum had loſt its red colour." Now had veſſels ſhot through this ſlender neck, and organized the clot of blood, as this would then have become a living part, it might have grown

to an indefinite magnitude, and its nature and progreſs would probably have depended on the organization which it had aſſumed. I have in my poſſeſſion a tumour, doubtleſs formed in the manner Mr. Hunter has deſcribed, which hung pendulous from the front of the peritoneum, and in which the organization and conſequent actions have been ſo far completed, that the body of the tumour has become a lump of fat, whilſt the neck is merely of a fibrous and vaſcular texture. There can be little doubt, but that tumours form every where in the ſame manner. The coagulable part of the blood being either accidentally effuſed, or depoſited in conſequence of diſeaſe, becomes afterwards an organized and living part, by the growth of the adjacent veſſels and nerves into it. When the depoſited ſubſtance has its attachment by a ſingle thread, all its vaſcular ſupply muſt proceed through that part; but in other caſes the veſſels ſhoot into it irregularly at various parts of its ſurface. Thus an unorganized concrete becomes a living tumour, which has at firſt no perceptible peculiarity

culiarity as to its nature; though it derives a ſupply of nouriſhment from the ſurrounding parts, it ſeems to live and grow by its own independent powers; and the future ſtructure which it may acquire, ſeems to depend on the operation of its own veſſels. When the organization of a gland becomes changed into that unnatural ſtructure which is obſervable in tumours, it may be thought in ſome degree to contradict thoſe obſervations: but in this caſe the ſubſtance of the gland is the matrix in which the tumour is formed.

The ſtructure of a tumour is ſometimes like that of the parts near which it grows. Thoſe which are pendulous into joints, are of a cartilaginous or oſſeous fabric; fatty tumours frequently form in the midſt of adipoſe ſubſtance, and I have ſeen ſome tumours growing from the palate, and having a ſlender attachment, which in ſtructure reſembled the palate. Sometimes, however, they do not reſemble in ſtructure the parts from which they grow. The inſtance juſt mentioned, of the pendulous portion of fat

growing

growing from the peritoneum, will ſerve as an inſtance: the veſſels which had ſhot into it, made the tumour into fat, whilſt the neck was of a fibrous and vaſcular ſtructure. I have ſeen oſſeous tumours unconnected with bone or perioſteum; and indeed, in general, the ſtructure of a tumour is unlike that of the part in which it is produced. Therefore we ſeem warranted in concluding, that in many caſes the nature of the tumour depends on its own actions and organization; and that, like the embryon, it merely receives nouriſhment from the ſurrounding parts.

If, then, the coagulable part of the blood be from any cauſe effuſed, if the adjacent abſorbents do not remove it, and the ſurrounding veſſels grow into it, the origin of a tumour may be thus formed. It may be right to reflect a little on the cauſes which may occaſion a depoſition and conſequent organization of the coagulable part of the blood; as ſuch reflections throw light on the nature and growth of tumours, and lead to the eſtabliſhment of principles, which are applicable

applicable to tumours in general. The depoſition of the coagulable part of the blood may be the effect of accident, or of a common inflammatory proceſs, or it may be the conſequence of ſome diſeaſed action of the ſurrounding veſſels which may influence the organization and growth of the tumour.

In the former caſes, the parts ſurrounding the tumour may be conſidered ſimply as the ſources from which it derives its nutriment, whilſt it grows apparently by its own inherent powers, and its organization depends upon actions begun and exiſting in itſelf. If ſuch a tumour be removed, the ſurrounding parts, being ſound, ſoon heal, and a complete cure enſues. But if a tumour be removed, whoſe exiſtence depended on the diſeaſe of the ſurrounding parts which are ſtill left, and this diſeaſe be not altered by the ſtimulus of the operation, no benefit is obtained: theſe parts again produce a diſeaſed ſubſtance, which has generally the appearance of fungus, and, in conſequence of being ir-

ritated by the injury of the operation, the diſeaſe is in general increaſed by the means which were deſigned for its cure. It appears therefore that in ſome caſes of tumours, the newly formed part alone requires removal, whilſt in others the ſurrounding ſubſtance muſt be taken away, or a radical cure cannot be effected.

There is yet another circumſtance deſerving attention, before I proceed to the particular conſideration of the ſubject; which is, that a tumour once formed, ſeems to be a ſufficient cauſe of its own continuance and increaſe. The irritation which it cauſes in the contiguous parts, is likely to keep up that increaſed action of veſſels which is neceſſary to its ſupply; and the larger it becomes, the more does it ſtimulate, and of courſe contribute to its own increaſe.

Suppoſe then a tumour to have formed, and increaſed; it will continue to grow and to condenſe the ſurrounding cellular ſubſtance, and thus acquire for itſelf a kind of capſule.

Tumours

Tumours are more closely or loosely connected to the surrounding parts; which circumstance seems to depend upon the degree of stimulus which they occasion, and the inflammation which they thus excite. This irritation perhaps may be the cause why some tumours which are slow in their first increase grow rapidly after they have acquired a certain size.

These preliminary observations will be referred to when the different kinds of tumours are described. When the history of different kinds of tumours is spoken of, there will be frequent necessity to advert to the effects of medical treatment upon them, it therefore seems right to premise a few words upon that subject.

It can scarcely be doubted but that when tumours form and grow, that there exists an increased state of action in the adjacent vessels, and the first curative intention in these diseases, will therefore be to repress as much as possible this unusual exertion of the vessels

ſels which gives riſe to the formation of a tumour, and, by its continuance, cauſes its increaſe.

I know of no local meaſures to diminiſh an increaſed or inflammatory action of any part of the body more rational in theory, or more efficacious in practice than thoſe of taking away the two great cauſes of animal actions, the blood and heat of the diſordered part. The former is generally accompliſhed by means of leeches applied in its vicinity, which ſhould be repeated as circumſtances indicate, and the latter, by the application of folded linen, wetted with ſedative lotions, by which a continual evaporation and conſtant abſtraction of heat is kept up from the ſurface of the ſkin. The effect of this laſt mode of treatment is much more conſiderable than at firſt ſight might be ſuppoſed. It operates on parts far beneath the ſurface. As heat is ſo tranſmiſſible a ſubſtance, ſo in proportion as the temperature of the ſkin is diminiſhed by evaporation, it derives heat from the ſubjacent parts, and thus are their

morbid actions leſſened. If by ſuch means the growth of a tumour be ſuſpended, another curative indication naturally ariſes which is to promote the abſorption of the new formed ſubſtance.

This indication is generally attempted by means of a ſtimulating nature, ſuch as frictions with mercurial ointment, preſſure, and electricity, or by means which alſo excite ſome counter-irritation, as rubefacient plaſters, ſolutions of ſalts, bliſters, and iſſues. Both reaſon and experience equally demonſtrate the impropriety of uſing the ſtimulating plan till the diſeaſe is firſt tranquillized, and in a degree ſubdued. It is reaſonable to expect that ſtimulating meaſures will increaſe the actions, which are going on in the diſeaſed part; and experience proves that diſeaſes are often increaſed by thoſe very means which, had they been employed at a proper time, might have effected their cure. The fact may be elucidated by a caſe that is, I believe, generally known and admitted, if a bliſter be applied for the cure of a pleuriſy before

before evacuations are made uſe of, and the activity of the diſeaſe thus checked, it aggravates the diſeaſe; if afterwards, it ſpeedily effects a cure. If a tumour or any local diſeaſe be for a time benefited by ſtimulating diſcutients, and the diſeaſed actions recur in it with a degree of activity; it is better to deſiſt from this latter plan of treatment, and adopt again the former one, till the diſeaſe is by ſuch means rendered inactive.

I am ſo well convinced of the neceſſity of attending to the time and circumſtances in which theſe remedies are applied, in order to give them their real efficacy in the cure of local diſeaſes, that I have been induced to dwell longer on this ſubject than may perhaps to ſome ſeem neceſſary.

When a bliſter is made permanent, or a ſeton or iſſue is made in the vicinity of a diſordered part, it is in fact producing a new but curable diſeaſe, in order to detract from an old one, over which we have leſs controul. But here the ſame obſervations apply. We

ſhould not produce a new diſeaſe till the active ſtate of the original one is diminiſhed, and till it is, as it were, rendered dormant; for otherwiſe the irritation of the intended remedy will rather tend to the aggravation than the cure of the diſorder; it will alſo increaſe the febrile diſturbance of the conſtitution, by adding to the cauſes of irritation.

Such are the local means of treating tumours, as well as other local diſeaſes, and to theſe I ſhall have occaſion to refer. I cannot ſpeak of the general means uſually employed to operate on theſe diſorders without entering into a long and, I think, unneceſſary diſcuſſion.

In attempting a claſſification of tumours, I ſhall ſuppoſe that they may be made to conſtitute an Order in the claſs of local diſeaſes in noſology; and the meaning of the word may be reſtricted, in the manner ſuggeſted, to ſubſtances of new formation, which made no part in the original ſtructure of the body; the order may then be divided into genera,

and the firſt genus may be denominated from its moſt obvious character, (that of having a firm and fleſhy feel,) Sarcoma, or Sarcomatous tumours.

This genus contains many ſpecies, to a deſcription of which I next proceed; the firſt of which I ſhall treat, being apparently compoſed of the coagulable part of the blood, rendered very generally vaſcular by the growth of veſſels through it, without having any noticeable peculiarity in their diſtribution, may therefore be called

Common Vaſcular, or organized Sarcoma.

The names by which I have diſtinguiſhed the different ſpecies of ſarcoma have been objected to, becauſe they are derived from internal circumſtances, and not from any information, which can be acquired prior to an operation. I have not, however, been able to deviſe any better mode of denominating theſe tumours; for all the ſpecies muſt agree in the external characters, thoſe of an increaſe of bulk, and a fleſhy feel. If,

however, an arrangement of tumours was once made, ſo that the hiſtory of each ſpecies could be particularly remarked, we might perhaps be able, from this circumſtance, to form a probable opinion of the nature of the tumour and of the mode of treatment which it would require; and, by adverting to the ſtructure of the removed tumour after an operation, we might determine whether it would be right to remove or leave the contiguous parts. It is deſigned then, to include under this title all thoſe tumours, which appear to be compoſed of the gelatinous part of the blood, rendered more or leſs vaſcular by the growth of veſſels through it.

The veſſels which pervade this ſubſtance are, in different inſtances, either larger or ſmaller, more or leſs numerous: they are diſtributed in their uſual arboreſcent manner, without any deſcribable peculiarity of arrangement. This kind of tumour ſeems to be the moſt ſimple in its nature; many, perhaps all, of the varieties of tumours, were at firſt of this nature. The fatty tumour lately

mentioned was doubtleſs at firſt common vaſcular ſubſtance; but the veſſels ſecreted fat in the body of the tumour, whilſt the neck underwent no ſuch change.

It is then ſuch tumours as are organized throughout, but without any diſtinguiſhable peculiarity of ſtructure, that are meant to be conſidered under this title. This ſtructure is met with not only in diſtinct tumours, but likewiſe in the teſtis, mamma, and abſorbent glands. In the teſtis I have ſeen the veſſels, very numerous and ſmall, diſperſed through every part of the tumour. In the mamma they ſeem to be rather large than numerous, and the organization appears leſs complete.

When this kind of tumour has attained a conſiderable ſize, the ſuperficial veins appear remarkably large; on which account, together with their curiouſly meandering courſe beneath the ſkin, they cannot fail to attract attention. Perhaps the weight of the tumour compreſſes the deeper ſeated veins, and

obliges the blood to return in larger quantities through thoſe nearer the ſurface; or perhaps theſe veſſels undergo a kind of ſympathetic enlargement; for they do not appear to be diſtended by the blood which they contain.

Theſe tumours are generally dull in their ſenſation; enduring even a rough examination by the hand, and electrifying, without becoming painful. I ſuſpect that it is this kind of ſarcoma, which ſometimes, though rarely, ſuppurates; but as, when that event takes place, even partially, the reſt of the ſubſtance is, in general, ſpeedily removed by abſorption, I have had no opportunity of aſcertaining this circumſtance.

Theſe tumours generally grow till the ſkin is ſo diſtended that it ulcerates, and expoſes the new-formed ſubſtance; which, being as it were obliged to inflame, and not being able to ſuſtain diſeaſe, ſloughs and falls out; ſometimes portions ſeem to be detached, and come away without ſloughing. In this manner

ner is the diſeaſe occaſionally got rid of; but ſuch is the conſtitutional irritation attending this proceſs, and the diſguſting fœtor and frightful appearance of the part, that the ſurgeon generally recommends, and the patient ſubmits to its removal at this juncture.

As Caſes will probably convey more information in leſs words than deſcription or narrative, and as they identify the kind of diſeaſe which is meant to be deſcribed, and inform, as it were by example; I deſign to relate one or more *caſes* of each kind of tumour, and thus curtail as much as I can my deſcription of them.

CASE.

A woman, between forty and fifty years of age, was admitted into St. Bartholomew's Hoſpital, on account of a conſiderable tumour which had grown on the inſide of the knee, and had ſo concealed the tibia, that it could not be felt. She remembered it when of the ſize of an egg, but could give no in-

formation to our inquiries, whether in that ſtate it was fixed to the bone, or moveable upon it. It meaſured two feet in circumference, and had been gradually increaſing between three and four years. The veins were large, and formed an appearance like network on the ſurface.

As the tumour advanced in ſize it had gradually prevented her moving about till it entirely confined her to her bed. In this ſituation it was not painful till within half a year before her admiſſion into the hoſpital; when, from the ſenſe of diſtenſion of the ſkin, and the inflammation induced in that part, ſhe became reſtleſs and feveriſh, and loſt her fleſh conſiderably. At length, the the ſkin ulcerated, and the expoſed tumour inflamed and ſloughed at different times, ſo as to leave a cavity in it of the ſize of a pint-baſon. From the ſides of this cavity there was poured forth a moſt *copious and fætid* diſcharge: ſhe had frequently loſt blood from the veſſels laid open by ulceration or ſloughing; and, on her admiſſion into the hoſpital

ſhe

ſhe had a confirmed hectical fever through weakneſs and irritation.

The ſtate of the patient's health, the magnitude of the tumour, the uncertainty of its origin, (for it was ſuppoſed to have ariſen from a diſeaſed bone) made amputation appear the only means of preſerving life. Upon an examination of the amputated limb, which was previouſly injected, this tumour was found to have no connection with the bone or joint upon which it lay. The lower part of the tumour was covered by a thin capſule, made apparently of condenſed cellular ſubſtance, and it was looſely connected to the parts on which it lay; but on the ſurface of the tumour next the ſkin the capſule firmly adhered to it in conſequence of the inflammation which had taken place. The ſubſtance of which the tumour was compoſed appeared to have been originally of a coagulable nature, and the veſſels which ramified throughout it, appeared to be rather large than numerous: yet this appearance might have ariſen from an imperfect injection.

This

This ſingle caſe is ſufficient to convey all the general information on this ſubject, which I have obtained. It is unneceſſary to add parallel inſtances, and I am unwilling to load the account with minute particulars, leſt they ſhould obſcure the principal facts. Probably from the want of knowledge I may have included, without diſcrimination, many varieties in this ſpecies of tumour; and, perhaps, further obſervations will furniſh more ſpecific diſtinctions in theſe diſeaſes. The ſubject is but begun; and the difficulty of the inveſtigation will, I hope, apologize for the ſmall advances which I have been yet able to make.

Adipoſe Sarcoma.

This is a very common ſpecies of ſarcomatous tumour, and is formed moſt commonly on the front, or back part of the trunk of the body, and ſometimes in the extremities.

Although it is generally formed in the midſt of cellular and adipoſe ſubſtance, there can

can be little doubt that its origin is like that of other tumours; that, in the firſt inſtance, it was coagulable lymph, rendered vaſcular by the growth of veſſels into it, and that its future ſtructure was the conſequence of their arrangement and actions. That this was the caſe in the pendulous tumours mentioned in the preliminary obſervations (page 9.) ſeems to be certain.

The diſtinct origin of ſuch tumours is made ſufficiently evident, by obſerving, that they have always a thin capſule of common cellular ſubſtance, which ſeparates them from the contiguous parts. This capſule ſeems merely to be the effect of that condenſation of the ſurrounding cellular ſubſtance, which the preſſure of the tumour occaſions. As the growth of adipoſe tumours is regularly and ſlowly progreſſive; as nothing like inflammation in general accompanies their increaſe; their capſules afford a ſtriking inſtance of an inveſtment acquired ſimply by a ſlight condenſation of the ſurrounding cellular ſtructure, unaffected by inflammation. The capſule,

ſule, which is very thin, adheres but ſlightly to the tumour; and the principal connection appears to be by veſſels, which paſs through it to enter the ſubſtance of the tumour. Theſe veſſels are ſo ſmall and the connection ſo ſlight, that no diſſection is required to ſeparate it; for when the tumour is to be removed, the hand of the operator can be eaſily introduced between it and its inveſtment, and it is thus readily turned out of its capſule.

The veſſels of adipoſe tumours are neither large nor numerous; they are readily torn when the ſeparation alluded to is attempted, and they ſcarcely bleed after it has been effected. It is natural to ſuppoſe when the greater part of a large tumour has been detached, and no veſſel of conſequence has been divided, that ſome principal nutrient artery will afterwards be met with, and this ſuppoſition produces an unneceſſary heſitation on the part of the operator. There is indeed no ſpecies of tumour that can be removed with ſo much celerity, with ſuch apparent

parent dexterity, or with ſuch complete ſecurity againſt future conſequences as thoſe of an adipoſe nature. In ſome inſtances, however, when inflammation has been induced, the capſules even of theſe tumours are thickened, and adhere ſo as not to be ſeparable without difficulty from their ſurface. To certify this remark I may mention the caſe of a man who had an adipoſe tumour growing beneath the ſkin of the nates, in which the preſſure from ſitting occaſioned inflammation, and this kind of tenacious adheſion of the capſule to its ſurface. This circumſtance made the ſeparation of the ſkin from off its ſurface difficult, when the extirpation of the tumour was undertaken; but, after that was accompliſhed, the baſe of the tumour was lifted up and removed with great facility, and almoſt without the uſe of the knife. The under part of this tumour had not a regular ſurface, but projected in portions ſo as to have a lobulated appearance; a circumſtance which is not unfrequent, and which deſerves to be mentioned. From the occurrence of inflammation likewiſe theſe

tumours

tumours ſometimes adhere to the contiguous parts; of which circumſtance the caſe which I am about to relate affords a curious example.

I have known ſeveral fatty tumours growing at the ſame time, in different parts of the body of the ſame perſon.

I ſhall take the liberty of giving an account of the extirpation of a very large tumour of this kind; as the caſe is particularly intereſting, and ſhews that the circumſtances uſually met with are unaltered by the ſize of the tumour.

CASE.

A healthy middle-aged man had a tumour formed apparently beneath the faſcia of his thigh, which he remembered when no bigger than an egg. It had increaſed by a regular and ſlow progreſs, in little more than four years, to a very great magnitude, ſuch as may be eaſily ſuppoſed, when it is told, that it weighed, after removal, between fourteen and

and fifteen pounds. It had been attended with no pain during its increaſe, and was now only inconvenient by its bulk.

The ſurgeons who firſt ſaw this patient would not undertake any operation, feeling an uncertainty as to the nature and connections of the tumour; though they all agreed that, when the ſkin gave way, there was but little chance of the poor man's ſurviving the conſequences of ſuch an expoſure. Conſidering from the hiſtory of the caſe, that the tumour muſt have been removable in the firſt inſtance; believing, from its freedom from pain and irritation, that it was of no malignant nature, and that an operation was only alarming from its magnitude; I recommended the patient to ſee the moſt eminent ſurgeons in London, before he returned in deſpair to the country, from whence he had come for relief. Mr. Cline gave him more direct hopes of ſucceſs than he received elſewhere, and he went into St. Thomas's Hoſpital to ſubmit to the operation.

When

When Mr. Cline had divided the ſkin and faſcia of the thigh, the tumour was eaſily turned out; but it had unfortunately acquired a ligamentous adheſion to the orbicular ligament of the hip, which could not be ſeparated without, in ſome degree, injuring that part. This attachment appeared to be about half an inch in breadth and about one fourth of an inch in length. The cauſe and nature of this firm attachment to the ligament of the hip, ſeems the only circumſtance peculiar to this caſe, or requiring explanation. It appears to me eaſily accounted for, by ſuppoſing the tumour to have compreſſed and irritated that part, and thus to have occaſioned an adheſion, at firſt of a gelatinous nature, but which afterwards becoming organized, had aſſumed the ſtructure of the parts, from whence it proceeded. In like manner tumours growing near, and compreſſing the ſurface of bones, frequently occaſion a degree of exoſtoſis.

No hæmorrhage followed the removal of the tumour. The wound at firſt appeared diſpoſed to do well, but the patient became feveriſh,

feveriſh, and it did not unite by adheſion. There were alſo ſome ſymptoms indicating inflammation about the hip-joint. The man, however, ſurmounted theſe difficulties, and, after ſome months, was diſcharged from the Hoſpital.

There were two circumſtances in the operation attended with danger; one, the ſize of the wound, which could hardly be expected to unite by adheſion, on account of the irritation which from its extent muſt be created; the other, this unlucky attachment to the ligament of the joint. It is to be lamented, that a diſeaſe, ſo readily removable in its commencement, ſhould have been ſuffered to acquire a magnitude, which alone was a ſource of danger.

Pancreatic Sarcoma.

The next ſpecies of ſarcomatous tumour which I ſhall deſcribe, reſembles in appearance the pancreas, and, on that account, may be named (if the etymological import of the

word be not conſidered as prohibitory) Pancreatic Sarcoma.

This new-formed ſubſtance is made up of irregularly ſhaped maſſes; in colour, texture, and ſize reſembling the larger maſſes which compoſe the pancreas. They appear alſo to be connected to each other, like the portions of that gland, by a fibrous ſubſtance of a looſer texture. This kind of ſarcoma, though ſometimes formed diſtinctly in the cellular ſubſtance, more frequently occurs in the female breaſt, perhaps originating in lymphatic glands; and, as caſes of this kind ſufficiently illuſtrate its nature and progreſs, and appear more intereſting in proportion to the importance of the parts concerned, I ſhall ſelect ſome inſtances of this kind, to ſhew thoſe circumſtances which ſeem moſt important in the hiſtory of this ſpecies of ſarcoma.

I ſhall, however, firſt relate a caſe of this diſeaſed ſtructure occurring in the lymphatic glands beneath the lower jaw, and afterwards

ſpeak of its progreſs when it takes place about the female breaſt.

A man came to St. Bartholomew's Hoſpital from Oxfordſhire, with three diſeaſed lymphatic glands, each of the ſize of a very large plumb. They were ſituated beneath the baſis of the jaw, upon the mylohyoideus muſcle. They reſiſted the attempts which had been made to diſcuſs them; and had not been removed from an apprehenſion that a dangerous hæmorrhage would take place in the operation. The glands had gradually, though very ſlowly, attained their preſent magnitude, for the diſeaſe was of fifteen years' duration. The ſurrounding parts were not affected. Sir Charles Blicke undertook and accompliſhed the removal of the diſeaſed glands, the ſtructure of which was exactly ſuch as has been deſcribed. This caſe is related in the firſt place, as it ſhews moſt clearly the uſual characteriſtics of this ſpecies of diſeaſed ſtructure; which are thoſe of ſlowly increaſing, of not being

prone to inflammation, or tending to ſuppuration.

It may not be improper to mention, though it is irrelevant to the preſent ſubject, that, in the operation, the external maxillary artery was unavoidably divided. It did not, however, bleed immediately after the operation, ſo that this cirumſtance was not perceived; and the edges of the wound were brought together by one ſuture, and accurately and firmly cloſed by ſticking-plaſter. Shortly afterwards the patient felt a ſenſe of choking, which increaſed to a ſtate of almoſt actual ſuffocation. Indeed it ſeems probable that this might really have happened before any one could have got to his aſſiſtance, had not ſome of the plaſters fortunately given way, and afforded ſome diſcharge to the blood: for a very great quantity of coagulated blood had collected within the wound, and compreſſed the trachea and pharynx to a greater degree than would readily be believed by thoſe who had not witneſſed the fact. This

circumſtance is mentioned to ſhew the impropriety when there is any chance of hæmorrhage, of cloſing wounds ſo ſtrictly by ſticking-plaſter, as to allow no exit to any blood that may be effuſed; and it is particularly unſafe in circumſtances ſimilar to thoſe of the foregoing caſe. If the hæmorrhage be but ſmall in quantity, and the eſcape of the blood be prevented, it ſeparates the ſides of the wound which ſhould lie in cloſe contact, and thereby prevents their immediate union; and, if it be conſiderable, it deſerves to be remarked, that, ſo far is the compreſſion which the confined blood muſt make on the arteries, from which it was poured, from ſtopping the bleeding, that it ſeems to be a ſtimulating cauſe, exciting an hæmorrhagic action in the veſſels. This remark is manifeſted by the preſent, as well as by many other caſes in ſurgery.

This kind of ſarcoma frequently forms amidſt the mammary gland, a little above, and on that ſide of the nipple, which is next to the arm. Its appearance would lead one

to ſuppoſe, that it was a lymphatic gland, which is uſually found in that ſituation, converted into this ſtructure; but ſometimes it ſeems like a diſtinct tumour. It is the appearance of the capſule which inveſts the tumour, that has led me to form theſe opinions.

Theſe tumours leſſen in bulk if judiciouſly treated; but if they cannot be entirely diſperſed, they increaſe gradually; and when they have attained ſome conſiderable ſize, they are generally removed, from apprehenſion of the conſequences which they might produce, if they were ſuffered to remain. If the tumour be indolent, and if it increaſes ſlowly, the parts ſurrounding it, and the glands in the axilla are not affected. But ſome tumours formed by this kind of diſeaſed ſtructure, which do not unfrequently occur in the breaſt, are, contrary to the ordinary properties of ſuch diſeaſes, of a very irritable nature, occaſioning ſevere and lancinating pain, and producing an inflammatory ſtate of the ſkin which covers them, ſo that it becomes

comes adherent to their ſurface. They alſo irritate the abſorbents leading to the axilla, and produce enlargement of their glands. From theſe circumſtances I ſuſpect that theſe tumours may be frequently conſidered as cancers. Theſe extremely irritable tumours do not generally attain any conſiderable magnitude; they are reduced in ſize by the treatment which has been mentioned, but increaſe again, when it has been deſiſted from. Sometimes a tumour of this nature, which was irritable in the firſt inſtance, becomes indolent after the activity of the diſeaſe has been checked by proper local applications, but in other caſes the irritability of the diſeaſe recurs. The pain is lancinating, and ſo ſevere as to make the patients feveriſh, grow faint frequently, and loſe their muſcular ſtrength. When the axillary glands become affected, one generally ſwells at firſt, and is extremely tender and painful; but afterwards the pain abates, and it remains indurated: another then becomes affected, and runs through the ſame courſe. I remember an inſtance where many of the glands attained a conſiderable

magnitude. The caſe was conſidered as cancerous, and the tumour, which was of the ſtructure that has been deſcribed, and alſo ſome of the diſeaſed glands were removed, but ſeveral were left, and the patient did well.

CASE.

A young woman, who lived with me as a ſervant, ſuffered for more than two years ſevere pain, and conſiderable conſtitutional indiſpoſition, from a tumour of this kind, which had cauſed inflammation and enlargement of three of the axillary glands. Being aſſured that it was not carcinomatous from its diminution under ſurgical treatment, I waited in hopes that ſome beneficial change would ſpontaneouſly take place; but at laſt, by her requeſt, and, with the coinciding opinion of Sir Charles Blicke, I removed the original tumour, leaving the diſeaſed glands in the axilla. The ſource of irritation being taken away, they gradually ſubſided, and the patient ſoon grew fat, and became and remained remarkably healthy. I have known many ſimilar caſes. As I have

preſerved

preſerved no notes, and do not perfectly recollect any caſe, of a tumour of this ſtructure occurring in a diſtinct form, unleſs ſome of thoſe about the breaſt may be ſo conſidered; and as I wiſh to ſhew that all theſe diſeaſes occur diſtinctly as well as in glands, I ſhall, as an inſtance of a pancreatic appearance in a diſtinct tumour, refer the reader to the curious Caſe publiſhed in London by Dr. Bouttatz of Moſcow, of a tumour which grew beneath the conjunctiva of the eye, and protruded it between the eyelids. The tumour was ſeven inches long and three inches and a half in circumference, and weighed two pounds and a half. The ſtructure, which is repreſented in a plate, anſwers correctly to that which I have denominated pancreatic, and it had alſo the ordinary characters of this diſeaſed ſtructure, which are thoſe of ſlowly and regularly increaſing, not prone to inflammation nor tending to ſuppuration. The tumour, as might be naturally ſuppoſed, was cloſely connected with the tunica conjunctiva againſt which it preſſed, but the baſe of it was eaſily elevated from the cornea which ſtill

retained

retained its natural tranſparency, and the patient regained his ſight on its removal.

Cyſtic Sarcoma.

The next ſpecies of ſarcomatous tumour, as it contains cells or cyſts, may be named Cyſtic Sarcoma; and this ſpecies will be found to comprehend varieties. This ſpecies ſometimes occurs as a diſtinct tumour, but is more frequently met with in the teſtis and ovary. In one kind of diſeaſe of the teſtis, the part is perhaps enlarged to ſix times its natural ſize, and conſiſts of a congeries of cells, containing a ſerous fluid; their ſize is that of currants or grapes, but of an oval figure. The ſides of the cyſts are ſo vaſcular as to be made red by injection; and ſometimes the injection is even effuſed and tinges the contents of the cyſt. Dr. Baillie has favoured us with an elegant and correct repreſentation of this diſeaſe, in his Series of Engravings intended to illuſtrate the Morbid Anatomy of ſome of the moſt important Parts of the Human Body *. I

* *Vide* Faſc. 8. Plate 8. Fig. 2.

have

have known this alteration of ſtructure the conſequence of a blow received on the part; but, in general, it occurs without evident injury. The firm or ſarcomatous part of an ovary, affords a good ſpecimen of the ſtructure I am deſcribing; the cells are here much larger, and are ſo vaſcular as to be made quite red by injection.

To ſhew that this ſtructure is not peculiar to theſe parts, I may mention the following caſe: a tumour was taken from the face of a boy by Sir Charles Blicke, which, when divided, was found to conſiſt entirely of an aſſemblage of cells filled with a watery yet coagulable fluid.

In the teſtis, cyſts are not unfrequently found containing a kind of caſeous ſubſtance. In this caſe too, the ſides of the cyſt are vaſcular. The cyſts are generally large, and ſometimes there is but one. I have called the ſubſtance caſeous, becauſe it reſembles cheeſe in conſiſtence, and in colour; being of a yellowiſh caſt, and of an unctuous appearance

pearance, but it is not at all unctuous to the touch. It may be proper to mention, that this caſeous ſubſtance is ſometimes irregularly diſtributed throughout the vaſcular ſubſtance of a diſeaſed teſtis, without being confined in diſtinct cyſts. I believe this kind of ſarcocele is particularly unyielding to medical treatment.

Maſtoid, or Mammary Sarcoma.

There is a ſpecies of ſarcomatous tumour, which indeed I have not frequently met with, but which ſo ſtrikingly reſembles the mammary gland in colour and texture, that, wiſhing to diſtinguiſh it on account of the following caſe, I have named it Mammary Sarcoma.

I have ſeen this ſubſtance (which is white and firm, and has a ſimilarity of appearance throughout) in the midſt of adipoſe tumours; but my attention was not particularly excited to it till the following caſe occurred.

A mo-

A moderately healthy middle-aged woman came from the country to St. Bartholomew's Hoſpital, on account of a tumour of the ſize of a very large orange, which had grown gradually on the front of her thigh: it lay beneath the integuments and above the faſcia. It was removed by an operation, and the integuments covering the tumour were alſo taken away, as in the removal of the cancerous breaſt. The ſides of the wound were brought together by ſticking-plaſter, and, at firſt, ſeemed diſpoſed to heal; but afterwards a conſiderable induration of the ſurrounding parts took place, and the wound degenerated into a malignant ulcer, which ſpread extenſively, and was incorrigible by any medical means employed. As the ulcer ſpread, ſo, in the ſame proportion, did the hardneſs of the parts which ſurrounded it. The pain and fever ſo exhauſted the patient, that in about two months ſhe died.

This tumour, the appearance of which was exactly of the kind that has been deſcribed, ſeemed to have no diſtinct capſule, but to be gradually

gradually loſt in the ſurrounding parts. The whole of the diſeaſed part ſeemed to have been removed, yet it is probable that the contiguous parts had a diſpoſition to diſeaſe, which was aggravated, and rendered more virulent, by the injury of the operation. Could the circumſtances have been foreſeen, it might have been right to have removed the parts ſurrounding this tumour more extenſively, as ſuggeſted in one of the preliminary obſervations.

There is a ſimilar kind of diſeaſed ſtructure, but of a ſofter texture, which is frequently found as a diſtinct tumour, or in glandular parts; which perhaps might, with propriety, be conſidered as a variety of the ſame ſpecies of ſarcoma. It has the ſame uniformity of ſurface, but it is not always of a white colour, being occaſionally of a browniſh or reddiſh tint. I have ſeen a ſubſtance of this kind forming a tumour ſurrounding and compreſſing the œſophagus, and cauſing a contraction of that tube. I have ſeen this kind of ſarcoma in glandular parts, in which the pro-

greſs

greſs and event of the caſe did not indicate the diſeaſe to be of a noxious nature. The general reſult of my obſervations, however, has induced me to believe, that this diſeaſed ſtructure may degenerate into an intractable ulcer, which will communicate its diſeaſe to rhe ſurrounding parts, and I have therefore placed this ſpecies of ſarcoma between thoſe which ſeem to poſſeſs no malignity and thoſe which follow, and which are of a very deſtructive nature.

Tuberculated Sarcoma.

The next ſpecies of ſarcoma which I have to deſcribe may be named Tuberculated Sarcoma. It conſiſts of an aggregation of ſmall, firm, roundiſh tumours, of different ſizes and colours, connected together by a kind of cellular ſubſtance. The ſize of the tubercles is from that of a pea to that of a horſe-bean, or ſometimes larger; the colour of a browniſh red, and ſome are of a yellowiſh tint. In Dr. Baillie's Plates there is one of the tuberculated liver *, which expreſſes the appearance

* *Vide* Faſc. 5. Plate 2.

of

of this kind of ſarcoma as well as can poſſibly be done by an engraving.

The inſtances which I have ſeen have been chiefly in the lymphatic glands of the neck. The tumours have ulcerated; have become painful and intractable ſores; and have deſtroyed the patient. The diſeaſe appears to poſſeſs a very malignant nature.

A remarkable caſe of this kind occurred in St. Bartholomew's Hoſpital in 1797. A man between forty and fifty years of age, had a large tumour at the ſide of his neck, beneath the platyſma myoides. It meaſured about eight inches in length, and four in breadth. It was hard and irregular on the ſurface, ſeeming like a cluſter of diſeaſed lymphatic glands. It was extremely painful, and had greatly impaired his health. He affirmed that it had not been more than ſix months ſince its firſt appearance, and in the courſe of this time, numerous ſmall tumours of ſimilar denſity and ſtructure had grown beneath the ſkin all over the trunk of the body,

but

but chiefly on the neck and abdomen. The ſkin and the front of the tumour in the neck had ulcerated, and become a painful phagedænic ſore; and the patient died with hectic fever, in about ſix weeks after his admiſſion into the Hoſpital. The ſtructure of all the tumours was alike, and ſuch as has been deſcribed: the body was examined by the ſtudents of the Hoſpital, who ſaid that there were no tubercles on the viſcera, as there commonly are in caſes of this diſeaſe.—As this diſeaſe is uncommon, it may not be improper to relate another caſe on which I was conſulted in the courſe of the laſt year.

A gentleman had a tumour in the lymphatic glands of the axilla, which he had taken notice of about a month, and which was ſuppoſed to be of a ſcrofulous nature. I was conſulted as to the propriety of his going to the ſea-ſide. The tumour was of the ſize of an egg, and its ſurface was irregular from the projection of numerous tubercles. This circumſtance ſtruck me, and led me to inquire if he had no other little

tumours in the ſkin. He told me there was one in the groin, which appeared on examination to be a diſtinct tubercle; and, on further inquiry, I found that the glands above the collar-bone, by the ſide of the neck, were in ſome degree affected. I had no doubt of the nature of the diſeaſe, and told the phyſician, that, in my opinion, it would terminate fatally. After about a fortnight, when I ſaw the patient again, theſe tubercles had multiplied all over the ſkin, both in the front and back part of the body; they were hard and painful, and gave him the ſenſation as if he was lying on a number of hobnails. The diſeaſe in the glands, both below and above the collar-bone, had greatly increaſed, and the arm was very œdematous. The diſeaſe progreſſively increaſed; the ſkin ſeemed to peel off in thin ſloughs from the ſurface of the enlarged glands in the axilla; but no ſloughing or ulceration had taken place in the tumour when the patient died, which was about five weeks after I firſt ſaw him. On examining the body, the tubercles every where had the appearance which has been deſcribed; and

many

many ſimilar tubercles were found on the ſurface of the lungs, heart, liver, ſpleen, omentum, and meſentery. The abſorbent glands of the meſentery, and the other internal abſorbent glands were, however, unaffected by this diſeaſe.

Medullary Sarcoma.

The ſarcoma which is next to be deſcribed is generally found in the teſtis, and is diſtinguiſhed by the name of the ſoft cancer of that part. The term cancer is objectionable, becauſe it conveys an erroneous idea of its nature; for this diſeaſe, though perhaps equally deſtructive, will be ſhewn to be unlike cancer in its nature and progreſs.

The tumour, in thoſe caſes of the diſeaſe which I have moſt frequently met with, has been of a whitiſh colour, reſembling, on a general and diſtant inſpection, the appearance of the brain. The diſeaſe is uſually of a pulpy conſiſtence; and I have, therefore, been induced to diſtinguiſh it by the name of medullary ſarcoma. Although I have

more frequently met with this diſeaſe of a whitiſh colour, yet I have often ſeen it of a browniſh red appearance. Which is moſt common I cannot decide: the ſtructure and feel of both are the ſame, and their progreſs is alſo ſimilar; they are therefore to be conſidered as varieties of one ſpecies. The ſhorteſt way in which I can communicate a knowledge of this diſeaſe, and render thoſe remarks, which I have to make on it intelligible, will be, by relating a caſe in which it proceeded to a very conſiderable extent before it deſtroyed the patient.

CASE.

A tall thin healthy-looking man, of about forty years of age, had, about fifteen years before, a ſwelled teſticle from a gonorrhæa; the epididymis remained indurated. Six years afterwards it became enlarged, and a hydrocele at the ſame time formed. Half a pint of water was diſcharged by a puncture, but inflammation ſucceeded the operation, and this teſtis became very large. An abſceſs formed,

formed, and burſt in the front of the ſcrotum, and the teſtis ſubſided in ſome degree. Mercury was employed to reduce it, but without effect. The part however was indolent, and gave the patient no trouble but from its bulk.

About a year afterwards a gland enlarged in the left groin (the ſame ſide as the teſtis): another then became ſwoln in the right groin, and, in the courſe of two years, ſeveral glands in each groin had obtained a very conſiderable magnitude. At this period he was admitted into St. Bartholomew's Hoſpital, under the care of Mr. Long. The teſtis was, at this time, between four or five inches in length, and about three in breadth; it reſembled its natural form, and was indolent in its diſpoſition. The ſpermatic chord was thickened, but not much indurated. Four or five glands were enlarged in the groin on both ſides; each of which was of the ſize of a very large orange; and, when obſerved together, they formed a tumour of very uncommon ſhape and magnitude.

They gradually increaſed in ſize for ſeveral months, till at laſt the ſkin appeared as if unable to contain them any longer. It became thin, inflamed, and ulcerated; firſt in the left groin, and expoſed one of the moſt prominent tumours. The expoſed tumour inflamed and ſloughed progreſſively, till it entirely came away. As the ſloughing expoſed its veſſels, which were large, they bled profuſely, inſomuch that the ſtudents endeavoured, but in vain, to ſecure them by ligatures: for the ſubſtance of the tumour was cut through, and torn away in the attempt. Preſſure by the finger, continued for ſome time, was the only effectual mode of reſtraining this hæmorrhage.

The loſs of one gland relieved the diſtended ſkin, which had only ulcerated on the moſt prominent part of the tumour, and had not become diſeaſed. It now loſt its inflamed aſpect: granulations formed, and a cicatrix took place. In the oppoſite groin a ſimilar occurrence happened. One gland, expoſed by the ulceration of the ſkin, ſloughed out,

being attended by the circumſtances juſt recited. However before the ſkin was cicatrized, ulceration had again taken place in the right groin, in conſequence of the great diſtenſion of the ſkin from the growth of the tumour; and ſloughing had begun in the tumour, when the patient, whoſe vital powers had long been greatly exhauſted, died.

The teſtis was injected, and, when divided, was found to be of a whitiſh colour, and moderately firm conſiſtence, and was made red by the injection in various parts. The tumour formed by the inguinal glands on each ſide was as large as a man's head, and the ſtructure was very ſimilar to that of the teſtis but more pulpy. On opening the body the pelvis was almoſt filled with ſimilarly diſeaſed glands, and the vertebræ were hidden by others as high up as the diaphragm. The diſeaſe in the upper ones was not however ſo far advanced as in the others: ſome of the former, which lay cloſe to the diaphragm, and were not larger than a walnut, being cut into, a thick fluid, reſembling

cream in colour and conſiſtence, eſcaped, and was expreſſed, and the gland was left a contexture of looſe fibrous ſubſtance.

The ſtate of the glands newly affected ſhews, that the actions of this diſeaſe cauſe a ſecretion of fluid-like cream; that this fluid acquires conſiſtence during its reſidence in the part; and that it is the cauſe of the increaſe of ſize in the gland. The profuſe hæmorrhage, which took place during the ſloughing, ſhews that there is an increaſe of veſſels proportionate to the augmentation in bulk of the diſeaſed part *. The ſimple ulceration

* Whether there are in this diſeaſe any new veſſels formed may fairly be doubted; the depoſited ſubſtance acquires ſolidity by reſidence, but it is not of that nature which ſeems to admit of becoming organized. Indeed it may reaſonably be queſtioned, whether veſſels will, in any inſtance, grow into any depoſited ſubſtance, except the gelatinous part of the blood, as that ſeems to be the common and natural matrix for them. Yet ſome tubercles in the liver can be injected; where the diſeaſe appears to be formed of a ſecretion made from cyſts, and of a different nature from the gelatinous parts of the blood: yet veſſels have apparentlyg rown into the depoſited matter. I am alſo much miſtaken if I have not ſeen tubercles in the lungs ſuppurate, though they were

ation of the ſkin from diſtenſion, and the ſubſequent healing of the ulcer ſhew, that this

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were of a kind which anatomiſts in general conſider as inorganic, becauſe they have not been able to inject them. Does not this change from a ſolid ſubſtance into pus imply that they are vaſcular, ſince they go through the ſame changes that vaſcular parts do? It may be ſaid that the change is brought about by the ſurrounding veſſels, or by thoſe of their cyſts; but, in the inſtances alluded to, this ſuppoſition appeared to me improbable. The ſubject ſeems curious, and I mention it merely to excite attention. I wiſh alſo here to ſtate ſome facts which, though not important, may yet be uſeful; and which have left this impreſſion upon my mind, that we do wrong to deny the life or vaſcularity of parts merely becauſe we cannot demonſtrate their veſſels by anatomical artifices. The arguments cited by Mr. Hunter againſt the vaſcularity of the teeth are remarkably ſtrong, and yet that accurate obſerver could not convince his mind, that the decay of the teeth was merely a chemical proceſs, which it ſhould be, if they were inorganic. It appeared to me, that there was ſo much animal ſubſtance in the bone of the tooth as to render it improbable that it would remain in the temperature, in which it exiſts throughout life, without undergoing ſome chemical change; and indeed the progreſs of the decay of a tooth ſeemed to me more like an animal than a chemical proceſs. In diſcuſſing this ſubject in a medical ſociety I was led to aſk, whether the decayed part of a tooth did not ſometimes become painful before the cavity containing the veſſels and nerves of the tooth became expoſed; for, in that caſe, the bone itſelf muſt poſſeſs ſenſation.

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this morbid affection is unlike carcinoma, which communicates its diſeaſe to all contiguous

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As far as my opportunities of obſervation enable me to reply to this inquiry I ſhould anſwer it in the affirmative; and it is alſo known, that the whole crown of the tooth may be deſtroyed to the level of the gum, and yet the patient may occaſionally eſcape the tooth-ache. Suppoſing then that the decay of the tooth was owing to a proceſs reſembling ulceration, without any attempt at reparation, ſuch as we occaſionally ſee even in ſoft parts, I was led to inquire further, whether the ſurface might not be ſometimes irritable and ſometimes indolent; whether the diſeaſe might not ſometimes proceed rapidly, and at another be nearly ſtationary. If this ſuppoſition above mentioned had any truth in it, I thought we might put it to this teſt, in order to aſcertain the probability or falſity of the conjecture. We might deſtroy the irritable ſurface of the decaying part as we do that of an ulcer with cauſtic, and thus diminiſh or remove the pain. This I have done in a great number of inſtances with ſucceſs; and the mode which I have adopted is to moiſten the black decayed ſurface with muriatic acid one half or one third diluted with water. This application gives no pain, except ſometimes when it gets into the cavity of the tooth, but it chemically decompoſes the diſeaſed ſurface. I uſually repeat the application three times, allowing a ſhort interval between each. The ſurface which has been thus deſtroyed is no longer ſore; it may be touched with a probe, and even cold water may be applied to it without cauſing pain. As far as my obſervation enables me to form an opinion on this ſubject, the moſt common kind of tooth-ache takes place in the

guous parts: neither has it the hardneſs, nor the diſpoſition to ulcerate, which characterize

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the following manner: The black ſurface of the tooth becomes ſore and painful when touched, particularly by any thing cold; and, after ſome time, theſe ſymptoms are aggravated, and the whole tooth ſeems tender in every part, from inflammation apparently excited by the irritation of the diſeaſed part. The deſtruction of the irritable decayed ſurface does not, of courſe, immediately remove the general inflammation, but all ſpringing pain, as many patients have called it, ceaſes, and the general inflammation gradually ſubſides.

In the few caſes where this mode of treatment did not ſucceed the failure ſeemed to ariſe either from the impracticability of touching the whole of the decayed ſurface, and from the decay extending into the cavity of the tooth; in which caſe the acid, by touching the nerves, gives great pain, and may perhaps rather augment than diminiſh the inflammation. Perhaps alſo this plan of treatment may ſometimes fail from the pain ariſing from inflammation, beginning in the cavity of the tooth, in the firſt inſtance, and not ariſing, as has been ſuggeſted, from an irritable and painful ſtate of the decayed ſurface. I have alſo deſtroyed one half of the decayed ſurface with the acid, and proportionately diminiſhed the patient's ſufferings, and then applied the remedy to the other half. I have alſo obſerved, that ſome patients have complained of moſt pain when the probe was applied to that part of the tooth neareſt the ſurface; to that which lay, as it were in a degree concealed, under the projecting

ize cancer. The general diſeaſe of the abſorbing glands ſhews, that the diſeaſed action is readily propagated in the courſe of thoſe ſuſceptible veſſels; and the glands of the pelvis being affected equally with thoſe higher up, renders it probable that it induces the diſeaſe, as well by imparting irritation to them, as by furniſhing a matter capable of ſtimulating them when they have imbibed it; an opinion that will be more ſtrikingly verified by the next caſe which I ſhall relate.

This ſpecies of ſarcoma, though it uſually affects the teſtis, occaſionally occurs in other parts. I ſhall authenticate this fact by the brief relation of another caſe, which will

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projecting ſhell of the broken enamel. If the above ſtatement be found, on further examination, to be fact, I think it muſt be granted, that the bone of the tooth has nerves, and conſequently veſſels. I am alſo much miſtaken if I have not ſeen the bone of the tooth tinged with bile like the other bones in perſons deeply jaundiced. This circumſtance was pointed out to me by Mr. Sutton, of Greenwich, who was at the time he made the obſervation a very induſtrious ſtudent, and Houſe-Surgeon at St. Bartholomew's Hoſpital.

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ſerve alſo to throw additional light on the nature and progreſs of this diſeaſe.

A boy about twelve years of age was brought to the Hoſpital for advice, on account of a tumour in the front of his thigh: it had been growing three or four months, and had then attained the ſize of a large orange. The baſe of it was ſituated cloſe upon the bone. It increaſed, notwithſtanding applications that were employed to diſperſe it, and the patient became confined to his bed. After ſome time the leg became œdematous to a very great degree; the inguinal glands were enlarged, but not in a degree proportionate to the œdema, none of them having attained to more than the ſize of a ſmall walnut. The parts in the ham were alſo conſiderably ſwoln. In a ſhort time the cauſe of the great degree of œdema was manifeſted; for the lower part of the abdomen became diſtended by a tumour, that ſeemed to riſe out of the pelvis and compreſs the iliac veſſels. The boy's health, as may be

be ſuppoſed, gradually declined, and, when the diſeaſe had attained to this ſtate, he died.

On examining the parts it was found, that the tumour, though it lay cloſe to the perioſteum of the thigh bone, had no connection with it; that it was in ſtructure like the diſeaſe laſt deſcribed; and that the diſeaſe had extended, through the medium, and in the courſe of the abſorbing veſſels, downwards to the ham, where the glands were enlarged and formed a conſiderable tumour; and upwards into the pelvis, where the internal iliac glands more than filled one ſide of that cavity, riſing out of it, as has been ſaid, ſo as to diſtend the lower part of the abdomen. The diſeaſe had alſo extended ſo as ſlightly to affect the lumbar glands. The tumours in the ham and pelvis were of the ſame ſtructure as the original tumour. The inguinal glands, though affected apparently from the ſame diſeaſe, were not conſiderably enlarged.

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This caſe alſo ſhews the uncommon facility with which this diſeaſe is propagated along the abſorbing veſſels; and its having extended downwards to the ham, as well as upwards into the pelvis, confirms the opinion, that it extends itſelf by imparting irritation to the veſſels, as well as, perhaps, by furniſhing a matter which, if imbibed, may communicate the ſame irritation.

I have mentioned, as a variety of this diſeaſe, that in which the colour is different, being between a brown and that of the blood, but in texture and organization it does not appear diſſimilar. It ſeems therefore as if the diſeaſed action cauſed the ſecretion of a fluid, ſometimes of a milky, ſometimes of a more duſky hue; which gradually acquires ſolidity and augments the bulk of the part. The diſeaſed part acquires in general a conſiderable ſolidity when it has continued for ſome time, ſo as ſcarcely to deſerve the names of ſoft cancer, or medullary ſarcoma. The hardneſs is alſo, in ſome inſtances which I have ſeen, increaſed, apparently by a thickening

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of the cellular ſubſtance which pervades the gland.

It ſeems probable, however, that the ſame kind of diſeaſed action may not be always followed by the like alteration of ſtructure, in the part which it affects. Mr. Aſtley Cooper, in his Paper on Obſtructions of the Thoracic Duct, mentions an inſtance in which matter, imbibed from a teſtis affected with a diſeaſe like the preſent, obſtructed that veſſel. His deſcription of the teſtis is, that it was "a pulpy maſs, compoſed of broken coagulable lymph, and blood-coloured ſerum *."

I remember one inſtance of the inguinal and lumbar glands being affected with a diſeaſe ſimilar to thoſe juſt deſcribed, from a diſeaſed teſtis of a different ſtructure. The teſtis was removed in the Hoſpital, and was found much enlarged, and vaſcular throughout, except where ſome ſoft cheeſe-like matter

* *Vide* Medical Records and Reſearches, p. 96.

was

was depoſited. Some of the inguinal glands enlarged, ulcerated, and ſloughed out, and the wound ſeemed diſpoſed to heal. The lumbar glands were affected, became extremely painful, and the patient being previouſly much exhauſted, ſunk under this laſt complaint.

He had been removed to ſome diſtance from the Hoſpital, and I could not obtain permiſſion to examine the body till four days after his deceaſe. I took out the lumbar glands and put them in water; and, the weather being extremely hot, when I examined them the next day, I found that all the unorganized depoſited matter which had enlarged them, had become putrid, and was waſhed away, leaving the capſule of the gland, and a congeries of flocculent fibres occupying the interior part of it: theſe were doubtleſs the veſſels and connecting cellular ſubſtance of the glands not indurated (as I have ſeen it in ſome other inſtances) by inflammation.

In the advanced ſtage of this diſeaſe ſometimes, lymphatic glands out of the courſe of

abſorption, and of the participation of irritation, become affected with the ſame diſeaſe; and a ſecretion of this thick cream or bloody-coloured fluid takes place on the ſurface, or in portions, even in the liver or lungs, or other viſcera. I have heard this circumſtance accounted for, by ſuppoſing that the abſorption of the matter depoſited in the originally diſeaſed parts was ſo abundant as to induce the neceſſity of depoſiting it in various places; but it ſeems to me more natural to attribute it to the more general prevalence of the ſame diſeaſed diſpoſition throughout the body. For we frequently find, that ſolid tumours of ſimilar ſtructure exiſt in various parts of the ſame ſubject; and ſometimes they rapidly multiply as the diſeaſe advances; as was mentioned in the caſe which is related of tuberculated ſarcoma.

Carcinomatous Sarcoma.

The laſt ſpecies of ſarcomatous tumour which I have to deſcribe, is the Carcinomatous. It is not here deſigned to give a full or diſtinct hiſtory of Carcinoma, but only a general and

comparative account of thoſe circumſtances in which it reſembles or differs from other tumours. This kind of tumour, on account of its peculiar hardneſs, is emphatically termed Scirrhus, while it remains entire and free from ulceration. But the word ſcirrhus is frequently applied to other indurations, and it ſeems better, in order to avoid ambiguity, to uſe the ſame term to denote all the ſtages of this diſeaſe, naming it carcinoma, in the firſt place, and ulcerated carcinoma when that change has occurred. This diſeaſe is not, in every inſtance, ſo peculiarly hard as to entitle it to the epithet ſcirrhus; and however indurated it may be, it ſtill muſt be accounted a kind of fleſhy tumour; therefore I may be allowed to call it carcinomatous ſarcoma.

I ſhall arrange the obſervations which I have to offer under three heads: 1ſt, The hiſtory of carcinoma. 2dly, Its anatomical ſtructure; and, 3dly, I ſhall compare this diſeaſe with others which reſemble it. I ſhall ſuppoſe the carcinoma to ariſe in the female

breaſt, as there it moſt frequently occurs, and can be beſt inveſtigated.

It ſometimes condenſes the ſurrounding ſubſtance ſo as to acquire a capſule; and then it appears, like other ſarcomatous tumours, to be a part of new formation: in other caſes the mammary gland ſeems to be the nidus for this diſeaſed action. The boundaries of the diſeaſe cannot be accurately aſcertained in the latter caſe, as the carcinomatous ſtructure, having no diſtinguiſhable inveſtment, is confuſed with the reſt of the gland. In either inſtance carcinoma begins in a ſmall ſpot and extends from thence in all directions, like rays from a centre. This obſervation will ſerve to diſtinguiſh it from many other diſeaſes which, at their firſt attack, involve a conſiderable portion, if not the whole of the part, where they occur. The progreſs of carcinoma is more or leſs quick in different inſtances. When ſlow, it is in general unremitting; at leaſt I am inclined to think that the diſeaſe, though it may be checked, cannot be made to recede by that medical treat-

ment which leſſens the bulk of other ſarcomatous tumours. I ſtate this opinion however with ſome heſitation, for I have been informed by ſurgeons, that diſeaſes, the event of which proved them to be carcinomatous, have ſuffered a conſiderable reduction in ſize by that kind of local treatment mentioned in the preliminary obſervations. This circumſtance affords, in my opinion, another criterion, by which it may in general be diſtinguiſhed. This obdurate and deſtructive diſeaſe excites the contiguous parts, whatever their nature may be, to the ſame diſeaſed action. The ſkin, the cellular ſubſtance of muſcles, and the perioſteum of bones all become affected, if they are in the vicinity of cancer. This very ſtriking circumſtance in the hiſtory of carcinoma diſtinguiſhes it from moſt of the diſeaſes already deſcribed. In medullary ſarcoma the diſeaſe is propagated along the abſorbing ſyſtem, but the parts immediately in contact with the enlarged glands do not aſſume the ſame diſeaſed actions. Neither in the tuberculated ſpecies does the ulceration ſpread along the ſkin, but deſtroys that part only where it covers the diſeaſed glands.

It was obſerved by Mr. Hunter that a diſpoſition to cancer exiſts in the ſurrounding parts, prior to the actual occurrence of the diſeaſed action. This remark, which is verified by daily experience, led to the following rule in practice: "That a ſurgeon ought not to be contented with removing merely the indurated or actually diſeaſed part, but that he ſhould alſo take away ſome portion of the ſurrounding ſubſtance, in which a diſeaſed diſpoſition may probably have been excited." In conſequence of this communication of diſeaſe to the contiguous parts, the ſkin ſoon becomes indurated, and attached to a carcinomatous tumour, which, in like manner, is fixed to the muſcles, or other part over which it was formed.

As a carcinomatous tumour increaſes, it generally, though not conſtantly, becomes unequal upon its ſurface, ſo that this inequality has been conſidered as characteriſtic of the diſeaſe, and it is a circumſtance which deſerves much attention. A lancinating pain in the part frequently accompanies its growth; but in ſome caſes this pain is wanting. It attends

attends alſo on other tumours, the ſtructure of which is unlike carcinoma; of which I have given an inſtance in ſpeaking of pancreatic ſarcoma. This pain cannot therefore be conſidered as an infallible criterion of the nature of the diſeaſe.

The diſeaſed ſkin covering a carcinomatous tumour generally ulcerates, before the tumour has attained any great magnitude; a large chaſm is then produced in its ſubſtance by a partly ſloughing, and partly ulcerating proceſs. Sometimes, when cells contained in the tumour are by this means laid open, their contents (which are a pulpy matter of different degrees of conſiſtence, and various colours) fall out, and an excoriating ichor diſtils from their ſides. This diſcharge takes place with a celerity, which would almoſt induce a perſon ignorant of the facility with which ſecretion is performed, to believe that it cannot be produced by that proceſs.

When the diſeaſed actions have, as it were, exhauſted themſelves by their vehemence,

an attempt at reparation appears to take place, ſimilar to that which occurs in healthy parts. New fleſh is formed, conſtituting a fungus of peculiar hardneſs, as it partakes of the diſeaſed actions by which it was produced. This diſeaſed fungus occaſionally even cicatrizes. But though the actions of the diſeaſe are thus mitigated, though they may be for ſome time indolent and ſtationary, they never ceaſe, nor does the part ever become healthy.

In the mean while, the diſeaſe extends through the medium of the abſorbing veſſels. Their glands become affected at a conſiderable diſtance from the original tumour. The progreſs of carcinoma in an abſorbent gland is the ſame as that which has been already deſcribed. The diſeaſe is communicated from one gland to another, ſo that after all the axillary glands are affected, thoſe that lie under the collar-bone at the lower part of the neck, and upper part of the cheſt become diſordered. Occaſionally a gland or two become diſeaſed higher up in the neck, and apparently out of the courſe, which the abſorbed fluids would take.

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The abſorbent glands, in the courſe of the internal mammary veſſels become affected as the diſeaſe continues. In the advanced ſtage of carcinoma a number of ſmall tumours, of ſimilar ſtructure to the original diſeaſe, form at ſome diſtance, ſo as to make a kind of irregular circle round it.

Here it is no wonder that I conclude the accounts of the dreadful effects of this pernicious diſeaſe. For when it has done ſo much miſchief, the ſtrongeſt conſtitutions ſink under the pain and irritation which the diſeaſe creates, aggravated by the obſtruction, which it occaſions to the function of abſorption in thoſe parts, to which the veſſels leading to the diſeaſed glands belong. Towards the concluſion of the diſeaſe the patient is generally affected with difficulty of breathing and a cough. In caſes where the external diſeaſe has been removed, the ſame ſymptoms of diſordered reſpiration take place, and the patients die of the internal diſorder, which is not apparent till the body is inſpected.

It has been a ſubject of debate and conſideration, whether the diſeaſe of the abſorbent glands, which takes place in carcinoma, be the effect of the ſtimulus of matter imbibed by thoſe veſſels from the original diſeaſe, or of irritation propagated along them. The reaſon for ſuppoſing that no poiſon is imbibed is, that if it were conveyed into the blood, it would produce general diſeaſe in the conſtitution; but no more fever or general diſorder is found to exiſt in carcinoma than what would naturally be produced by the irritation which the affected parts occaſion. It does not ſeem eſſential to my preſent deſign to diſcuſs this ſubject at length: it is however right to obſerve, that we ſcarcely ever ſee glands diſeaſed out of the courſe which the abſorbed matter would naturally take, though they are affected in this manner in diſeaſes which can be propagated ſimply by irritation. When the glands of the axilla are obſtructed by diſeaſe, the abſorbed matter will paſs by anaſtomoſing channels, into the internal mammary abſorbents, and if occaſionally one or two gland

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in the neck are found diſeaſed, they may become affected in the ſame manner, by the fluids being obliged to take a circuitous route. It may be proper to enquire, whether thoſe tumours, which ariſe in the circumference of carcinoma, are not cauſed by the abſorbed matter being made to ſtop for a time in the veſſels, and thus to afford that irritation which induces diſeaſe in them and the contiguous parts?

The difficulty of breathing and cough which generally occur in the laſt ſtages of carcinoma, have been ſaid to ariſe from the diſeaſe in the glands on the inſide of the thorax. I have never ſeen them ſo greatly diſeaſed, as to appear adequate to this effect. I once thought they might contribute to it by preſſing on the nerves, where they enter the thorax: of late I have ſcarcely doubted but that the diſturbed ſtate of reſpiration has ariſen from an affection of the liver, which almoſt conſtantly occurs in the laſt ſtages of carcinoma.

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There is another circumſtance in the hiſtory of cancer which deſerves attention and inveſtigation; that is, Whether a diſeaſe not originally cancerous can become ſo in its progreſs? We can only form our opinions on this ſubject from analogy and obſervation. Analogy leads us to believe, that ſuch an alteration in the diſeaſed actions may readily take place. Venereal buboes often change their nature after the adminiſtration of mercury, and become troubleſome ſores, to which that medicine is rather detrimental than beneficial. Injuries induce inflammation and enlargement of parts, which afterwards degenerate into ſcrofulous diſeaſes. But, though analogy ſeems ſo ſtrongly to favour the opinon, I cannot take upon myſelf to ſay, that my obſervations have confirmed it. When tumours have been removed, the hiſtory of which correſponded to that of cancer, a cancerous ſtructure was obſerved in them; and, on the contrary, in diſeaſes of an apparently different nature, a different organization has been found. I once, indeed, aſſiſted at an operation where the tumour was of that kind which I have

denominated

denominated pancreatic; and I heard afterwards, that the patient died in the country of a diſeaſe which was reputed cancerous. Again, in inveſtigating this ſubject it deſerves to be remarked, and every ſurgeon muſt, I believe, be famliarly acquainted with this fact, that many diſeaſed tumours remain in the breaſt for a great length of time, perhaps during life, without undergoing any change in their nature; or, in other words, without becoming cancerous.

It is difficult to convey correct ideas of the ſtructure of carcinoma by words, or even by drawings. In the generality of inſtances the diſeaſed part is peculiarly hard, and there are intermixed with it firm whitiſh bands, ſuch as Dr. Baillie has deſcribed and repreſented in his Book and Plates of Morbid Anatomy. There is indeed no other ſtriking circumſtance, which can be mentioned as conſtantly claiming attention in the ſtructure of this diſeaſe. Theſe firm whitiſh bands ſometimes extend in all directions from the middle towards the circumference of a carcinomatous tumour, like rays from a center, having little intervening

intervening matter. Sometimes they interſect it irregularly; having interpoſed between them a firm browniſh ſubſtance, which may be ſcraped out with the finger. Sometimes they form cells containing a pulpy matter of various colours and conſiſtence; and ſometimes theſe bands aſſume an arboreſcent arrangement, ramifying through the diſeaſed ſubſtance.

Firm white bands, like thickened and compact cellular ſubſtance, are ſeen as the diſeaſe advances, to extend themſelves from the original tumour amidſt the fat in which it is occaſionally imbedded, intercepting portions of fat in the irregular areolæ which they form. This appearance led Dr. Adams to conjecture, that the fat might be originally diſeaſed, and that theſe white bands might be a thickening of the cellular ſubſtance, which enſued as a natural conſequence. This circumſtance deſerves conſideration on account of its practical application; for if, after removing a carcinomatous tumour, the ſurgeon attends to the part which has been taken away, he will ſee if any of theſe bands have been

been cut through, and, conſequently, whether ſome of this diſeaſed ſubſtance, which ought to be removed, has not been accidentally left. This circumſtance cannot be obſerved by looking at the bleeding ſurface of the wound, but may be readily aſcertained by examining the part which has been removed.

Theſe are the chief circumſtances, which I think ſufficiently characterize carcinoma, and diſtinguiſh it from other ſarcomatous tumours. The account of them is brief, and much has been omitted, becauſe it was not deſigned particularly to diſcuſs the ſubject of carcinoma, but merely to point out its diſtinguiſhing characters. I now proceed to ſpeak of diſeaſes reſembling cancer; though, in ſo doing, I ſhall digreſs a little from the principal ſubject of this paper, that is, to deſcribe the diſtinguiſhable kinds of ſarcomatous tumours, and give their hiſtory.

According to the preceding account, carcinoma begins in a ſmall ſcirrhus, which gradually

gradually enlarges and afterwards ulcerates. It does ſo in the breaſt, lip, tongue, and cervix uteri; yet it may be enquired if it does ſo in every inſtance. Parts ſometimes ſuperficially ulcerate at firſt, and afterwards acquire ſurrounding hardneſs, and ſtrikingly reſemble carcinoma, if they do not ſtrictly deſerve that name. This is the way in which ſome diſeaſes proceed, which occur near the ſide of the noſe or eye, and which gradually deſtroy the parts in which they are ſituated, and cannot be cured by any mode of local or general treatment. The intelligent reader will not ſuſpect me of confounding theſe more malignant diſeaſes with the herpes exedens naſi, in which the morbid actions gradually ceaſe, and the firſt affected parts get well whilſt the ſurrounding parts become diſeaſed.

Here ſome additional diſcriminating circumſtances ſeem to be wanted, by which we may diſtinguiſh between theſe ulcers and common carcinoma. I have never remarked, that ſuch ulcers have affected the abſorbent glands, though I do not feel aſſured that this occurrence

occurrence never takes place. It therefore remains to be determined by future caſes, how far this circumſtance may enable us to decide on the nature of theſe diſeaſes. I ſhall next relate the principal circumſtances of a remarkable caſe of this kind of diſeaſe, which will ſerve to elucidate the ſubject, and alſo to exhibit a ſpecimen of the diſeaſes to which I allude.

CASE.

A man was admitted into St. Bartholomew's Hoſpital with a tumour beneath the jaw, having a great degree of ſurrounding hardneſs, and containing three cells, like thoſe of carcinomatous tumours. The hiſtory which he gave of the diſeaſe was very curious: he ſaid that a redneſs took place ſuperficially in the ſkin, which gathered and burſt, and diſcharged good matter; that the opening enlarged, and the ſurrounding parts indurated, and thus produced an appearance like a cell in a carcinomatous tumour; then,

another portion of ſkin became diſeaſed in the ſame manner, and with the ſame conſequences, till, by degrees, the general tumour had acquired its preſent magnitude. To the truth of this account we had an opportunity of bearing teſtimony; for this occurrence took place twice in ſucceſſion during his reſidence in the Hoſpital; and thus two more cells were added to the general maſs. The inflammation of the ſkin, and the ſuppuration, which was healthy in appearance, took place beneath the tumour, and made it reach almoſt as low as the ſternum. As the patient's health had conſiderably declined by the irritation of the conſtitution which this diſeaſe kept up, and as no amendment of the diſeaſe had taken place in conſequence of the applications or medicines which were employed, he left the Hoſpital, and went into the country.

Diſeaſes alſo, which ſtrikingly reſemble carcinoma in appearance, form in the following manner. An enlarged lymphatic gland ſhall gradually become ſoft, and contain a fluid.

a fluid. In this ſtate it ulcerates or is opened; but inſtead of ſubſiding, it inflames; the ſurrounding parts become indurated; the integuments acquire a duſky hue; the opening and cavity enlarge, and aſſume the appearance of a cyſt, from the ſides of which fungus ariſes, and turns over the everted edges of the opening. I have alſo ſeen, after the burſting of an encyſted tumour the ſurrounding parts indurate, and throw out a fungus, forming a diſeaſe appearing like cancer, and which could not be cured.

Are ſuch diſeaſes as I have here deſcribed to be accounted carcinomatous? if not, What are the characters which diſcriminate between them and carcinoma? As I have no preciſe or ſatisfactory information to communicate, I forbear to ſay any thing on the ſubject.

There are tumours, the ſtructure of which may not correſpond with any of the deſcriptions that I have given. I feel, however, unable, from my own obſervations, to depict any other ſpecies. It ſeems to me, that theſe

diſeaſes reſemble colours in this reſpect, that a few of the primary ones only can be diſcriminated and expreſſed, whilſt the intermediate ſhades, though diſtinguiſhable by cloſe attention and comparative obſervation, do not admit of deſcription or denomination. There are ſingle tumours, in the compoſition of which ſeveral of the above-deſcribed ſtructures may be found, and, perhaps, ſome part of which may not correſpond to any deſcription that has been given. If, however, the hiſtory of theſe diſſimilar diſeaſes, which appear in the form of tumours, was accurately recorded, and their ſtructure noted, we might perhaps from the former be led to judge of the latter; and thus attain a knowledge of the intrinſic nature of the diſeaſe which would enable us to act rightly in practice.

Encyſted Tumours.

In the claſs of local diſeaſes, and in the order of tumours, cuſtom ſeems to have placed the genus of Encyſted Tumours, next

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to thoſe of the ſarcomatous kind. The arrangement indeed appears proper; for they are ſo allied in appearance, and in the ſenſation which they impart on examination, that they are not unfrequently miſtaken for each other; and yet, in general, the encyſted tumours have ſufficiently diſtinguiſhing characters, to enable a ſurgeon to determine their nature prior to the performance of an operation. The diſcriminating characters are,—a regularity of ſurface and ſhape, and a pulpineſs to the touch. Yet moſt ſurgeons will, I believe, acknowledge, that they have ſeen tumours diſperſed, which they have taken for wens; and have even, when they have removed them under that belief, diſcovered the diſeaſe to have been a ſoft regularly ſhaped ſarcoma, and not a cyſt containing a pulpy ſubſtance.

Reſpecting the ſtructure of encyſted tumours I have nothing to remark, but what is, I believe, generally known. The cyſts moſt frequently are compoſed of many lamellæ, which are ſometimes ſo compacted, as

to be ſcarcely diſtinguiſhable. Theſe cyſts vary conſiderably in thickneſs; being ſometimes very thick and tough, and at others extremely thin and tender. They ſometimes moſt tenaciouſly adhere to the contiguous parts, ſo as to make it difficult to ſeparate them; and, at others, they are ſo looſely connected, that, when an inciſion is made which lays bare the cyſt, the whole tumour ſtarts out without any diſſection.

That the interior ſurface ſecretes the contents formed in the cyſt, is in my opinion indiſputable. That it is a ſecreting ſurface I believe; becauſe, when a wen has ſpontaneouſly opened by ulceration, I have ſeen the cyſt produce granulations from its ſurface. When alſo, the front of the bag has alone been taken away, and the ſkin cloſed over the back of it, an union takes place between the ſkin and cyſt. When alſo a wen has burſt, or has been punctured, ſo that a ſmall aperture has been left in it, I have ſeen the cyſt fill repeatedly by a ſecretion of the ſame nature, but more fluid than the contents which were

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at firſt found in it, and which has occaſionally been expreſſed from the aperture.

Some notions have of late been entertained, that theſe cyſts may be of the nature of hydatids; it may not, therefore, be improper, in order to enable the reader to form his own judgment on this ſubject, to mention the following caſe.

A gentleman had a wen in his cheek, which ſpontaneouſly burſt, and on which Mr. Hunter tried various ſtimulating means to induce the cyſt to granulate or adhere, ſo that no further collection might enſue. His endeavours, however, were unavailing; for, after the opening cloſed, the cavity of the cyſt filled again, and the wen was as complete as before, and had increaſed in magnitude. It was ſituated unfavourably for removal, and the patient was averſe to an operation. It lay ſo deeply on the buccinator muſcle, as to be as perceptible from the mouth as on the cheek; and there was a great riſk of dividing the parotid duct, in an operation undertaken

for the removal of the tumour. The deformity which the wen occaſioned, was, however, conſiderable, and the patient was very deſirous of having the tumour leſſened, though very averſe to having it extirpated. He had for this purpoſe uſed ſalt and water, which made the ſkin inflame. Having conſulted me, I told him that if ſtimulating applications were to do good, they could only effect it by cauſing the ſkin to ulcerate, and the contents of the wen to be diſcharged, as had formerly happened; all which might be accompliſhed in a more direct, and leſs teazing manner, by juſt pricking the bag with a lancet, and ſqueezing out its contents. I thought it alſo probable, that the ſmall wound would heal, and that the operation might be occaſionally repeated. The patient was pleaſed with the propoſal, and it was put in execution. The contents were of the conſiſtence which is termed meliceritous, and had a peculiar odour. No inflammation enſued, and the wound healed; but, after a little time, it opened again, and gave diſcharge to a ſmall quantity of watery liquor,

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of preciſely the ſame odour as the original contents, and the little puncture again cloſed up. From that time to the preſent, which is now ſome years, the wound has occaſionally opened, diſcharging a ſmall quantity of ſometimes a more fluid, ſometimes a more meliceritous ſubſtance; and, after this diſcharge, the aperture cloſes up. This circumſtance occurs but ſeldom; perhaps every ſecond or third month. The aperture is ſo ſmall as not to be diſcernible; no plaiſter is worn upon it, and the patient has got rid of a conſiderable deformity, upon what he thinks very eaſy and ſatisfactory terms.

I have heard that wens have been treated in the following manner: they have been pricked in various parts of their ſurface with a needle, and the contents expreſſed, ſo that the neceſſity for a more ſerious operation has been prevented.

Theſe circumſtances are mentioned to illuſtrate the functions of the cyſts of theſe tumours; and to ſhew what may be done in

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ſome caſes, as a palliation of theſe diſeaſes. It is not, however, meant to recommend ſuch practice; for, on the contrary, it will be ſhewn afterwards, that it is dangerous to tamper with encyſted tumours; and, indeed, I ſhould not have ventured on this palliative mode of treatment, in the caſe related, had I not known from the effects of the former conduct, which had been purſued, that the cyſt and contiguous parts were of an indolent nature, and not diſpoſed to react in conſequence of violence done to them.

The contents of encyſted tumours have been denominated from their conſiſtence, ſteatomatous, atheromatous, and meliceritous. To this ancient diſtinction muſt be added another: the cyſt ſometimes ſecretes a ſubſtance like nail or horn; which is protruded when the ſkin ulcerates, hardens, and is puſhed forwards in proportion as the cyſt ſecretes more of this ſubſtance, ſo as to appear like horns; as has been ſhewn by Mr. Home in the Philoſophical Tranſactions.

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There is yet another curious circumſtance to be noticed with relation to cyſts; which is, that they have ſometimes hairs growing from their interior ſurface. This is the caſe of thoſe cyſts which are not unfrequently met with in the ovary *.

But though the cyſts of encyſted tumours muſt be conſidered as poſſeſſing the organization of other parts, and as ſecreting and abſorbing ſurfaces; yet their veſſels are probably very minute, and not endued with a degree of ſtrength adequate to the ordinary reparation of injury. If they produce granulations they are flabby, and not diſpoſed to heal.

It is no uncommon circumſtance to meet with wens, that have burſt ſpontaneouſly, and have thrown out a fungus, which, like a foreign body, prevents the ſurrounding integuments from healing.

* Some of the tubercles which occur in the viſcera ſeem to be formed by the depoſition of various kinds of ſubſtances from the ſurface of a cyſt, which appears to be the firſt formed and moſt eſſential part of the diſeaſe.

Moſt parts that are weak, are irritable when excited, and apt to aſſume diſeaſed actions. This frequently happens in a ſtriking manner in the cyſts of theſe tumours; and as, perhaps, ſurgeons are not ſufficiently apprized of the bad conſequences ſometimes occurring from the inflammation of wens, and as it is proper to ſhew the danger of irritating theſe diſeaſes, I ſhall relate a few caſes to illuſtrate this fact.

A woman, about forty years of age, was admitted into St. Bartholomew's Hoſpital, with a frightful fungus growing on the front of the belly, below, and to the right of the navel. She had been a healthy luſty woman, but was greatly deranged in health by the pain and irritation which this had occaſioned. She deſcribed it as being a wen which had burſt, and her account was afterwards verified by diſſection. The fungus bled, and ſhe could ſcarcely bear the ſofteſt dreſſings to be applied to the part. Nothing mitigated her ſufferings ſo much as lint dipt in a ſolution of opium, and kept moiſt by very frequently

ſqueezing on it, from a ſponge, a ſufficient quantity of the ſolution. Nothing allayed the conſtitutional irritation but large doſes of opium. She died exhauſted in the courſe of a fortnight.

I removed the cyſt from off the aponeuroſis of the external oblique muſcle, where it covers the rectus, leaving the tendinous expanſion quite clean and unaffected. The cyſt had ulcerated in two ſmall places, ſo that the fungus which it contained was viſible from behind.

A man between forty and fifty years of age, who was in St. Bartholomew's Hoſpital, had a wen on his back, which ulcerated, diſcharged an atheromatous ſubſtance, and afterwards inflamed, and threw out a fungus. Extenſive eryſipelatous inflammation took place in the ſurrounding integuments, and his conſtitution was greatly deranged by irritation and fever. When he was almoſt exhauſted by theſe circumſtances, and before any local amendment had taken place, another

other wen of the ſame nature, which he had on his right thigh, ulcerated, and was followed by the ſame conſequences, and, conjointly, they ſoon deſtroyed him.

A gentleman, of a ſtout make, and about forty years of age, had a tumour, ſuppoſed to be ſarcomatous, which had formed beneath the integuments on the lower edge of the pectoral muſcle. It was attended with ſevere pain occaſionally, at which time it rapidly increaſed in ſize, and produced a great deal of fever and irritation*, which made him look very ſickly, and grow very thin, and cauſed ſome perſons to deem the diſeaſe cancerous.

When the tumour had acquired a magnitude of about four inches in length, and three

* Circumſtances like theſe ſhould, I think, be particularly attended to in the hiſtory of tumours; for they may ſerve, perhaps, to characterize the diſeaſe in which they occur. Tumours of an innocent nature commonly increaſe in an equal ratio, and do not excite irritation in the contiguous parts, or in the conſtitution. Yet this, as a general rule, has exceptions. Some of which have been ſtated under the head of pancreatic ſarcoma, occurring in or about the mammary gland.

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in breadth and depth, he ſubmitted to its removal; the integuments were divided and turned back, and the tumour diſſected off the ſurface, and, in ſome degree, from under the edge of the pectoral muſcle.

When the tumour was examined, it was found to be compoſed of a ſteatomatous ſubſtance, contained in a thin capſule. The ſubſtance reſembled that which I have deſcribed as being ſometimes found in cells in the teſtis, or intermixed with the diſeaſed organization of that part. It was firm, and reſembled cheeſe in its yellow colour and unctuous appearance; but it was not unctuous to the touch.

The wound made in the operation ſoon healed, and the patient's health was reſtored to as good, or ſeemingly a better ſtate than before the formation of this diſeaſe. He alſo regained his uſual athletic form. But in leſs than three months after his recovery, two new tumours formed, one above, and the other below the cicatrix of the wound. The

patient

patient did not particularly attend to them till they had attained a ſize equal to that of a large walnut. To diſſect out both theſe tumours, and make ſo free a removal of parts as to render it probable that no new growth would enſue, ſeemed to be a very formidable operation; and, as the nature of the former tumour was known, and it was ſuppoſed that theſe were of the ſame nature, it was agreed to puncture the upper one, to expreſs the contents, and await the event. This was done by a puncture of half an inch in length, made by an abſceſs lancet. The contents were exactly like thoſe of the original tumour. Vehement eryſipelatous or irritative inflammation took place, and ſloughing about the diſeaſed part: the inflammation rapidly extended to the oppoſite ſide of the thorax, and then down the integuments of the abdomen to the groin. The derangement of the conſtitution was as violent as the local diſeaſe, and in about a week the patient died.

Theſe caſes are related to ſhew the danger of irritating wens, either of an irritable nature,

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or occurring in irritable habits; and becauſe I have not met with ſuch caſes deſcribed in books in a manner adequate to the importance of the ſubject.

It deſerves to be noticed in this brief account of encyſted tumours, that the diſpoſition to form wens prevails frequently in many parts of the body at the ſame time. It is not very uncommon to ſee many, even twenty or thirty wens alike in their ſtructure and contents in various parts of the ſame ſubject. Nay, the diſpoſition ſeems ſometimes to be hereditary, and tranſmitted from parents to their children.

The ſubject would appear to me to be incomplete, were I not to notice the formation of cavities, containing different ſubſtances, and which can neither be accounted encyſted tumours, nor abſceſſes. The cyſts are like the cyſts of abſceſſes; they are ſecreting ſurfaces, not regular in ſhape, but varying according to the form of the parts, amongſt which they are produced. They adhere alſo, like the

ſides of abſceſſes, to the circumjacent parts, and are not eaſily ſeparable from them like the cyſts of wens. Theſe cyſts ſometimes contain a kind of ſerum and hydatids, like the cyſts formed in the liver, and other viſcera. Sometimes they contain a number of granular ſubſtances of a white colour, having a poliſhed ſurface, and generally an oval figure. They reſemble pearl barley, but the granules are generally ſmaller. I have ſeen the cyſts containing hydatids, in the back and about the hip. I never met with any containing theſe granular bodies but about the hip, and, in the thecæ of tendons, I have therefore conjectured that thoſe near the hip might have been originally formed in the burſa mucoſa of the great gluteal muſcle.

The majority of theſe caſes, which I have ſeen, have ultimately, but very ſlowly, done well. However ſome cyſts, upon becoming open, produce great and fatal irritation in the contiguous parts. Sometimes cyſts, as Mr. Hey has lately remarked, produce that appearance

pearance which he has called fungus hæmatoides. Of this circumſtance, as it appertains to the preſent ſubject, I ſhall relate an inſtance; but to ſpeak more largely of it would be deviating from the plan of this paper, and would be unneceſſary, as the numerous and accurate caſes which Mr. Hey has related, ſhew that this diſeaſe may exiſt without being connected with cyſts.

A girl about ſixteen years of age, who was in St. Bartholomew's Hoſpital, had a collection of fluid under the triceps extenſor cubiti, near to the olecranon. When I firſt ſaw it, it was not larger than a pullet's egg, but it increaſed, notwithſtanding the means which were employed to diſcuſs it; and, in about twelve months, it preſented itſelf beneath the integuments on the outſide of the arm, in the ſpace between the extenſor and flexor muſcles, a little above the elbow. Upon compreſſing the projecting integuments, an agitation of fluid was felt beneath the triceps muſcle in the inſide of the arm, and the collection ſeemed to extend high up on the back

part of the os brachii. As the parts containing the fluid ſeemed more diſpoſed to increaſe in dimenſions, than to give way and diſcharge their contents, the collection was opened where it pointed, and a quantity of ſerum was diſcharged. On introducing the finger, ſome ſtrata of coagulated blood came away, and this was ſucceeded by ſo great an hæmorrhage, that it became neceſſary to enlarge the wound, in order to ſearch for the bleeding veſſels. In proportion as this was done, and more coagulated blood was detached from the ſides of the cyſt, which had contained both it and the ſerum, the hæmorrhage increaſed, and the blood flowed ſo profuſely from ſo many and ſuch large arteries, that it was impoſſible to controul its effuſion. Amputation ſeemed unavoidable, and was performed as high up as poſſible, but not clearly above the cyſt, ſome part of which remained amongſt the muſcles of the ſtump.

On examining the amputated limb, a thick and firm ſtratum of coagulated blood was found adhering to the ſides of a cyſt, which

extended from a little above the obecranon, where it was large, to nearly the upper part of the os brachii, where it gradually tapered to a ſmall ſize. The upper part of the cyſt was cut off from the reſt by the amputating knife, and of courſe remained upon the ſtump. At firſt, the ſtump appeared to do well, but ſhortly after the ſides of the wound ſeparated, conſiderable inflammation came on, and a fungus was thruſt forth. Great fever and irritation accompanied this local diſorder, and the girl died.

The treatment of encyſted tumours reſembles that of the ſarcomatous kind. By abſtracting blood and heat from the part it is probable the growth of them will be ſtopped, and the diſeaſe made for a time ſtationary. They are not likely to be diſperſed; and, as the magnitude is increaſed by delay, and the ſpontaneous opening of the cyſt generally leaves a vexatious and intractable ſore, and ſometimes is attended with more dangerous conſequences, the early removal of the diſ-

eaſe is the beſt practical conduct that can be purſued.

Another genus of tumours is the oſſeous. Thoſe which hang pendulous into joints are ſometimes bony. Oſſeous tumours alſo form, though not frequently, in other parts: of this circumſtance I ſhall relate the following inſtance. A woman was admitted into St. Bartholomew's Hoſpital, with a hard tumour in the ham. It was about four inches in length and three in breadth. She had alſo a tumour on the front of the thigh a little above the patella, of leſſer ſize and hardneſs. The tumour in the ham, by its preſſure on the nerves and veſſels, had greatly benumbed the ſenſibility, and obſtructed the circulation of the leg, ſo that it was very œdematous. As it appeared impoſſible to remove this tumour, and, as its origin and connections were unknown, amputation was reſolved on. On examining the amputated limb, the tumour in the ham could only be divided by a ſaw; ſeveral ſlices were

were taken out of it by this means, and appeared to conſiſt of coagulable and vaſcular ſubſtance, in the interſtices of which a great deal of bony matter was depoſited. The remainder of the tumour was macerated and dried, and it appears to be formed of an irregular and compact depoſition of the earth of bone. The tumour on the front of the thigh was of the ſame nature with that in the ham; but containing ſo little lime, that it could be cut with a knife. The thigh-bone was not at all diſeaſed; which is mentioned, becauſe, when bony matter is depoſited in a limb, it generally ariſes from a diſeaſe of the bone. This caſe, however, ſhews that the veſſels of a tumour may ſecrete phoſphate of lime, and convert it into an oſſeous ſubſtance, without any manifeſt cauſe exiſting to excite ſuch oſſific inflammation.

Vaſcular tumours alſo may doubtleſs become converted into a ſubſtance reſembling cartilage like thoſe found in joints; and their hardneſs might then exclude them from the genus ſarcoma. I have not however met

with ſuch inſtances, though it is not very uncommon to find a ſubſtance reſembling cartilage intermixed with the other vaſcular ſubſtance of a ſarcocele of the teſtis.

The diſeaſes which I have been deſcribing may be conſidered as edifices which are built up by diſeaſed actions, and in which thoſe diſeaſed actions continue to reſide. The actions themſelves do not admit of examination, though the ſtructures do which they erect. Therefore as Dr. Baillie has obſerved, it is by an examination of diſeaſed ſtructure that we muſt be ſlowly led to a knowledge of diſeaſed actions. It does not follow as a certain conſequence, that ſimilar diſeaſed actions will, in every inſtance, produce preciſely the ſame diſeaſed ſtructure; though it is highly probable that they will do ſo in general. This obſervation would diminiſh our ſurprize if, in ſome rare inſtances, we found cancer exiſting where a cancerous ſtructure was not ſtrikingly manifeſt; or if, in others, a ſtructure like that of cancer, was obſerved where no cancerous actions were apparent. The ſcirrhus

tumours,

tumours, which form beneath the peritoneal covering or lining of the uterus, have ſomething of the ſtructure of cancer, and yet they are not cancerous. In all caſes where tumours are formed we muſt ſuppoſe an increaſe, and, in ſome degree, a diſordered action of the veſſels which form them, but, in many, theſe actions poſſeſs but little diſeaſed peculiarity. As in every caſe of growth, in the re-production of deſtroyed parts, the gelatinous ſubſtance of the blood is firſt depoſited, and afterwards rendered vaſcular, therefore I have conſidered a tumour formed in this manner as one of the moſt ſimple kind and poſſeſſing the leaſt of diſeaſed peculiarity; but I am aware that I may have included under this general character tumours of eſſentially different natures. In the adipoſe ſarcoma there muſt be ſome peculiarity in the arrangement and actions of veſſels which form this tumour; but it muſt be accounted a natural rather than a morbid peculiarity. The pancreatic ſarcoma, I ſhould ſuppoſe, differed but little from the firſt ſpecies. It may be conſidered as a new growth characterized merely

merely by the peculiarity of its appearance, in conſequence of its being ſeparated into may diſtinct parts, which ſometimes cohere by a looſer kind of texture, and ſometimes are ſeparated by a firmer ſubſtance. The connecting medium appears like the thickened cellular ſubſtance of the part in which the newly organized matter is formed. Indeed I have ſometimes preſſed out the ſeparated portions of this ſubſtance from the connecting medium which environed them. In the mammary ſarcoma I ſuſpect ſome diſeaſed peculiarity to exiſt, as has been mentioned in ſpeaking of that ſubject. In the tuberculated ſarcoma the prediſpoſition to that diſeaſe ſeems general on the part of the conſtitution. In the medullary ſarcoma the diſeaſe ſeems local, in the firſt inſtance, and propagated by means of the abſorbing veſſels to their glands, and frequently in a courſe retrograde to that which the abſorbed fluids would naturally take; but in the advanced ſtate of the diſeaſe the morbid diſpoſition appears to be general. In carcinomatous ſarcoma the diſeaſe appears to begin

in

in a point or ſmall diſtrict, and to extend in every direction, as rays do from a center, affecting every ſurrounding part whatever may be its nature. The diſeaſed actions alſo, though they may be at times more violent or more tranquil, never ceaſe. This diſeaſe is alſo extended through the medium of the abſorbing veſſels in the direction which the abſorbed matter would naturally take.

On Diseases resembling Syphilis.

HAVING thus ventured again to appear before the Public, I ſhall take the opportunity of exciting its attention to ſome caſes which have occurred to me of diſeaſes reſembling Syphilis. Mr. Hunter, in his excellent Treatiſe on the Venereal Diſeaſe, has related ſeveral caſes ſuppoſed to be of that nature, and ſome of which were certainly not ſo, as they got well without mercury; but in the greater number the employment of this medicine rendered their nature doubtful. Mr. Hunter alſo, who was as cautious in drawing concluſions as he was accurate in making obſervations, expreſſes himſelf in many inſtances ſo diffidently on the ſubject, as, in my opinion, not ſufficiently to impreſs the minds of his readers with the certainty, importance, and frequency of ſuch facts. He concludes his obſervations by intimating "that undeſcribed diſeaſes, reſembling the venereal, are very numerous,

numerous, and that what he has ſaid is rather to be conſidered as hints for others to proſecute this inquiry further than as a complete account of the ſubject." As it has occurred to me very frequently to meet with ſuch caſes, and as the neceſſity for diſcriminating them from venereal diſeaſes appears to me of the higheſt importance, I ſhall proſecute the ſubject by relating ſome unequivocal caſes of diſeaſes ſtrikingly reſembling ſyphilis, and which, however, were not ſo, provided it be admitted that ſyphilis does not ſpontaneouſly get well without the aid of medicine.

The neceſſity for diſcrimination between theſe diſeaſes will appear upon a ſlight conſideration of the ſubject. If a ſurgeon, who does not ſee that extent of practice which occurs in a metropolis, adminiſters mercury in one of the diſeaſes reſembling ſyphilis, he finds perhaps that the ſymptoms yield ſlowly; and even after a conſiderable and debilitating courſe of that medicine they may recur. They are then counteracted by a ſtill more ſevere uſe of mercury till they perhaps ſpontaneouſly

taneouſly ceaſe, which may not happen till the patient's conſtitution is ſo enfeebled, that if it does not fall into other ſtates of diſeaſe it very ſlowly regains the ſtandard of health. Such caſes would induce the ſurgeon to conſider the venereal diſeaſe as peculiarly difficult of cure, and liable to recur on the remiſſion of even a ſevere courſe of mercury. The conſequence of this opinion is, that he employs mercury to an unneceſſary and injurious degree in his general practice.

I do not mean by theſe remarks to infer, however, that, in my opinion, the venereal diſeaſe is equally ſuſceptible of cure in every inſtance by mercury; nor am I an advocate for what has been termed an alterative courſe of this medicine. Caſes which frequently occur have convinced me that it requires a very conſiderable mercurial effect to cure the venereal diſeaſe in ſome inſtances; and that this effect muſt be continued for a conſiderable time in order to inſure a cure. Mr. Hunter probably wiſhed the ſubject of diſeaſes reſembllng ſyphilis to be proſecuted, in

hopes that ſome diſtinctive characters might be diſcovered as peculiar to them; but the following caſes ſhew that theſe diſeaſes enſue from primary infected ſores of very diſſimilar appearances, and ſometimes ariſe without any primary ſore having been obſerved. The reader will beſt underſtand my motives for relating theſe caſes after he has peruſed them. The firſt is the caſe of a gentleman who was, at the time it happened, which is many years ago, a moſt attentive and intelligent ſtudent at St. Bartholomew's Hoſpital.

CASE.

This gentleman thought that he had infected a ſlight cut on his hand (which was ſituated in front of and juſt below the little finger) with the diſcharge from a bubo in the groin that he had occaſion to open. The wound fretted out into a ſore about the ſize of a ſixpence, which he ſhewed me, and which I affirmed had not the thickened edge and baſe, and other characters of a venereal chancre. I therefore recommended him to try

try the effect of local means, and not to uſe mercury.

In about a month the ſore, which had ſpread a little, became again contracted in its dimenſions, and aſſumed an healing appearance. At this time pain was felt extending up the arm, and ſuddenly a conſiderable tumour aroſe over the abſorbing veſſels, which proceed along the inner edge of the biceps muſcle. This tumour became nearly as big as a ſmall orange. As the original ſore ſeemed now diſpoſed to heal, and as there was no ſurrounding induration, I could not believe it venereal, and therefore recommended him ſtill to abſtain from mercury, and apply leeches, and linen moiſtened in the aq. litharg. acet. comp. to the tumour formed over the inflamed abſorbents. For it ſeemed to me that if venereal poiſon had been imbibed from the ſore, it would have paſſed on to one of the axillary glands, and would have cauſed induration and inflammation to take place there, more ſlowly than had occurred on the preſent occaſion.

Under

Under this treatment the tumour was diſcuſſed, and the ſore at the ſame time healed. About three weeks afterwards the patient called on me, and ſaid that there were venereal ulcers in his throat; and in each tonſil there was an ulcer deeply excavated, with irregular edges, and with a ſurface covered by adhering matter; ulcers, in ſhort, which every ſurgeon, who depends on his ſight as his guide, would have pronounced to be venereal. Shortly after alſo, ſome copper-coloured eruptions appeared on his face and breaſt. He ſhewed his diſeaſes to ſeveral ſurgeons, on whoſe opinion he relied, who, without heſitation, affirmed that they were venereal, and that the mercurial courſe had been improperly delayed.

Whilſt the patient was looking out for lodgings, in order that he might go through the mercurial proceſs, a circumſcribed thickening and elevation of the pericranium covering the frontal bone appeared; it was of the circumference of an half-crown piece; and was, in ſhort, what every ſurgeon, who is

guided only by his ſight and touch, would, without heſitation, have called a fair corona veneris. I now told the patient that I was more inclined to believe his diſeaſe was not ſyphilitic, from the ſudden and ſimultaneous occurrence of this node with the ſore throat, &c. Other ſurgeons thought differently; and I believe this very ſenſible and amiable young man imagined that his health would become a ſacrifice if he any longer attended to my opinion. He was preparing to ſubmit to a mercurial courſe, when very important concerns called him inſtantly into the country. He went with great reluctance, taking with him mercurial ointment, &c.: and after a fortnight I received a letter from him, ſaying that he found his complaints benefited by his journey, that buſineſs had prevented him from beginning the uſe of mercury for a few days, that he now found it was unneceſſary, for his ſymptoms had almoſt diſappeared, and ſhortly afterwards he became perfectly well.

At the time, and ever ſince, I conſidered this caſe as meriting publication, as being the

moſt unequivocal inſtance extant of a diſeaſe occurring, which could not from appearance be diſtinguiſhed by ſurgeons of the greateſt experience from ſyphilis, and which, however, was undoubtedly of a different nature; and I believe that there is no one, who would not have decided on this caſe, as thoſe did who declared it to be venereal, unleſs they had had an opportunity of watching its progreſs very attentively. This caſe probably made me more ſcrupulous than I ſhould otherwiſe have been in admitting diſeaſes to be venereal, till their unabating progreſs eſtabliſhed their nature beyond the poſſibility of doubt; and from this heſitation in deciding I have been enabled to prove, that a great number of caſes, in which mercury would have been employed, have got well without the uſe of that medicine. It has happened to me, as it did to Mr. Hunter, to meet with theſe caſes very frequently, and I therefore conclude that they muſt occur frequently to others; and my object in relating theſe inſtances is to induce ſurgeons to reflect on the beſt mode of diſcriminating between them

and thoſe truly venereal. I have kept no particular account of the numerous caſes which I have met with, but the five following inſtances happened in my own private practice within a few months, and the circumſtances of them are ſtill freſh in my memory. The caſes are drawn up from narratives which I requeſted the patients themſelves to make out of their own diſeaſes.

CASE.

A gentleman had a ſore on the lower part of the prepuce near the frœnum, which was much irritated by travelling from the country. When he came to town there was a good deal of ſurrounding inflammation, and a thickening adjoining the edges of the ſore, which were irregular, and ſeemingly diſpoſed to ſpread. An appearance of granulations had taken place on the ſurface of the ulcer, which was at this time as large as a ſhilling. I gave him the pilulæ hydrargyri, whilſt I tried by local means to quiet the irritation of the ſore, and of the ſurrounding parts. As

the ſore appeared to heal ſlowly, and ſeemingly in proportion to the quantity of mercury taken, the patient rubbed in at the ſame time ſome mercurial ointment, and continued to do ſo till after the ſore was well, which was in about a month. In three weeks after he had left off theſe medicines this patient applied to me on account of an ulceration on the velum pendulum palati, and on the ſurface of one tonſil; and ſoon afterwards ulcers took place on the edges of the tongue, on the inſide of the lips and cheeks. Copper-coloured ſpots alſo came out on his arms and legs, and all over his body. They were very numerous, but none appeared on his face. By waiting and watching the progreſs of the diſeaſe, I found that ſome of the ulcers amended ſpontaneouſly, and that the palate got well. I therefore exhorted him to refrain from mercurial medicine, and he went into the country. A medical gentleman, whom the patient conſulted, was very anxious to try ſomething to cure this diſeaſe, when his patient was ſeized with a ſevere febrile complaint, during the continuance of which all

theſe doubtful ſymptoms diſappeared, and there has not been any return of diſeaſe ſince that time.

CASE.

A gentleman had a ſmall ſore on the prepuce, at a little diſtance behind the corona glandis, which did not appear like a venereal chancre, and therefore no mercury was uſed. After about a fortnight, during which time it could ſcarcely be ſaid to be better or worſe, it ſuddenly became conſiderably indurated in its circumference, and the ſurrounding parts became inflamed. The hardneſs was ſo conſiderable that it reſembled one of thoſe indurated chancres which ſo frequently occur; and in conſequence of this ſtriking reſemblance, another ſurgeon, whom the patient conſulted at this time, inſiſted on his confining himſelf to his chamber, and uſing mercury attentively.

The quietude of the patient, with ſome little attention in regard to local applications, ſoon removed the inflammation and hardneſs,

and

and the patient, who was controuled by nothing but his fears, diſcontinued his medicine after thrice uſing ſome mercurial ointment, and returned to his former mode of life.

About a month afterwards he called on me with an ulcer in each tonſil, one of which was deeply excavated, with irregular edges, and covered by adhering matter. Shortly afterwards copper-coloured ſpots appeared on his body, but they all went away in about a month without mercury.

CASE.

A gentleman applied to me with a very irritable ſore, or rather excoriation, extending itſelf over the left half of the corona glandis. It was unlike a venereal ſore, as may be ſuppoſed from this deſcription, yet, as the patient was young and healthy, I adviſed him to take ſome of the pilulæ hydrargyri to guard againſt the poſſible conſequences of abſorption, and to bathe the parts affected with the aq. litharg. acet. comp. c. opio, and to apply

folded linen moiſtened with the waſh round the penis. The prepuce ſoon became ſwoln and inflamed, ſo that he was unable to retract it, and the attempt gave him great pain. He was therefore directed to cleanſe the part by injecting frequently the decoction of white poppy heads of a lukewarm temperature. After a week he tried a very weak ſolution of vitriolated zinc, and other metallic ſalts, but they all increaſed his pain, and he was obliged to return to the uſe of the anodyne waſh. When he had perſevered in this courſe three weeks without any evident amendment, we conſulted another ſurgeon, who recommended the diſcontinuance of the mercurial medicine, and in lieu of it the free uſe of the bark. This medicine he took for a week without any amendment; he then tried the nitrous acid for ten days, and afterwards took cicuta.

In about two months he was able to retract the foreſkin, and then the ſolution of vitriolated zinc appeared to leſſen the irritability, and contribute to the ſkinning of the ſore,

which

which was merely on the ſurface, not having been attended with any loſs of ſubſtance.

Afterwards, the penis being ſubjected to ſome accidental irritation, the ſame kind of ſoreneſs ſpread over the other half of the corona glandis; but this diſeaſe was not accompanied with ſo much tenderneſs as the former one, and got well in leſs than a month. As ſoon as it was well the patient had an ulceration of the velum pendulum palati, round which the cuticle aſſumed a whitiſh colour; the ulceration ſpread acroſs the palate, but it was evident that the part firſt affected got better whilſt the ulcer became worſe in the parts laſt affected. Two or three ulcers took place upon each edge of the tongue, and ſome on the inſide of the lips. At the ſame time many copper-coloured ſpots appeared on the face, breaſt, arms, and lower extremities; they came out in ſucceſſion, were of an oval ſhape, about the ſize of a ſixpence, and had a ſtrikingly venereal aſpect.

Believing

Believing that the primary ſymptoms of this diſeaſe were not ſyphilitic, and obſerving that ſome part of the ulcer on the palate healed, and that ſome of the ſores on the tongue and lips got better, whilſt new ones broke out, I recommended the patient to uſe no mercury. He went into the country, where all theſe maladies gradually diſappeared, and in about a month he was perfectly well.

CASE.

A perſon, whoſe irregular habits of life gave reaſon to ſuſpect the exiſtence of ſyphilis in the conſtitution, had ulceration of the tonſils, not ſuperficial, but deep. Theſe were accompanied with copper-coloured ſpots on the face and breaſt, and eruptions on the head amidſt the hair, accompanied with a great deal of ſcurf. Theſe got well by anointing the head with ung. hydrarg. nitrat. mixed with ſimple ointment, which made me doubt whether the other diſeaſes were really ſyphilitic, and cauſed me to delay the uſe of mercury. The complaints did not amend, nor did they get materially worſe. There

was

was attending theſe diſeaſes a good deal of general indiſpoſition; the appetite failed, and no ſleep took place till the morning.

At this time a tenderneſs and thickening of the perioſteum of the tibia took place. Though other medicines did not appear to be of any ſervice I ſtill was averſe to the uſe of mercury. Tired of delay, the patient conſulted another ſurgeon, who declared the diſeaſe to be venereal, and deſired that mercurial ointment might be uſed. The patient accordingly rubbed in two or three nights without feeling any effect from the medicine, and then ſet off on a party of pleaſure to Brighton, where all the diſeaſes gradually diſappeared without any further uſe of mercury.

CASE.

A gentleman had an enlargement of a gland in the groin, probably from the abſorption of ſome infectious matter, though he was not conſcious of having had any ſore. A ſecond and a third gland became enlarged, the integuments

guments became thickened and inflamed, and a very large bubo formed. It ſuppurated and burſt in three places. The general tumefaction ſubſided, but by no means diſperſed, and ſinuſes remained where the abſceſſes had been. About this time I ſaw the patient, which was two months after the firſt appearance of the diſeaſe.

Shortly after this he had an ulceration, which ſpread over the velum pendulum palati, and, except that it was more ſuperficial, much reſembled a ſyphilitic ulceration. It continued ſo long without amendment that I began to think it was venereal. Bark was now given plentifully, and the ulcer evidently amended. The patient went afterwards to the ſea-ſide, where the bubo gradually diſperſed: many months however elapſed before it entirely diſappeared. The ulcerations of the velum pendulum palati alſo healed ſlowly, and ulcers which afterwards appeared in the back part of the pharynx, alſo got well without mercury.

Theſe

Theſe caſes are not related as being curious, but becauſe they all, except the firſt, occurred to me within the ſpace of a few months, and becauſe ſufficient time has elapſed ſince their occurrence to ſhew that there is no probability that any ſubſequent diſeaſe will ariſe from the ſame ſource. It muſt be allowed that they are inconteſtable inſtances of diſeaſes getting well without mercury, which could not be diſtinguiſhed by mere inſpection from ſimilar diſeaſes truly ſyphilitic. For though mercury was employed in ſome of the caſes, it was uſed at ſuch a time, or in ſuch quantity, that it cannot in the leaſt influence our deciſion as to this point. For inſtance, in the firſt caſe the mercury was employed for the cure of the primary ulcer, and did apparently contribute to it, yet the ſecondary ſymptoms got well without mercuy, which, according to the opinions now prevailing among ſurgeons, is a proof that neither were venereal. It may indeed be ſuppoſed that the venereal poiſon may be modified by certain conſtitutions, and its effects ſpontaneouſly get well; and ſome

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may queſtion if the ſecondary ſymptoms were the conſequences of the ſores or abſorption to which I attribute them. What I have written is, I believe, in conformity to prevailing opinions, and I forbear to enter into uncertain diſcuſſions.

Theſe inſtances, however, though not ſelected for the purpoſe, ſhew that the primary infected ſores which are capable of producing ſecondary ſymptoms, which ſtrikingly reſemble thoſe of ſyphilis, do not themſelves poſſeſs any uniform characters. In the firſt caſe the ulcer had no uncommon appearance; it was of the ſize of a ſhilling, with fretful edges, and every where covered with granulations. In the ſecond there were no apparent granulations, and a great degree of induration ſuddenly ſurrounded it, giving it a ſtriking reſemblance to the indurated venereal chancre. In the third the ſore ſurface was extremely irritable; but though the diſeaſe exiſted for a long time the ulcerative proceſs did not eat into the part; and at the concluſion of the caſe there was no loſs of ſubſtance.

ſubſtance. In the fourth and fifth caſes the abſorption of the matter, which cauſed the ſecondary ſymptoms, either took place without any breach of ſurface, or the primary ſores were too inſignificant to excite attention. I lately attended a gentleman who had an ulcerated throat, and eruptions on the head, which broke out between the ſecond and third month after the appearance of a ſore on the prepuce, which ſore healed in a few days with no other treatment than bathing it with a ſolution of acetated lead, and applying to it a piece of lint moiſtened with that liquor. This circumſtance made him diſregard the primary ſore, but he was aſſured by a ſurgeon, whom he conſulted, that the ſecondary ſymptoms were venereal: they however got well without mercury.

It is probable that theſe morbific poiſons may be abſorbed without any evident ulcer, or from a trivial ulcer, which may heal ſpontaneouſly, much more frequently than the ſyphilitic poiſon; and if the conſequent conſtitutional ſymptoms are conſidered as venereal,

real, and treated as ſuch, I need not ſay what confuſion muſt be produced in the mind of the ſurgeon who purſues this conduct, and how bewildered his opinions muſt be reſpecting the venereal diſeaſe. If, for inſtance, in the caſe beginning at page 123, a ſurgeon had conſidered the ſecondary ſymptoms as venereal, and employed mercury ſucceſsfully for their cure, he would ſet this down as a caſe of venereal bubo occurring without a previous chancre, and be inclined in his general practice to uſe mercury in all caſes of buboes without chancre, leſt conſtitutional diſeaſes ſhould enſue. There, however, does not appear any thing that ſhould exempt the glands of the groin from enlargement, and diſeaſes to which others are ſubject, whilſt they are particularly liable to irritation and conſequent diſeaſe from the diſorders of the urethra and other parts, to which they are connected by means of their veſſels. The general uſe of mercury, therefore, in enlargement of theſe glands, unleſs circumſtances characterize them as venereal, muſt, I think, be conſidered as improper.

In

In order further to exemplify the remark that the primary ſores excited by poiſons, capable of producing ſecondary ſymptoms reſembling ſyphilis, have no uniform characters, but put on various and diſſimilar appearances, I think it right to add another caſe of a phagedænic ulcer, which ſpread by ſloughing, and which I attended in the early part of laſt winter. This I have placed by itſelf, becauſe, as mercury was employed, the concluſions to be drawn from it are leſs certain than in the preceding caſes.

A gentleman had a very irritable ſore on the prepuce, juſt behind the corona glandis, which was covered with ſlough; this having been thrown off was ſucceeded by another ſlough, and the ſore ſpread laterally to the right and left; but it neither extended backwards ſo as to affect the ſkin covering the body of the penis, nor forwards ſo as to touch the glans; neither did it eat deeply into the part ſo as to affect the corpus cavernoſum. I tried various dreſſings, but none ſeemed to do much good. I touched the

ſurface of the ſore with argentum nitratum, but that did harm. I therefore was obliged to ſoothe this ſore ſince I could not correct it. A ſalve made of ſpermaceti cerate, with as much aq. litharg. acet. and tinct. opii as could be incorporated with it, ſeemed to anſwer beſt; and the parts were kept cool by enveloping them in linen moiſtened with the decoction of poppies. The moſt perfect quietude was enjoined, and the part laid upon a pillow with the extremity rather raiſed above an horizontal line. I had given the patient ſome pilulæ hydrargyri in the firſt inſtance, but his conſtitution was ſo deranged by the irritation of the ſore that it would have been abſurd to perſevere in the uſe of mercury. The ſore continued to ſlough, and to extend in a circular direction nearly all round the prepuce, the lower part of which became extremely ſwoln. This took up nearly two months: about five weeks after the commencement of the diſeaſe a ſpot appeared more than an inch from the corner of the mouth. It was ſoon covered over with a ſcab, which roſe far above the ſurface. It had

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encreaſed to the ſize of a ſixpence, when I thought right to dreſs it, that I might diſtinguiſh the ſurface of the ſore. I found that the ulcer was very deep, but I could not ſee the ſurface for a very viſcid diſcharge, which adhered to it like mucus. Poultices and various dreſſings were employed, but the appearance of the ſore was unchanged, and it gradually became of the ſize of a ſhilling. At length a kind of fungus ſhot from that edge of the ſore fartheſt from the mouth. A ſimilar ſpot had made its appearance on the ear, and was alſo increaſing. The activity in the diſeaſe of the prepuce had gradually declined, and I began again to try ſome medicated applications:—the ſore ſeemed much benefited by touching it daily with argentum nitratum; but when this was omitted the ſloughy appearance of the ſore again took place, and it increaſed in dimenſions. It was now agreed at a conſultation that this patient ſhould uſe mercury, and he rubbed in two drachms, by meaſure, every night for ſix weeks. As the mercury took effect it ſeemed to operate beneficially on the ſpot on the ear,

which gradually died away; and on the ſore of the penis, which alſo gradually acquired a healthy appearance, and the parts became ſound, except at one part where the prepuce was not quite deſtroyed, which ſtill retained an unhealthy appearance. The mercury, however, did not affect the ſore on the cheek; the fungus which I mentioned ſeemed to increaſe, and, after a time, ſkin formed over it, ſo that the ſore healed in an unhealthy manner at the edge fartheſt from the mouth. But it ſtill ſpread in the other direction till it reached the angle of the mouth, and it afterwards extended itſelf along each lip. On the upper lip it had ſpread to the extent of one-third of an inch, and ſtill retained the ſame diſeaſed appearance which characterized it at the beginning. It was deep, and its ſurface could not well be ſeen on account of a viſcid matter which adhered to it. It was now agreed in conſultation to leave off mercury, leſt the irritated ſtate of the mouth ſhould increaſe the deſtruction which the ulcer was committing on the lips. The ſore now no longer ſpread; it very ſlowly loſt its diſeaſed

ſtate,

ſtate, and healed. This alſo happened in the remaining diſeaſed part of the ſore on the prepuce.

I have met with many ſimilar caſes ſince thoſe five that have been related, and of which, from their ſudden and almoſt ſimultaneous occurrence, I was induced to take a written account: within theſe two months I have ſeen two caſes of eruptions and three of ſorethroats. The eruptions took place particularly about the hands and feet: in one caſe the patient has been ſalivated for them; the diſeaſe, however, recurred, and afterwards got well without the uſe of mercury. In the other there were warts and ſores on the prepuce, and buboes in the groin, which ſuppurated and burſt: the eruptions ſo ſtrikingly reſembled thoſe of ſyphilis that all the medical men, who accidentally ſaw the patient, exclaimed that they were ſo, with a confidence proportioned to their profeſſional ſkill and accuracy of obſervation. Indeed in this caſe, and in others, I have been almoſt impelled to uſe mercury, in conſequence of the

opinion and wiſhes of the patient and thoſe of his friends. The hiſtory however of this diſeaſe did not accord with that of the venereal; the warts had preceded the ſores; ſome ſores healed, and others broke out; and at laſt ſome of the eruptions began to get well, and the reſt gradually diſappeared. One of the patients who had the ſore throat had been ſalivated, but the diſeaſe recurred. In the other two I forbore to uſe mercury, and I have reaſon to ſay they will do well without it. In one of the latter caſes there were ulcers on the tongue and inſide of the lips. This circumſtance of the recurrence of theſe diſeaſes, after mercurial courſes, is a ſtrong argument againſt its adoption till their nature is aſcertained as far as poſſible by prudent delay and attentive obſervation.

If, then, the occurrence of ſuch caſes be frequent, and the neceſſity of diſcriminating them from thoſe of ſyphilis be of great importance, we may ſolicitouſly enquire by what circumſtances we are to diſtinguiſh between diſeaſes ſo ſimilar in appearance, but

ſo different in their nature. Mr. Hunter ſeemed to wiſh the proſecution of this ſubject, probably from the expectation that ſome characters appropriate to theſe diſeaſes might be detected: I have not, however, been able to diſcover any; the fictitious diſeaſe in appearance ſo exactly reſembles ſyphilis that no obſervation, however acute, ſeems to be capable of deciding upon its nature. Although the ulcers in theſe ambiguous caſes generally ſpread more extenſively along the ſurface of the part which they affect, yet this does not conſtantly happen, as is ſhewn in the caſe related at page 118. In this caſe, however, the induration which ſurrounded the chancre occurred ſuddenly, and went away as rapidly. The hiſtory, therefore, of the two diſeaſes was very diſſimilar *. It muſt alſo be remarked, that true

* On the ſubject of induration ſurrounding chancres I think it may be uſeful to relate the following caſe, and to mention that I have known ſimilar ones in a leſſer degree:

A ſtudent in ſurgery ſhewed me an indurated chancre, for the cure of which he had uſed a great quantity of mercury, which had affected his mouth for a long time, though not ſeverely. The ſore ſo exactly reſembled a bad indurated

true venereal ſpots and ulcers ſometimes aſſume the appearance of other diſeaſes, and do not poſſeſs their ordinary characteriſtics.

Since, then, our ſenſes fail us in our endeavours to diſcriminate between theſe two diſeaſes, and ſince the moſt important circumſtance is to diſtinguiſh whether the diſeaſe be venereal or not, we may enquire whether there are any circumſtances in the progreſs of theſe different diſeaſes which will ſerve us in diſtinguiſhing one from the other. It appears to me that there are; and theſe caſes are publiſhed not merely to ſhew the frequency of ſuch occurrences, and the neceſſity

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venereal chancre that I did not heſitate to recommend him to remain at home, and rub in ſo as to produce a ſlight ſalivation. But as no amendment was perceived after a fortnight's confinement, and under a conſiderable affection of the mouth, I was induced to enquire more ſtrictly into the local treatment of the ſore, which I found he was conſtantly irritating by various ſtimulating applications. He alſo affirmed that the hardneſs had ſeveral times gone away and returned again. By bathing the part with milk and water, and dreſſing it only night and morning with mild ſalve, the hardneſs quickly abated, and though he deſiſted from the mercurial courſe it ſoon became perfectly well.

for diſcrimination, but to engage a more general attention to the means by which ſuch diſtinction may be made. A very ſimple fact has enabled me in moſt caſes to diſtinguiſh between the two diſeaſes; yet, ſimple as it is, if it be generally true it is very important; and if it were univerſally true, it would be of the higheſt conſequence. The fact alluded to is, that the conſtitutional ſymptoms of the venereal diſeaſe are generally progreſſive, and never diſappear unleſs medicine be employed. It may be added too, they are as generally relieved under an adequate effect of mercury on the conſtitution. An attention to ſuch plain and ſimple circumſtances has been of great uſe in directing the medical treatment which I have purſued, and I am induced to ſolicit the public attention to them, that others may determine the value of ſuch remarks.

I have aſked the opinion of ſeveral ſurgeons of great practice and abilities reſpecting this queſtion; Whether conſtitutional ſymptoms of ſyphilis do ever ſpontaneouſly amend? and no one has decidedly replied in the affirmative,

mative, whilſt all, without heſitation, agreed that they were generally progreſſive till checked by the effect of mercury. It ſeemed uſeleſs to ſeek further information; for what ſurgeon is there at preſent, if he ſees diſeaſes that cannot be diſtinguiſhed by the ſight from ſyphilis, and hears that they aroſe in conſequence of a chancre, that would ſuſpend his judgment, and forbear to adminiſter mercury? If I have lived in the habit of ſo frequently detecting the impoſing appearances of the ſecondary effects of theſe diſeaſes, it is becauſe I have been upon the watch, and becauſe they have occurred in patients in whom I have ſeen the primary ſores, the appearance and progreſs of which have excited my ſuſpicion as to their nature. I have ſtated the rule as general, but not univerſal; for I could myſelf relate caſes of diſeaſes, in which, from the great abatement, and even diſappearance of ſymptoms, I have concluded the diſeaſe was not ſyphilitic; yet, from the duration of the diſorder, or from the ſubſequent aggravation of its ſymptoms, the patient has deſired, and I have recommended the uſe of mercury, and

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the diſeaſe has been treated as venereal without its real nature being aſcertained.

The rule which has been mentioned relates to the conſtitutional ſymptoms of the venereal diſeaſe, for the primary ones, chancres, do ſometimes heal ſpontaneouſly, generally however, though not conſtantly, leaving a thickening or induration of the affected part. They may alſo be induced to heal by topical means, without mercury, with ſimilar events. Some enlargements of glands in the groin will alſo in like manner ſubſide.

It may be fairly ſuppoſed that if ſome chancres heal ſpontaneouſly, that conſtitutional diſeaſes ariſing from the ſame cauſe, may, in like manner, ſometimes get better without medicine. The adminiſtration of nitrous acid, opium, and other remedies have been ſaid to have amended, if not entirely cured, theſe conſtitutional diſeaſes. But the queſtion is, will they get better ſpontaneouſly? and the queſtion can only be ſolved by experience. Delay will frequently enable a ſur-

a ſurgeon to decide; but there are caſes in which no amendment takes place, and the ſurgeon is as it were forced, from the progreſs of the diſeaſe, to employ mercury.

In recommending prudent delay and attentive obſervation I hope and believe that I am not recommending any thing likely to be of dangerous conſequences. The venereal diſeaſe is generally ſoon checked by the uſe of mercury; and in conſtitutions where much medicine is required to counteract its effects, that medicine may be given with freedom. By delay and obſervation we perhaps may perceive that eruptions and ſore throats, which could not from appearance be diſtinguiſhed from venereal, ſpontaneouſly amend: that ſome eruptions ſcale and become well, and the probability will of courſe be that the reſt will do ſo likewiſe: or that an ulcer mends in one part though it may ſpread in another, when the natural inference is that the diſeaſed actions in the ſore will gradually ceaſe, and health return ſpontaneouſly; and that what has occurred in one part of

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an ulcer will ſucceſſively take place in another.

In recommending delay it cannot, I ſuppoſe, be thought that I would adviſe any one to wait till an ulcer deſtroyed the velum pendulum palati, or did material injury to any important part. There are caſes where the progreſs of the diſeaſe obliges a ſurgeon to uſe mercury even though he may be ſuſpicious that it is not ſyphilitic. The effect of exciting a mercurial affection of the conſtitution in diſeaſes reſembling ſyphilis is, as far as my obſervation enables me to determine, very various. It ſometimes cures them very ſuddenly and very differently from the gradual amendment which it produces in truly venereal diſeaſes. Sometimes, however, theſe diſeaſes yield more ſlowly to its operation, and are cured permanently. Sometimes the diſeaſes recur in the ſame parts after a ſevere courſe of mercury; ſometimes mercury merely checks the diſeaſe, and can ſcarcely be ſaid to cure it; in which caſe it ſeems important to ſupport the ſtrength of the conſtitution,

tion, and to keep up that mercurial effect which controuls the diſeaſe, and can be borne without material derangement of the conſtitution for a great length of time. Sometimes alſo the uſe of mercury aggravates theſe diſeaſes.

Again, in ſome conſtitutions, the venereal diſeaſe may aſſume unuſual characters, and be very difficult of cure. It muſt then be ſcarcely poſſible to diſcriminate between theſe anomalous caſes of ſyphilis and thoſe of diſeaſes reſembling it, unleſs ſome new diſtinctions are diſcovered.

But I ſuppreſs any further obſervation on the ſubject, having accompliſhed the intention of this paper, which was to depict a kind of caſes which very frequently occurs in this metropolis, and which is, I believe, too commonly treated as venereal, but which may be diſtinguiſhed not to be ſo by a little prudent delay and attentive obſervation. The frequent caſes of ſuch diſorders which I have recently met with has ſuggeſted the idea that they are increaſing of late; nor is it improbable

bable ſince they are like ſyphilis, propagated by promiſcuous intercourſe from ſecretions, or ſores not ſo readily curable by mercury as thoſe that are venereal, and ſome of which are not from their nature ſo prohibitory of that intercourſe.

It is now nearly two years ſince this paper was drawn out as a ſubject for diſcuſſion at a medical ſociety; and, after ſuch an interval, the chance of any of the diſorders which are deſcribed in it returning is diminiſhed almoſt to nothing. I have ſince met with conſiderable numbers of ſimilar diſeaſes, which gives confirmation to the opinion that they are frequent occurrences. In ſome later caſes, when the diſeaſe has been long protracted, and the patient very anxious to get rid of it, I have given a little calomel for that purpoſe, but not ſo as to invalidate the opinion that the diſeaſe was not ſyphilitic. Having waited for inſtance, four months from the occurrence of a ſore throat with eruptions, and being certified by the progreſs of the diſorders that they were not ſyphilitic, I have directed

directed that one of the compound calomel pills * ſhould be taken every ſecond or third night, which generally diſpoſes the ſores in the throat to heal, but I have taken care to remit the uſe of even this ſmall quantity of mercury if it ſeemed to heal the ſores too ſpeedily, for it ſeems to me better to let the diſeaſe exhauſt itſelf than ſuddenly to cure it, as in the latter caſe it is very likely to return. In confirmation of this opinion I may mention, that, about five years ago, a gentleman applied to me to undergo a ſalivation for the cure of a ſore throat, for which he had been ſalivated three times, once in each ſucceeding year. I need ſcarcely ſay that it was one of thoſe ulcerated throats which have been deſcribed. All medicine was abſtained from; and in between three and four months the ſores ſpontaneouſly became well, and have never ſince recurred. The whole of this paper has been written upon the preſumption

* This pill, as preſcribed in the pharmacopeia of St. Bartholomew's Hoſpital, contains 1 grain of calomel, 1 grain of the precipitated ſulphur of antimony, and 2 grains of powdered gum guaiacum.

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that diſeaſes which ſpontaneouſly get well are not ſyphilitic, which is, I believe, the general opinion. It may, perhaps, be queſtioned by ſome whether the diſeaſes here recorded may not be modifications of the venereal diſeaſe. The practical rules of conduct will not, however, be altered even if ſuch a ſuppoſition were verified, ſo that it does not ſeem neceſſary to diſcuſs this point: it may however be right to remark, that there are caſes which would induce the belief that ulcerated ſore throats, eruptions, and nodes on the bones, ſimilar to thoſe deſcribed in this paper, may occur from a general diſturbance of the conſtitution without the abſorption of any infectious matter.

SECT. II.

HAVING written the foregoing account, I intended here to conclude, having, in my own opinion, accompliſhed my purpoſe, which was to proſecute in ſome degree the ſubject which Mr. Hunter deemed worthy of inveſtigation, and to depict the circumſtances of diſeaſes which I believe very frequently occur, and which are often confounded with caſes of ſyphilis, to the detriment of patients, and the diſcredit of our profeſſion. But having requeſted the opinions of two of my medical friends on the foregoing paper, one of them ſaid that he thought the publication of it would be injurious, as it might induce the younger ſurgeons to abſtain from the uſe of mercury, to the prejudice of their patients; the other gentleman ſaid that he thought more explicit deſcriptions ſhould be given of the caſes in which mercury ſhould be withheld or employed. In conſequence of

theſe opinions I am induced to take a cloſer comparative view of diſeaſes that are, and of thoſe that are not, ſyphilitic.

I undertake the taſk reluctantly, becauſe the brevity with which I muſt ſpeak of theſe ſubjects may render my opinions liable to miſapprehenſion, and becauſe I do not feel competent to its proper performance. Yet, by this means, I think I ſhall do away the objection of one of my medical friends: for I believe that I am myſelf more likely to err in recommending the too free than the too ſparing adminiſtration of mercury in diſeaſes of this nature. Any ſurgeon who has obſerved the ruinous conſequences of repeated mercurial courſes in ſome conſtitutions would probably err in the ſame manner; and his diſlike to diſorder the conſtitution by mercury would probably lead him even to uſe it more freely than might be abſolutely neceſſary: this he would do in caſes clearly ſyphilitic, in order to prevent the poſſibility of the recurrence of diſeaſe, and a repetition of a mercurial courſe. In doubtful caſes, which are

cured by exciting the mercurial action in the conſtitution, he would adopt a ſimilar mode of treatment in order to ſuppreſs the diſeaſe for ſo long a time as to make it leſs likely to recur; or if any ſubſequent diſeaſe ſhould take place, to render it highly probable that this was not venereal, ſince it had broken out after ſuch a courſe of mercury as muſt be conſidered to be adequate to the cure of almoſt any diſeaſe of that nature. By undertaking this taſk I ſhall perhaps comply with the wiſhes of my other friend in ſtating more explicitly the circumſtances which ſhould induce a ſurgeon immediately to uſe or abſtain from the adminiſtration of mercury, and, at the ſame time, contribute my mite of obſervation to thoſe already offered on this ſtill obſcure ſubject of venereal diſeaſes.

Primary ſores or chancres are extremely various in their appearance, and perhaps in their nature. The moſt clearly marked venereal chancre has been excellently deſcribed by Mr. Hunter. The ſtriking characters of the diſeaſe are, an ulcerating inflammation without

without any reparation, attended with induration of the ſurrounding parts. The deſcription is, a ſore of a ſomewhat circular form, excavated, without granulations, with matter adhering to the ſurface, and with a thickened baſe and edge.

There is another ſpecies of chancre in which the diſpoſition to ulcerate is leſs than uſual, and the diſpoſition to indurate is greater; ſo that the ulcerated ſurface may heal, and leave an indurated knob or tubercle in the affected part.

There are beſides ſome chancres in which the diſeaſed action ſeems to be very inert; in theſe the ulcer is ſuperficial, the thickening of the ſurrounding parts ſlight, and, after ſome time, the ulcerated ſurface acquires a ſtate of health, and cicatrizes, without producing any perceptible granulations.

But it is impoſſible to depict by words the various ſores, ſome of which are of a very irritable nature, that are produced by vene-

real virus, and through the medium of which the conſtitution is contaminated by that poiſon. Mr. Hunter, apparently influenced by this belief, ſpeaks briefly on the ſubject of chancres, and obſerves that the ſore induced by venereal virus will partake of the prevalent diſpoſitions to diſeaſe exiſting in the conſtitution or the part. If, then, many venereal chancres are ſo anomalous in their appearance, it is by their hiſtory that we muſt chiefly be guided in forming our opinion of their nature, as will be preſently more fully inſiſted on *. Reſpecting theſe irritable and uncha-

racteriſtic

* When mercury is adminiſtered in theſe anomalous venereal chancres it ſometimes amends them, ſometimes it appears to have little or no effect on them, and ſometimes, by increaſing the febrile indiſpoſition which they occaſion, its operation appears to be prejudicial. Sometimes, likewiſe, the irritation which theſe ſores keep up in the general ſyſtem prevents the ſpecific operation of mercury on the conſtitution, and therefore, in many caſes, we are obliged, for different reaſons, to poſtpone the uſe of mercury when it ſeems to be either unavailing or injurious, and to reſume it when future circumſtances indicate. The local treatment of anomalous irritable ſores is, under theſe circumſtances, of the higheſt importance. The removal of the diſcharges from ſuch ſores ſeems eſſential, yet every mechanical irrita-

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racteriſtic chancres I wiſh to mention ſome obſervations, which have induced me to believe that the venereal poiſon can be conveyed into the conſtitution, and contaminate it through the medium of a ſore, the general actions of which are probably not venereal.

CASE.

A healthy young man had a chancre behind the corona glandis, which was very

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tion ſhould be avoided; and when, therefore, the retraction of the prepuce cannot be effected without injury to the ſores, the diſcharges ſhould be waſhed away by frequent injections of tepid opiate waſhes. The heat and irritation ſhould be alleviated by keeping up evaporation from the ſurface by linen folded and applied round the part, and moiſtened with opiate lotions. The penis ſhould be ſupported in an horizontal poſition, and kept free from that excitement which preſſure or friction may occaſion. As ſoon as it is probable the ſores will bear ſtimulants of any kind, weak ſolutions of metallic ſalts, and ſimilar applications, may be uſed to correct their morbid ſtate; and the ſtrength of theſe applications may be gradually and cautiouſly increaſed, ſo as to leſſen the morbid irritability of theſe ſores. But it is foreign to my deſign to diſcuſs the treatment of theſe caſes; and the relation which has been given of ſome of them will ſerve as ſpecimens of that plan of conduct which I ſhould adopt and recommend.

irritable, threw off ſucceſſive ſloughs, which came away in ſmall portions, and diſcharged a bloody ſanies. It cauſed ſo much ſwelling of the prepuce as, after a ſhort time, to prevent the retraction of that part, ſo that he could only cleanſe it by frequently injecting the decoctum capitum papaveris. This ſore diſordered his conſtitution. As he was healthy he took the pil. hydrarg., and rubbed in the mercurial ointment in conſiderable quantities for more than a month; but it neither checked the progreſs of the ſore, nor affected his habit. It may be remarked that the irritable ſtate of the conſtitution, which theſe ſores occaſion, often counteracts the operation of mercury. This unavailing mercurial courſe was now deſiſted from, when the ulcer had deſtroyed about one half of the glans; it ſtill continued to ſpread, though ſlowly, and afterwards healed. In about two months this patient had eruptions and ſore-throat, which had the characteriſtic marks of ſyphilis, and yielded regularly, like the ſymptoms of that diſeaſe, to the effects of mercury. Again, after the lapſe of ſome months,

nodes

nodes appeared on the tibia and ulna, with nocturnal pains in thoſe parts, and in the head. Theſe complaints were equally characteriſtic, and gave way to the operation of mercury, after which the patient had no return of diſeaſe.—Can we ſay that the actions of a ſore, which were not amended by mercury, and afterwards got well without that medicine, were venereal? or did the mercury adminiſtered, as ſometimes happens, cure the venereal actions of the ſore, and ſo diſpoſe it to heal afterwards, yet without preventing the abſorbed venereal poiſon from producing conſtitutional ſyphilis?

CASE.

Another healthy young man had three irritable ſores behind the corona glandis; one in the middle, one by the ſide of the frænum, and one in the intermediate ſpace. Theſe ſores diſcharged a viſcid ſanies, were of a livid colour, did not eat into the part, but rather roſe above the ſurface, and threw off no ſloughs. We tried, unavailingly, to quiet

their

their irritability by opiate applications, and to correct their diſeaſed ſtate by a great variety of other local means. This patient took mercury; and, in conſultation, it was determined that he ſhould perſevere in it till his conſtitution was affected. This happened in about ſix weeks, but the medicine did not operate in the way that was deſired. It made the patient weak and ill, but did not affect his gums; and at laſt brought on ſo violent an affection of his bowels as obliged him to deſiſt, although the ſores were not amended. Knowing that irritable ſores, which in the firſt inſtance reſiſt the effects of local applications, do afterwards yield to them when the powers of the diſeaſe are, as it were, in ſome degree exhauſted, or its nature in ſome way altered. I one morning, by way of experiment, touched one of the ſores with the argentum nitratum, and was the next day ſurpriſed to ſee the amendment it had produced. I repeated the application to this ſore, and employed it to the other two, and in a few days all the ſores were well. As ſoon as this gentleman was a little recovered from

the debility occaſioned by the diſeaſe and the medicine he went into the country, from whence he returned after ſix weeks, with three ſmall indurations in the ſituation of the three ſores. Theſe indurations regularly increaſed, and one of them began to ulcerate on the ſurface. They were ſhewn to ſurgeons of the greateſt experience and eminence, and no doubt was entertained but that they were three indurated venereal chancres. This opinion was confirmed by their giving way regularly to the uſe of mercury, which was perſiſted in till they were completely diſperſed, ſince which time there has been no return of diſeaſe.

It appears to me from ſuch caſes that the irritation of the venereal virus may excite extenſive ſurrounding diſeaſe which is not venereal. In the firſt caſe it ſeems to have got admiſſion into the conſtitution, and as the mercury employed had not its ſpecific operation, the poiſon produced its cuſtomary effects. In the latter it ſeems to have been controuled but not cured by mercury, and afterwards

afterwards to have excited true venereal action without producing irritation in the ſurrounding parts. I need not ſay that theſe caſes which ſuggeſted the idea which has been mentioned, are far from proving its truth. I could relate a great number of ſimilar caſes; and in ſome inſtances, when the irritable action of the ſore has ceaſed, I have known it become indurated throughout its whole extent. Theſe kind of caſes appear to me to deſerve particular attention, as it muſt be by ſuch means that we may be enabled to draw up a hiſtory of the irregularities of the venereal diſeaſe. Nor is this opinion, which has been mentioned, unſupported by analogy; for the ſame thing happens when conſtitutional ſymptoms of ſyphilis occur. The firſt irritation of venereal diſeaſe in the throat frequently produces extenſive eryſipelatous inflammation in irritable conſtitutions. Of this the patient complains, and to this the practitioner attends; and when it is mitigated or cured a local venereal ulcer appears, which muſt be regarded as the cauſe of this more general diſeaſe. In

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like manner the appearance of a local venereal node is uſhered in by general rheumatic pains in the limb and contiguous joints, which engage the firſt attention, till at length the cauſe which produced them becomes manifeſt. I mean here only to advert to thoſe rheumatic affections which, as it were, uſher in venereal diſeaſes, and then terminate, and not to thoſe which occur and accompany the venereal diſeaſes of the bones in ſome conſtitutions. If this opinion be correct, it will indeed only tend to perplex farther this already intricate ſubject; yet it is only by a recital and proper attention to every fact, that it can ultimately be made clear and ſimple.

If then, as ſeems to be the opinion of Mr. Hunter, the venereal actions in a chancre may be ſometimes ſo modified by the diſeaſed propenſities of the conſtitution, or part, as to form an ulcer ſcarcely cognizable as a venereal one; and if in ſome rare caſes the poiſon may infect the conſtitution, and produce a ſore, the general actions of which are not ſyphilitic, it follows, as a general rule of conduct

duct in practice, that ſurgeons are not to confide in their powers of diſcrimination, but in all caſes of ulcers ariſing from impure intercourſe to act as if the ſore was venereal, to give ſufficient mercury ſlightly to affect the conſtitution, to guard againſt the conſequences of abſorption, and, by local and other general means, to cure as quickly as poſſible the local diſeaſe, and thus remove the ſource of contamination, and the neceſſity for the continuance of medicine. This is, I believe, the general rule of practice adopted by the beſt ſurgeons, and it appears to me, in the preſent ſtate of our knowledge of theſe diſeaſes, to be judicious. One advantage reſults from this plan of conduct, which is, that if conſtitutional ſymptoms follow from a ſore treated in a manner that ought to have prevented contamination of the habit had the ſore been venereal, our ſuſpicions are excited, and by attentive obſervation we may perhaps diſcover that they are well founded.

In caſes of anomalous ſores it may be enquired, if in thoſe, which the event proves to be of a venereal nature, the diſeaſe deviates materially

terially from its common characters, that of an ulcerative proceſs without reparation, and extending in every direction. Do theſe ſores enlarge by ſloughing, or produce granulation or fungus? do they ſpread otherwiſe than nearly equally in their whole circumference? does the ulceration extend in them only in particular directions? do they heal in one part and ſpread in another? or do they amend and become worſe ſuddenly? Thoſe infected ſores which are not venereal have ſuch peculiarities, as has been ſhewn in the firſt part of this paper, and as they are ſo very various, it becomes neceſſary to diſtinguiſh them from thoſe which are ſyphilitic by accurately noting the progreſs of anomalous caſes of the latter diſeaſe. It is extremely difficult to form any correct opinions on this ſubject on account of its intricacy, and the almoſt impoſſibility of abſtaining from the uſe of mercury; but it is a ſubject highly deſerving enquiry, and which never can be fairly inveſtigated till it be known that the ſecondary ſymptoms ariſing from ſores may not be venereal, though their appearances cannot be

diſtinguiſhed

diſtinguiſhed from ſuch diſeaſes by ſight alone.

With reſpect to ſores that are not venereal the difficulties of inveſtigation are greatly multiplied. If a deſcription cannot be given of venereal ſores, it ſeems almoſt abſurd to ſay any thing of thoſe multiform ſores produced by infectious matter, the qualities of which may be probably variouſly modified, and the effects of which appear equally liable to modification from peculiarities of conſtitution. Yet in this intricate ſubject there are certain facts which can be diſtinctly obſerved, and deſerve attention. Some of theſe ſores ſpread by ulceration, and ſome by ſloughing, of which inſtances are related in the firſt ſection of this paper. Even Celſus has deſcribed ſeveral ſpecies of ſores which, as Dr. Adams has obſerved, we are acquainted with in the preſent day. I have never ſeen that phagedænic ulcer, which ſuddenly ſloughs, affect the conſtitution; neither do I believe that ſurgeons in general have remarked it; thoſe who regard all theſe ſores as venereal attribute

the abſence of ſecondary ſymptoms to the chancre having been removed by the ſloughing of the ſurrounding parts. Yet in the caſe related by Mr. French in Mr. Hunter's Treatiſe on the Venereal Diſeaſe, ſecondary ſymptoms did occur from a ſore of this kind, and got well without mercury. It may therefore, perhaps, be doubted whether this diſeaſe be not an aggravated form of the ſore which ſloughs more ſlowly, and from which the conſtitution is much more frequently affected. As I conſider any obſervations that I have made on theſe ſores to be incomplete, and therefore not to be depended upon, and Dr. Adams having reſtricted the term Phagedæna to one kind of deſtructive ſore, I feel more inclined to leave it as a generic term for all theſe ſores, and to divide them into ſpecies according to their peculiar characters. Then we may deſcribe them as ulcerating phagedænic ſores, and ſores which ſpread by ſloughing. Again, the ulcerating or ſloughing proceſs may extend not in all but in particular directions, and the ſloughs may take place from the edges or from the whole

ſurface. As Dr. Adams has treated theſe ſubjects at large, I refer the reader to his book; but I will take upon me to deſcribe one ſpecies of ſore which frequently occurs, and is generally treated as venereal, but which I am convinced is not ſo.

The ſores alluded to generally break out in ſucceſſion, and ſometimes after a conſiderable interval of time; which circumſtance, if remarked, would render it improbable that they aroſe from infection of the ulcerated part, ſince ſuch ſores would probably be contemporary. The ulcer is at firſt inflamed, and ſpreads ordinarily to the ſize of the finger nail: its circumference is thickened; it throws out new fleſh, which riſes above the ſurrounding ſkin; ſometimes there is an appearance of ſeveral little cells or ſpaces in the interſtices of the granulations, if they may be called ſo, owing to the whole ulcer not producing new fleſh in an equal degree. Theſe ſores are ſlow in healing under any mode of treatment, and they generally get well in the ſame ſucceſſion as they broke out.

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They ſometimes form in a circle round the orifice of the prepuce, and cauſe a contraction in that part after they have healed. I do not mean to ſay that all ſores occupying this ſituation are not venereal, but merely to ſtate that ſometimes after a gonorrhæa of the prepuce, either originally occurring there, or having happened by a metaſtaſis of diſeaſe from the urethra, ſores do break out in this ſituation at a remote period from the receipt of the infection, which are not venereal. They ſeem to be the conſequence of an irritated ſtate of the prepuce, from which there is ſometimes a ſlight general diſcharge, like that which takes place when the gonorrhæa ſhifts its ſituation from the mouth of the urethra, and becomes the gonorrhæa of the prepuce. The glands in the groin ſometimes ſwell from irritation in theſe caſes, and generally ſubſide again, though I have known them ſuppurate; but I never ſaw any ſecondary ſymptoms ſucceed to this ſpecies of ulcer.

In the earlier part of my practice, in conformity to general rules, I uſed to give mer-

cury in theſe ulcers to ſecure the conſtitution againſt infection, whilſt I tried to heal the ſores as ſpeedily as I could by topical applications. Slightly deſtroying the ſurface with the argentum nitratum every ſecond day, and dreſſing with the ſolution of zincum vitriolatum, were the local means which ſeemed to be moſt ſucceſsful. An attention to the hiſtory of the diſeaſe, and frequent applications for advice from perſons who had been ſeverely and unavailingly ſalivated for the cure of this ſpecies of ſore, ſoon emboldened me to abſtain from the uſe of mercury, and I have never found, though I have met with a conſiderable number of inſtances, that I have in this reſpect acted wrong.

As I believe that the relation of caſes conveys information reſpecting diſeaſes more correctly and ſtrikingly than any other mode of deſcription, I ſhall mention the circumſtances of a caſe which occurred to me no long time ago. A gentleman had a ſlight irritation in the urethra, and, after a few days, found the prepuce a little ſwollen, with a ſmall

a ſmall diſcharge from beneath it. This was checked by a weak ſolution of zincum vitriolatum; and afterwards three ſores, ſuch as I have deſcribed, broke out in ſucceſſion, for which he uſed mercury ſo as to affect his mouth. The ſores ſlowly healed, but two new ones made their appearance, and the mercurial courſe was perſevered in. Theſe ſores alſo healed ſlowly, and a running came on from the urethra, no new ſores having appeared. The mercury was left off, the gentleman came to town, and was much diſtreſſed to find that three other ſores, exactly like the former ones, now broke out, but the diſcharge from the urethra had ceaſed. At this period he applied to me, and gave me the foregoing narrative of his diſorder, with an aſſurance that he had expoſed himſelf to no new riſk of infection. I employed only local means for their cure, being ſatisfied by the hiſtory as well as the appearance of the ſores that they were not ſyphilitic. Near a month elapſed before any conſiderable amendment took place, when a ſwelling appeared in the groin, and the ſores healed ſuddenly

in a few days. Leeches and Goulard's waſh were employed to diſperſe the bubo, but in vain: it ſuppurated, and formed a very unhealthy abſceſs. There was a great deal of ſurrounding eryſipelatous inflammation, the cuticle ſeparated from the ſurface of the bubo, the ſkin became livid, and gave diſcharge to the matter by a partly ſloughing and partly ulcerating proceſs. This, however, proved the criſis of the complaint: the abſceſs having thus broken filled up, and healed in the courſe of about three weeks, ſince which the patient has had no return of diſeaſe. This gentleman was liable to have ſores break out ſpontaneouſly on the prepuce: they got well readily by bathing them with a weak ſolution of zincum vitriolatum; and I believe that perſons who have naturally an irritable ſtate of the prepuce are moſt obnoxious to ſuch affections. We muſt not, however, impute the occurrence of theſe peculiar ſores to mere irritability, but to ſome ſpecific contagion.

The diſcharge from the urethra in ſuch caſes is not conſiderable, nor attended with much

much inflammation or chordee, nor does it increaſe in violence; it may therefore be eaſily diſtinguiſhed from common gonorrhæa and its varieties.

Sometimes, in a common gonorrhæa, the diſeaſe ſhifts its ground and attacks the foreſkin, and ſores from about the orifice of this part. Theſe are of a different nature from the ſores which I have been deſcribing: their ſurface is generally gloſſy, not producing exuberant new fleſh, and their colour is unhealthy. They generally get well as the diſeaſe returns to its original ſituation in the urethra. I merely mention theſe circumſtances to induce attention, and to prevent ſurgeons from confounding the ſores which I have been deſcribing with any others ſimilarly ſituated, but different in their nature.

I am deſirous of briefly relating an anecdote, communicated to me by an eminent ſurgeon in this town, on the ſubject of ſores that occur from a diſorder firſt affecting the urethra. This caſe deſerves attention, not

only as being curious in itſelf but becauſe it corroborates the foregoing obſervation by the teſtimony of another. A gentleman lately married complained to his ſurgeon of a running from the urethra, which ſo ſtrikingly reſembled a venereal gonorrhæa that the latter could not but aſcribe it to infection. He had afterwards a ſwelling of the prepuce, and ſores on that part, which confirmed the ſurgeon in his opinion, and produced a kind of diſſenſion between his patient and him, the one affirming that the diſeaſe was venereal, the other that it could not poſſibly be ſo, as his wife had no diſeaſe, and he had had connexion with no other woman. The effect of this litigation was, that the ſurgeon could not urge the taking mercury, nor would the patient require the adminiſtration of that medicine, though a bubo, ſorethroat, and eruptions ſucceeded, which could not be diſtinguiſhed from ſimilar complaints of a ſyphilitic nature, but all of which ſpontaneouſly got well.

Under this head of ſores which occur on the genitals, and which are not ſyphilitic, I may

may mention one ſpecies that I have ſeveral times ſeen on the ſide of the penis, which is herpetic, affecting new parts whilſt thoſe firſt affected get well; ſo that the ſore may exiſt a long time, and be very troubleſome, though its ſituation may have varied conſiderably.

I have alſo ſeen a circle of ſmall ſores, like what takes place in tinea, occur on the outſide of the prepuce in conſequence of ſome acrimonious ſecretions being applied to it in ſexual intercourſe. Some diſeaſes, whatever may be their primary nature, do, after a time, extend themſelves between the integuments and the ſubjacent parts. I have known many diſeaſes which burrow in this manner treated as ſyphilitic, and, as the event of the caſes has proved, improperly. Indeed the progreſs of ſuch diſeaſes is ſo different from that of ſyphilis, that it is natural to diſcredit its being ſo. Diſeaſes which proceed in this manner ſeem to be of an irritable nature, and to affect moſt thoſe parts which have leaſt powers of life, which appears to be the cauſe of their peculiar mode of extending themſelves.

I have

I have in the foregoing pages endeavoured to repreſent briefly the circumſtances of the primary ulcers of diſeaſes which are, and of thoſe which are not, ſyphilitic, and to ſtate the general rules for the adminiſtration of mercury; and, at the ſame time, I have deſcribed ſome ſores which have not, as far as I know, been diſtinguiſhed, and which, in my opinion, are not venereal, though they are generally treated as ſuch. To take a ſimilar comparative view of conſtitutional diſeaſes ariſing from theſe various ſores would render this paper too prolix. I hope it will be ſeen that I do not preſume, nor do I ſee cauſe, to deviate from thoſe eſtabliſhed rules of practice founded on the general experience of ſurgeons. It would indeed, in my opinion, be preſumptuous in an individual to form general rules drawn from his ſcanty experience; I may be allowed, however, to remark that individuals of the profeſſion are likely to err by inferences drawn from their own practice; and it appears to me that ſome profeſſional men at preſent are inclined to believe all ſores ariſing from impure connexion to be ſyphilitic, whilſt others may be

too

too ſcrupulous in expecting all ſyphilitic ſores to poſſeſs their common characters. The truth probably in this, as in other inſtances, lies between theſe extremes. Much however, it muſt be acknowledged, remains to be aſcertained, and I think that thoſe ſurgeons would do eſſential ſervice to ſcience, who would give an accurate account of the irregularities of the venereal diſeaſe. But ſuch an account never can be given by one, who eſteems all diſeaſes venereal, which reſemble venereal diſeaſes in appearance. The foregoing caſes will, I think, at leaſt prove this to be fact; and it was a principal incitement to their publication, that if this fact were generally admitted, it might lead to that ſcrupulous attention and impartial obſervation of ſyphilitic diſeaſes, as would probably lead to accurate diſtinctions, and the removal of that obſcurity with which they have hitherto been ſurrounded. I have ſuppreſſed many obſervations of my own on this ſubject, from a belief that it is better to ſay nothing than to offer opinions not fully confirmed by facts. The idea that ſyphilis is a moſt variable and

proteus-

proteus-like diſeaſe has probably ariſen from thoſe irregular diſeaſes which I have deſcribed in the firſt ſection of this paper being confounded with it. The opinion is however prejudicial, as it checks attentive obſervation by declaring its inutility. If it ſhould be in our power, as I ſhould hope it may, by directing our attention to the hiſtory rather than to the appearances of theſe diſeaſes, to diſtinguiſh ſyphilis from other complaints, then we may alſo be able to deſcribe the irregularities of this diſeaſe, and to inform others when it aſſumes deceptive characters, and purſues an unuſual track, what diſguiſe it puts on, and what courſes it follows.

On Injuries of the Head.

IN the eſſays which I formerly publiſhed, as well as in the preſent work, I have endeavoured to excite the attention of ſurgeons to particular points of practice, and to eſtabliſh them by caſes, without entering into a full diſcuſſion of any ſurgical ſubject. This plan, though uſeful from its brevity, is not without its inconvenience. In the account of injury done to the head I ſtated, that, in my opinion, the older ſurgeons had recommended the operation of the trephine to be performed in ſome caſes unneceſſarily; whilſt others, who had witneſſed the frequent ill ſucceſs attending that operation, ſeemed inclined to reprobate it too generally. In order to ſhew what were the kind of caſes in which it might be abſtained from, I related ſeveral inſtances of fractures with ſlight depreſſion, which did perfectly well without the operation of the trephine: I alſo mentioned other

caſes to prove that ſlight preſſure on the brain is not productive of thoſe dreadful conſequences which had been formerly apprehended. Theſe facts were intended to point out the impropriety of the former practice, which was founded on the belief that the brain was an organ of ſuch delicate ſtructure that the leaſt degree of preſſure would be highly injurious: which opinions would induce us to trephine in caſes of ſlight depreſſion, or even where a little blood was ſuppoſed to be effuſed upon the dura mater. Yet I know that ſeveral ſurgeons, whoſe judgment I reſpect, thought that the repreſentation which I gave of this ſubject might induce others to abſtain from the operation of the trephine, when it was neceſſary, in a prejudicial degree. I muſt however ſay, that many caſes which have occurred ſince my laſt publication have tended to confirm the opinions which I have delivered on this ſubject. One of theſe I ſhall briefly relate.

A lad, eighteen years of age, had the ſquamous part of the temporal bone beaten in; the

the fracture ran horizontally, about a quarter of an inch above the zygoma, and could be distinctly traced with the finger, introduced through the torn scalp and temporal muscle, for two inches. The upper part of the bone was depressed about one-eighth of an inch; and it was impossible to trephine below the fracture in order to elevate the depressed portion. The lad had recovered from the immediate stunning occasioned by the injury, nor was there any symptom that indicated material derangement of the functions of the brain from the pressure which it sustained. He was bled largely, and took purging medicine, and was moderately well on the following day. On the second morning he was again purged; and when I saw him at noon nothing materially wrong appeared; but when I came to the hospital at eight in the evening I found he had gradually become delirious, and that he then could scarcely be kept in bed. His skin was hot, and his pulse frequent and strong. These symptoms could be attributed to nothing but inflammation of the brain; he was therefore immediately and

largely bled. He now became quiet and manageable; but the next morning his replies to all queſtions were incoherent, his pulſe frequent, his ſkin hot, and his tongue dry. The bleeding and purging were repeated, and at night a bliſter was applied to his neck. On the following morning he was ſleeping and feeble, but his anſwers were rational; as the frequency and fulneſs of his pulſe increaſed in the evening, he was again bled. The inflammation of the brain was now ſubdued, and the patient gradually recovered. The wound healed without any exfoliation of bone, and when he was diſcharged from the hoſpital there was not the moſt trivial circumſtance which could induce us to ſuſpect that the brain had ſuſtained any injury from the accident. His ſleep was ſound and undiſturbed, and the ſudden motion of his head in any direction occaſioned no giddineſs or inconvenience.

This caſe, with the others that I have related, ſhews that the inflammation of the brain is to be expected as a conſequence of any

any ſerious injury of the head, and can ſcarcely be conſidered as the effect of ſlight preſſure, as it frequently does not occur till ſome time after the preſſure has exiſted, and is removed though the preſſure ſtill remains.

I have ſaid, that the caſes which I have met with ſince my former publication on this ſubject, have confirmed the opinions that were then delivered. Candour however obliges me to relate the circumſtances of the only caſe, which I have ſeen ſince that time, of fracture with ſlight depreſſion of the ſkull which terminated fatally.

June 3, 1802. A coachman, twenty-three years of age was thrown from his box. The middle of the anterior edge of the right parietal bone was fractured, and a piece about the ſize of a ſixpence was ſlightly depreſſed. He ſoon recovered from the ſtunning occaſioned by the fall, and did not come to the hoſpital till the ſucceeding day. As he was perfectly well he was but ſlightly bled, and no bad conſequences of this injury appeared

for two months. At this time he came again to the hoſpital, complaining of ſpaſms in his left arm. The wound, which was not yet healed being examined, the depreſſed bone was found to be looſe, and was removed, which alleviated the ſpaſms. Soon afterwards a portion of the external table of the ſkull alſo came away. In the middle of September his health ſeemed much deranged, and he continued to get weaker till the middle of October. The dura mater had gradually become protuberant, and covered with a fungus; it at laſt gave way, and coagulated blood was diſcharged mixed with detached pieces of the ſubſtance of the brain. The left arm had now loſt its ſenſation, though the patient could feebly direct its motions. On the 17th of October the patient became very ill, and much bloody ſerum was diſcharged from the wound. He was delirious during the night, but on the next day underſtood all queſtions propoſed to him; blood and brain were diſcharged through the wound. On the evening of the 19th he died. There was found a vacancy in the membranes of the brain, oppoſite

to the deficiency in the bone, through which the effuſed blood and cruſhed brain had been diſcharged. In other reſpects theſe membranes were perfectly ſound. The whole right hemiſphere of the brain ſeemed to be reduced into a pulpy and fetid maſs, compoſed of a mixture of blood and brain; the cortical ſubſtance, to the depth of about half an inch, remaining ſound, and containing the other. This large cavity communicated with the left ventricle under the fornix.

The want of any urgent ſymptoms in the beginning of this caſe prevented the patient from ſubmitting to thoſe ſtrict attentions, which might have produced his ultimate welfare. The reader muſt form his own opinion whether the continuance of the preſſure of the bone was the cauſe of the diſeaſe in the ſubſtance of the brain. In order to form a correct opinion it ſhould be conſidered that ſometimes the immediate bruiſe of the brain will occaſion ſuch a diſeaſe, although the depreſſed bone be ſpeedily elevated, of which inſtances are related in my former

publication: and that ſometimes diſeaſe and abſceſſes of the brain enſue from mere concuſſion, as was the caſe in Le Sieur de Gallois, related by Mr. Louis in the Memoires de l'Academie de Chirurgie, tom. 5. They may occur alſo without any fracture of the bone, perhaps from the irritation which dead bone occaſions in the ſubjacent parts; of which I ſhall relate the following inſtance.

A man had the ſcalp bruiſed and torn down by the wheel of a cart from off the frontal bone. He was not ſtunned at all by the accident. The bruiſed ſcalp mortified and the bone was left bare. He remained in the hoſpital waiting for exfoliation, and as he had no illneſs, but little attention was paid to him. After about two months, however, he became weak, and ultimately delirious, and died, and on examination an abſceſs containing about one ounce and a half of pus was found in the front lobe of the cerebrum, beneath the dead bone, and full half an inch from the ſurface.

It was my object in the former publication, ſimply to ſtate the circumſtances of caſes of fractures of the cranium with ſlight depreſſion, which would do well without elevation. Had I been ſpeaking at large on the ſubject of trephining, I ſhould have ſtated it as my opinion, that the inflammatory ſymptoms would probably be more ſevere after that operation has been performed, than they would have been, had it been omitted. This opinion has been formed from obſerving, that in many caſes, where the trephine has been employed in caſes of ſlight depreſſion, the ſubſequent inflammatory ſymptoms have been ſo violent that they could not be controuled by the moſt copious evacuations, and that the patients have in conſequence died. Indeed the opinion is ſufficiently probable to make it admitted, were it not ſupported by numerous facts: for in trephining an additional injury muſt be done to the ſcalp and cranium, which would increaſe the ſympathetic irritation of the internal parts; and the ſuſceptibility of the brain would probably be increaſed, when that ſlight preſſure, which it had endured was

ſuddenly taken away. Probably the vehemence and frequent fatality of the inflammation, which follows the operation of the trephine, is the circumſtance which has led ſome practitioners to be unwarrantably averſe to its performance. It cannot be ſuppoſed that I mean to deſcribe the ſubſequent ſymptoms as in every inſtance uncontroulable and fatal; on the contrary I know it to be a neceſſary and ſucceſsful operation. I only mean to remark that inflammation will come on with or without its performance in caſes of violent injury, and that it would probably be more violent under the former than under the latter circumſtance. Had I been in the former publication writing expreſsly on the operation of the trephine, I ſhould have ſtated it as my opinion, that no conſiderable depreſſion of the cranium ought to be ſuffered to remain; and that every hazard ſhould be encountered rather than ſuch a degree of preſſure ſhould be ſuffered to remain, as might be productive of future inflammation and diſeaſe, or diſturb the functions of ſo important an organ as the brain. The object of my laſt publication

tion was to ſhew, as far as my opportunities of obſervation enabled me, what appeared to be the kind of caſes, in which it would be injurious to apply the trephine, and what caſes would do well without that operation.

If I had been writing expreſsly on the circumſtances requiring the operation of the trephine, I ſhould alſo have ſaid, that where the bone was broken into many pieces, ſo as to render it probable that they would not unite, but on the contrary that ſome would periſh, and that ſuppuration would take place, it would be right to make a ſmall perforation, and take away the ſplintered portions of bone. They might otherwiſe become looſened by ſuppuration, and keep up for a length of time an irritation on the ſubjacent membranes and brain, in conſequence of that ſympathy which exiſts between external and internal parts.

It will be acknowledged, that it is very difficult to decide in ſome caſes, whether it is preferable to trephine or not. All that I have ſaid, either in the former paper, or in this, is

deſigned more to excite obſervation and inveſtigation in others, than from a belief that I have eſtabliſhed any certain rules for deciſion. The caſes on which the opinions are founded muſt, however, I think, be worthy of attention.

Since my laſt publication on this ſubject I have met with a caſe of concuſſion of the brain, ſo remarkable on account of the violence of the ſucceeding inflammatory ſymptoms and their conſequences, and on account of the recovery of the patient under ſuch violent and complicated diſeaſe, that I deem it worthy of publication. The caſe was attended by Mr. Sheppard of Chew Magna, who was, at the time it happened, dreſſing pupil to Sir Charles Blicke at St. Bartholomew's hoſpital. To his judicious and unremitting attention I cannot but attribute in a great degree the ultimate welfare of the patient. The account which I have drawn up, is taken from Mr. Sheppard's notes.

David Davis, a robuſt man, thirty-five years of age, was admitted into St. Bartholomew's hoſpital

hoſpital on the 21ſt of November 1799. He had fallen from a conſiderable height on his head, and had bruiſed and wounded the ſcalp, but without fracturing the bone. He was, when brought to the hoſpital, ſo far inſenſible, as not to be affected by ſlight impreſſions, and his extremities were cold. His feet were put into hot water, and, after ſome time, he became warm and more ſenſible, and the pupils of his eyes contracted as in common. Twelve ounces of blood were taken from the temporal artery, and a purging medicine given. On the following day, the pulſe being full and hard, ſixteen ounces more of blood were taken away, and the purging medicine repeated, which procured ſeveral ſtools, and a bliſter was alſo applied to the nape of the neck. Notwithſtanding theſe meaſures, however, he became delirious, and his ſkin felt hot, and he complained of pain in his head. Twelve ounces more of blood were therefore taken, and three grains of pulvis antimonialis given every fourth hour.

November 24. The delirium ſtill continued, but the patient lay more quiet: his pulſe

pulſe was 120 and full, therefore twelve ounces of blood were taken, and as the delirium and ſtrength of the pulſe ſtill continued, in the evening the bleeding was repeated to the extent of twelve ounces. His bowels were alſo emptied by magneſia vitriolata and ſenna. Afterwards he had thirty drops of Tra. opii given him at night. He ſlept ſome hours in the night, and next morning his pulſe was leſs hard, and only 96 in a minute; his anſwers to queſtions were alſo much more rational, and delivered in a leſs loud and quick tone of voice than before. For during the greater part of the delirium he had been very unmanageable, rolling about in bed and endeavouring to get up, and ſpeaking in a loud and fierce manner. Toward the evening the ſymptoms again increaſed; his pulſe was 120, and harder and fuller than in the morning; his ſkin was hot, and he complained of thirſt. He had taken purging medicine in the morning, which had operated. Three grains of antimonial powder were now given every fourth hour, and his feet put into warm water in hopes of procuring perſpiration: ten ounces of blood

were

were taken from the temporal artery, and the opiate repeated at night.

25th. The patient had ſlept during great part of the night; his pulſe 100; he complained of cold though his ſkin was hot, and of great pain in his head. More ſtools were procured, and twelve ounces of blood were taken from the temporal artery. He now took ſix grains of pulv. ipecac. comp. every four hours.

26th. He had been delirious during the former part of the night, but had ſlept towards the morning; in other reſpects he was much as before. In the evening, as his pulſe would bear it, twelve ounces of blood were again taken away.

27th. Pulſe ſofter and frequent. He had three ſtools from medicine in the evening. The delirium ſeemed to have a little ſubſided, and he was much inclined to ſleep, ſo that it was difficult to obtain an anſwer from him.

28th. A bliſter was applied to his head, and in the evening his pulſe becoming full,

ten ounces of blood were taken from him. Two grains of opium were given him at night.

29th. He had ſlept well but complained of his head, and of difficulty in ſwallowing, and in the evening had hemiplegia of the right ſide of his body.

30th. He had ſlept but little, the bowels lax, the pulſe ſmall and frequent, the hemiplegia continues.

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We had thus far been endeavouring, by the moſt powerful means, to ſubdue a violent inflammation of the brain, and could ſcarcely be ſaid to have accompliſhed our deſign, when a new affection called for attention. I think it can ſcarcely be doubted that the hemiplegia was the effect of preſſure made by an effuſion of fluids in conſequence of inflammation, operating probably chiefly on the left hemiſphere of the brain, ſo as to paralize the oppoſite ſide of the body. Under this perſuaſion, and without expectation of ſucceſs, I directed that two drachms, by meaſure, of ſtrong mercurial

curial ointment ſhould be rubbed in on his arms and legs night and morning, and that five grains of the pil. hydrarg. with one grain of opium, ſhould be given three times a day. Theſe means were continued for three days without any ſtriking amendment being perceived, but on the fourth (Dec. 4.) he ſtretched out his right arm when required, and he was able to ſwallow without difficulty. As he was getting better, the ſame plan was perſevered in till the 9th, when the mercury had affected his mouth, and produced a diarrhœa. He now knew all thoſe perſons who had attended him, and his ſtate was ſurpriſingly altered. During the inflammation of the brain he had been very unmanageable, and his replies and expreſſions were fierce and loud. Now he was extremely tractable, and wept whenever he was ſpoken to. His pulſe was very feeble, and beat but 90 in a minute. It ſeems right to mention that a few days afterwards, when he was ſlowly recovering, one of the wounds of the temporal artery gave way, and he loſt perhaps fourteen ounces of blood before it was perceived.

ceived. This circumſtance of courſe made him weaker, and increaſed the frequency of his pulſe, but it did not much impede his recovery, which, though very ſlow, was very perfect. Extenſive ſloughing of the integuments of the nates had taken place, which it does not ſeem requiſite to mention, but inaſmuch as it tends to ſhew the reduced ſtate to which he was brought. Indeed if this patient had not poſſeſſed a vigorous conſtitution, it could not be expected that he would have ſurvived the debility which this diſeaſe and the treatment conjointly produced.

The extent of the evacuations, that ſurgeons are obliged to make, in inflammations of vital organs is ſuch, as would deter the unexperienced from purſuing them, and muſt aſtoniſh thoſe who have employed them with ſucceſs, that they could be borne with ſo little apparent injury. It can only be accounted for by conſidering the diſeaſe as the ſtimulus which keeps up the actions of the conſtitution under ſuch exhauſting meaſures, as would occaſion them to ſink but for this excitement.

I have

I have ſeen ſo many additional caſes of concuſſion, ſo exactly correſponding to thoſe formerly related, that I am more fully ſatiſfied of the truth of the repreſentation which has been given of them. I have in conſequence been led more and more to wonder, that a contrary plan of treatment to that which has been ſo uniformly ſucceſsful, could ever have been recommended, and to conjecture what caſes could have occurred, in which ſuch oppoſite practice muſt not have been ſtrikingly prejudicial. Probably I may point out ſuch caſes; and as I do not find them deſcribed in books of ſurgery, becauſe they have not been deemed ſufficiently important, it may not be improper briefly to mention them.

A young lady was ſtooping in a cloſet, and riſing up ſuddenly and forcibly ſhe ſtruck her head againſt a ſhelf. The blow occaſioned extreme pain, but did not ſtun her. She went down ſtairs without mentioning the accident, and after ſitting with her friends for a ſhort time ſhe fainted. As it was in the evening

evening ſhe went to bed, but could not ſleep for pain in her head, and the next day her pulſe was very languid, and her extremities cold, ſhe complained of great pain when the ſcalp was ſlightly touched, and ſaid there was a ſenſation as if cold water was dropping on it. She took ſome gentle opening medicine, which relieved theſe ſymptoms, but ſhe could not ſit up for many days, and it was a conſiderable time before ſhe recovered the languor, which the blow had occaſioned: but neither fever, nor failure of ſenſation, or of intellect took place in the ſlighteſt degree. I have ſeen many ſimilar caſes, and in one the patient ſaid his ſenſations were ſuch as would induce him to believe that his brain was looſe, and moving on the inſide of the ſkull. All theſe caſes were relieved by ſlight evacuations, as gently opening medicines, leeches, or cupping, though I am inclined to believe that a contrary plan of treatment, which has been recommended in concuſſion, might have been purſued without material detriment.

I ſhall

I ſhall next relate a caſe, in which though the brain was not the immediate ſubject of the injury, yet it became affected in conſequence of it, and I think the caſe deſerves to be recorded, not only on account of ſeveral uſeful facts and hints relative to practice which it affords, but alſo becauſe it may eventually tend to throw light on the economy and diſeaſes of the brain.

CASE.

A man was gored in the neck by a cow. The horn entered by the left ſide of the cricoid cartilage, and penetrated as far as the vertebræ; it then paſſed upwards on the bodies of thoſe bones, nearly as high as the bottom of the ſkull, afterwards it came out behind the angle of the jaw, expoſing and in ſome degree injuring the parotid gland in its paſſage, and lacerating the ſkin of the face as high as the middle of the ear. In its courſe it had paſſed beneath, and torn the internal carotid artery, and all the primary branches in front of the external carotid artery. The former veſſel

was not however entirely rent aſunder, ſo that the general courſe of the artery and its connection with the cranium remained in the uſual ſtate. Notwithſtanding the ſize of the veſſels which had been torn, they did not immediately bleed; the wound was therefore cloſed and bound up. The blood was ſoon obſerved to flow in ſtreams down the neck, nor could any general preſſure upon the wound prevent hemorrhage. In this ſtate the man was conveyed to St. Bartholomew's hoſpital, but he loſt a large quantity of blood before his arrival.

The patient was laid upon a bed, and before the wound was opened, one of the ſtudents firmly compreſſed the trunk of the carotid artery, againſt the lower cervical vertebræ. We found upon the firſt inſpection of the wound, that this preſſure prevented any hemorrhage; yet upon the occaſional motions of the patient, and upon accidental variations in the preſſure made on the veſſel, the blood guſhed from the bottom of the wound ſo ſuddenly and in ſuch quantities as

to

to prevent any accurate examination. The man was very unquiet; he complained much of the preſſure, and was greatly diſtreſſed by a ſenſation of ſuffocation, which compelled him conſtantly to attempt to expectorate. Under theſe circumſtances our firſt endeavours were to tie the more ſuperficial arteries, but the edges of the wound being lacerated, the firſt ligatures which we endeavoured to make tore away portions of the fleſh, and did not ſecure the veſſels.

The ſituation of the patient became every moment more deſperate, he really ſeemed choking, his extremities became cold and his pulſe was ſcarcely to be felt: his ſtruggles alſo which could not be controlled, made the preſſure on the trunk of the artery very precarious. It was deemed neceſſary to enlarge the wound to get at the trunk of the carotid artery, and an inciſion was made between that veſſel and the trachea, in a direction parallel to each of theſe parts. I had now the power of paſſing my finger beneath the trunk of the carotid artery; and of effectually compreſſing

it between that finger, and my thumb which was placed oppoſite to it, upon the integuments of the neck.

I had now leiſure to examine the wound with my other hand, and felt that the pharynx had been ſeparated from the vertebræ of the neck, and had fallen againſt the larynx: its irritation on that organ was probably the cauſe of the ſenſation of ſuffocation which the patient ſuffered. There did not appear any reaſon to believe that the pharynx was wounded; for though the patient was conſtantly ſpitting, the mucus was not mixed with blood. Finding that the moment I remitted the preſſure on the carotid, the blood guſhed out from ſo many orifices and in ſuch a torrent from the bottom of the wound, I reſolved to paſs a ligature round the trunk of the carotid at the part where I had been compreſſing it, and which was about an inch below its diviſion. This ligature I thought might be made to ſerve as the tourniquet in amputation, for I could with it compreſs the artery ſo as to prevent the wounded parts

becoming obſcured by blood, and by ſlackening it I might gain information with regard to the ſituation of the ruptured veſſels.

Should it become neceſſary at any time to tie the carotid artery, I am convinced that it may be done without much difficulty or danger, even without an accurate diſſection of the part. If the inciſion be made on that ſide of the artery which is next the trachea, where no important parts can be injured, as was done in the preſent inſtance, the finger can then be paſſed behind the artery ſo as to compreſs it. The veſſel being ſufficiently bulky and firm, to make its form and outline diſtinctly perceptible, a needle may then be paſſed behind the artery, as near as poſſible to that edge of it which is next to the internal jugular vein, there can be little riſk of wounding that veſſel, or of including in the ligature the 8th pair of nerves which lies between them. In attempting to ſecure the carotid artery, I paſſed behind it in the manner deſcribed, a blunt hook with an eye in the point, and having previouſly introduced

a ligature into it, I drew back the inſtrument and thus encloſed the artery.

When I compreſſed the veſſel by tightening the knot of the ligature, I did it ſlowly, and with a watchful attention to the ſufferings of the patient; for I cannot but ſuppoſe that had the nerve of the 8th pair been included, his complaints would have ſufficiently denoted that circumſtance. But the compreſſion of the ligature did not ſeem to make the leaſt difference in the general ſtate of the patient, whilſt it completely prevented the further effuſion of blood. With a knife and diſſecting forceps I then expoſed the lacerated veſſels, and found that the primary branches of the external carotid artery had been torn off from the trunk. By drawing upwards the ligature which encircled the trunk of the artery, I made the internal carotid tenſe, ſo that its courſe and ruptured ſtate could be diſtinctly felt. The ligature on the trunk was ſlackened, and the guſh of blood further confirmed the laceration of the internal carotid artery. I had now the alternative of

ſecuring

ſecuring the ligature, which I had already made on the trunk of the veſſel, or of tying the branches ſeparately. I preferred the former, and it ſhould be obſerved that the man had now lain ten minutes or more, without any blood being carried to the brain by the left carotid; and during that period he had recovered from his extreme faintneſs, appeared perfectly ſenſible, and as well as could be expected in a perſon, conſidering that he had loſt ſo large a quantity of blood. The ligature being now made ſecure, the wound was brought together by ſtripes of plaiſter; and in this ſtate warm milk was given to the patient to drink, in order to learn what would be the effect of his efforts to ſwallow, and to aſcertain as far as poſſible, whether there was any wound in the pharynx or œſophagus. The patient ſwallowed about a quarter of a pint of this fluid with difficulty, and with the frequent excitement of coughing. No milk however came through the wound, and I concluded that all the difficulty of deglutition aroſe from the unnatural ſtate in which the muſcles of the pharynx were placed, in con-

ſequence of their detachment from the vertebræ. Theſe circumſtances happened betwen 4 and 5 o'clock in the afternoon, and when I ſaw the patient again between 9 and 10, his ſtate ſeemed greatly amended. He had ſeveral times taken warm milk, and the difficulty of deglutition had abated. His pulſe was now moderately full and ſtrong, and not very frequent. It therefore appeared that the apparently dying ſtate of the man, which at one time had alarmed us, proceeded rather from the ſudden diſcharge of blood, than from the quantity, however conſiderable, which had been loſt. The patient alſo appeared tranquil, and perfectly rational, and though prevented from ſpeaking much, he expreſſed himſelf ſatisfied in his ſituation.

On the whole I was led to form a favourable expectation of the progreſs of the caſe, as far as related to the effects which a ligature on one carotid would have on the economy of the brain. I was next morning mortified to learn that the patient had been unquiet, and feveriſh during the night, that he

he had become delirious, that he had been ſeveral times affected by ſlight convulſions, which had increaſed; and that when liquids were now given to him, they paſſed through the wound, and he could ſcarcely ſwallow any thing. The pulſe of the patient was now about 130 in a minute, and hard, and his ſkin was hot. He lay inattentive to external objects, but probably not inſenſible, for the pupils of his eyes were contracted, and when the lids were opened in order to examine them, he ſhut them quickly, and as it were, impatiently. It had been remarked, that the left ſide of the body was more convulſed than the right.

As we had it not in our power eaſily to give medicine, I introduced a ſmall hollow bougie through the right noſtril into the œſophagus, and immediately injected half a pint of milk and water, and 60 drops of tincture of opium; that I might learn the effects of that medicine under the preſent circumſtances. The patient ſhortly after broke out into a moſt profuſe ſweat, and the convulſions

convulſions were quieted by the opium. The convulſions when thus mitigated by opium, might be deſcribed as violent tremors of the left ſide of his body, but the right ſide remained motionleſs; to which curious fact I particularly attended. I placed his right arm acroſs his breaſt, from which ſituation it did not afterwards ſtir. I could not however, perceive any diſtortion of the face to the oppoſite ſide, and the pupils of both eyes were equally contracted. When I ſaw the ſweat break out on the taking of opium, and the nervous irritation diminiſhed by its operation, I was then more forcibly ſtruck than I had been before with the ſimilarity of this patients ſituation, to that of a perſon ſuffering from the effects of concuſſion of the brain, ſome time after the accident, when the inflammation often ſucceeding to it, had begun to take place.

I even queſtioned if it might not be right to take blood from the temporal artery, which was ſeen beating violently. I thought however

ever the general opinion would be againſt ſuch practice, and I only applied a bliſter to the head. Twenty drops of tincture of opium were directed to be given to the patient every third or fourth hour, with a view to mitigate the convulſions, which it appeared to do. Milk and water was alſo occaſionally given, in proportion to the degree of perſpiration. No remarkable change of ſymptoms took place, but the ſtrength of the pulſe gradually declined, and at 10 o'clock at night he had a ſevere convulſion fit, and immediately after died. His death happened about thirty hours after the ligature was made on the carotid artery.

The body was examined on the following day. The brain appeared to have ſuffered a conſiderable degree of inflammation. The veſſels of the pia mater appeared as if they were injected, and in many places upon the ſurface of the convolutions of the cerebrum, there even ſeemed an effuſion of blood producing that appearance uſually termed blood-

ſhot. There was a very conſiderable depoſition of gelatinous ſubſtance between the tunica arachnoidea, and the pia mater. The veſſels paſſing through the ſubſtance of the brain, though fuller than common, were not particularly turgid. A conſiderable quantity of water of a light brown colour, and ſlightly turbid appearance was found in the ventricles, whilſt the firmneſs of the ſides of thoſe cavities ſufficiently indicated that the collection had not preceded the accident. On examining the neck, the carotid artery was found to be the only part included in the ligature. The ſuperior thyroideal, lingual and facial branches of the external carotid, were torn off from the trunk, and the internal carotid was rent acroſs, as has been already mentioned.

Neither the trunk of the 8th pair of nerves, nor the great ſympathetic, nor thoſe of the tongue, appeared to have ſuffered injury. The ſuperior laryngeal, and the deſcending branch of the 9th pair were the chief nerves injured by the accident. Theſe circumſtances

are

are mentioned to enable the reader to form his own judgment on the probability of the ſymptoms which occurred being produced by nervous injury or irritation.

That the diſorder and death of this man is not to be attributed to the quantity of blood which he had loſt, appears clearly to me, not only from the degree of plenitude and power of the vaſcular ſyſtem which remained, but becauſe I had ſeen many patients in the hoſpital, who had divided moſt of the primary branches of the external carotid artery in the attempt at ſuicide; and who after ſurviving a few days, periſhed in conſequence of the loſs of blood which they had ſuſtained, but with a train of ſymptoms very different from thoſe which occurred in the preſent inſtance.

Some perſons may perhaps be inclined to attribute inflammations of the brain to nervous injury or irritation. I have taken notice of all the injury diſcoverable by diſſection, and have further to obſerve that we frequently

frequently ſee larger nerves lacerated in wounds without the production of ſuch ſymptoms, and the tranquil ſtate of the patient till the inflammation of the brain came on, oppoſes ſuch an idea. Upon reflection I can form no other opinion of the caſe than that which firſt ſtruck me, which is, that though the ſtopping the ſupply of blood to the brain did not for ſeveral hours produce any apparent derangement in the functions of that organ, yet ſuch a ſtate was gradually occaſioned by it, and which was attended like the effects of concuſſion of the brain, with inflammation. It further appeared, that when the combined effects reſulting from the derangment, and the inflammation were manifeſted together, the ſtate of the patient much reſembled that of a perſon who had ſuffered concuſſion.

The different ſtates of the two ſides of the body ought not I think to paſs without further notice. Although the right ſide could not be poſitively ſaid to be paralytic, yet in my opinion it approached to that ſtate.

It has been already obſerved, that a double conſtruction might be put upon the ſymptoms, yet as the inflammation of the brain was equal on both ſides, we might naturally expect the whole body to ſuffer equally. Should the ſtate of the right ſide have been, as appears moſt probable, an approach to a ſtate of paralyſis, it would ſurely be conſidered as peculiarly curious. An effuſion of blood in the left hemiſphere of the brain would affect the oppoſite ſide of the body in the ſame manner, that cutting off the ſupply of blood to the left ſide appears in this inſtance to have done. I forbear to ſpeculate on this ſubject, the fact which I have mentioned ſeems to deſerve notice, and though at preſent it muſt ſtand alone, it may in future receive addition, and, when thus ſupported, be applied to ſome uſeful purpoſe in phyſiology.

I have thought it right to record this caſe, not merely becauſe it is curious, but becauſe it affords ſome uſeful practical hints, as to the conduct to be purſued when a perſon has divided the large primary branches of the carotid

carotid artery in an attempt at ſuicide. It may be allowable alſo to mention in relation to this latter ſubject, the great advantages which appear to me to ariſe from the immediate introduction of a ſmall elaſtic catheter, paſſed through the right noſtril, down the œſophagus, nearly as far as the ſtomach, in the manner practiſed by Deſſault, in the cure of a perſon wounded by a piſtol ball.

A patient in ſuch a ſtate is not under the neceſſity of frequently ſwallowing nouriſhment, which act tears open the wounded parts, and cauſes inflammations in them, and produces ſuch a ſecretion of mucus as excites almoſt conſtant cough, increaſing the diſturbance of the wounded parts.

The introduction of a ſmall elaſtic catheter may be eaſily accompliſhed in the firſt inſtance, though not without difficulty, after the ſenſibility of the parts have been increaſed by inflammation, and from the benefit I have ſeen derived from it I ſhould not heſitate to do it in all caſes of extenſive wounds of the throat,

throat, where the larynx or trachea is divided, even though the pharynx and œſophagus may be uninjured. It ſeems to me alſo that a ſimilar plan of conduct is very ſuitable to ſtrictures of the œſophagus.

On Aneuriſm.

Since my laſt publication, I have a ſecond time performed the operation of tying the external iliac artery. In this caſe the artery was tied with two ligatures and divided in the interval; it afterwards firmly united at each extremity, and the ligatures came away at the uſual time: neither did there appear any deficiency in the nutrition of the limb. Theſe circumſtances afford reaſonable expectations of ſucceſs in future operations of this kind, yet in the preſent inſtance the operation appears to have been too long delayed, and the patient to have died from an event which was not foreſeen, but which might perhaps have been prevented. I therefore think it right to ſtate the circumſtances of this caſe in the preſent publication.

CASE.

——Wrungel, a German, by trade a ſugar-baker, of a ſickly aſpect and ſlender make, about 5 feet 7 inches high, and near 40 years of age, was admitted into St. Bartholomew's hoſpital, on account of an aneuriſm in the femoral artery, cloſe to Poupart's ligament. This he imputed to a ſtrain about three weeks before. The tumor at the time of admiſſion was of the ſize of a ſmall orange, and the blood contained in it was fluid; for it could be entirely expreſſed from the aneuriſmal ſac. At a conſultation on the treatment of the caſe, I ſaid that I did not think a ſurgeon warranted in tying the external iliac artery, till he was in ſome meaſure compelled to it by the progreſs of the diſeaſe, for the following reaſons. 1ſt. An aneuriſm, in proportion to its increaſe and duration, obſtructs the paſſage of the blood through the natural and principal channels, and obliges it to circulate by other courſes, which are enlarged according to the exigency of

of the caſe. It ſeems highly probable, that in proportion to the ſize of the artery which is tied, and the magnitude of the part to be nouriſhed after that operation, ſo will be the degree of previous enlargement in theſe collateral channels, which is neceſſary to enſure its ſucceſs. On this account the operation ſhould be delayed longer in an inguinal aneuriſm than in any other.

2dly. The operation of tying the external iliac artery muſt, in the preſent ſtate of our knowledge, be conſidered as very ſerious in its nature, and uncertain in its event. I once tied this veſſel when a man would otherwiſe have bled to death from the femoral artery; and though the limb was nouriſhed, the artery ulcerated. The operation was done a ſecond time in London, and the limb mortified; but no fair practical inference can, I am told, be drawn from the latter caſe, as the operation was poſtponed till mortification was as it were impending.

3dly. There is ſome chance in aneuriſms of a cure ſpontaneouſly occurring from the

cloſure of the artery above by the coagulation of the blood. To cite thoſe inſtances only which have come within my own knowledge, and which it ſeems right to mention, as it increaſes the ſtock of facts before the public; I have known ſuch a ſpontaneous cure take place twice in the popliteal artery, once in the arteria profunda femoris, and once in the axillary artery. For theſe reaſons it was agreed to poſtpone the operation in the caſe of the preſent patient till circumſtances ſhould appear to demand its perfomance.

Our poor patient therefore lay in the hoſpital during two months, in which time his diſeaſe gradually increaſed, and his health declined. Towards the latter part of the time he ſuffered a great deal of pain in the front of his thigh, which deprived him of reſt, and the whole limb was largely œdematous. Theſe ſymptoms would naturally ariſe from the preſſure which the aneuriſm muſt make on the anterior nerves and abſorbents of the thigh. The tumor had advanced towards the ſurface, and the ſkin had become ſlightly inflamed, yet the protruding part of the

the tumour was not of greater extent than when he was firſt admitted into the hoſpital, and no judgment could be formed of that part which was more deeply ſituated, on account of the general ſwelling of the thigh. The blood could even now be expreſſed from the prominent part of the tumour, and I felt anxious, leſt the obſtruction to the circulation in the main artery ſhould not have been ſufficient to have obliged the blood to circulate by other channels. It deſerves to be remarked, that the aneuriſm may extend conſiderably beneath the faſcia of the thigh, cauſing pain and œdema by its preſſure, and yet that part which advances towards the ſurface may be of no great magnitude.

The patient's ſufferings increaſed conſiderably during the week preceding the operation, ſo that he declared his preſent ſtate was almoſt inſupportable, and ſolicited that ſomething might be done to change it either for the better or the worſe. He never, however, was able to explain the cauſe of this uncommon degree of anxiety and inquietude.

The operation was undertaken on Saturday the 24th of October. An inciſion of three inches in length was made through the integuments of the abdomen, beginning a little above Poupart's ligament, and being continued upwards; it was more than half an inch on the outſide of the upper part of the abdominal ring, to avoid the epigaſtric artery. The aponeuroſis of the external oblique muſcle being thus expoſed, was next divided in the direction of the external wound. The lower part of the internal oblique muſcle was thus uncovered, and the finger being introduced below the inferior margin of it and of the tranſverſalis muſcle, they were divided by the crooked biſtoury for about one inch and a half. I now introduced my finger beneath the bag of the peritoneum, and carried it upwards by the ſide of the pſoas muſcle, ſo as to touch the artery about two inches above Poupart's ligament. I took care to diſturb the peritoneum as little as poſſible, detaching it to no greater extent than would ſerve to admit my two fingers to touch the veſſel. The pulſations of the artery

tery made it clearly diſtinguiſhable from the contiguous parts, but I could not get my finger round it with the facility which I expected. This was the only circumſtance which cauſed any delay in the performance of the operation. After ineffectual trials to paſs my finger beneath the artery, I was obliged to make a ſlight inciſion on either ſide of it, in the ſame manner as is neceſſary when it is taken up in the thigh, where the faſcia which binds it down in its ſituation is ſtrong. After this I found no difficulty in paſſing my forefinger beneath the artery, which I drew gently down, ſo as to ſee it behind the bag of the peritoneum. By means of an eyed probe two ligatures were conveyed round the veſſel; one of theſe was carried upwards as far as the artery had been detached, and the other downwards: they were firmly tied, and the veſſel was divided in the interſpace between them. Nothing further remained than to cloſe the external wound, which was done by one ſuture, and ſome ſtrips of ſticking-plaiſter. The threads of the upper ligature were left out of the wound

above the ſuture which cloſed its edges, and thoſe of the lower beneath.

A few remarks on this operation may be permitted. To divide the parietes of the abdomen, puſh aſide the peritoneum, and tie the external iliac artery by the ſide of the pſoas muſcle, is an operation more formidable in ſound, and on its firſt propoſition, than it is in reality. It is performed almoſt without ſhedding blood, ſo that the principal circumſtances of it are very evident. When I formerly performed this operation, I was urged to it by immediate neceſſity: I tied the artery much higher than in the preſent caſe, diſturbed the peritoneum in a greater degree, and, contrary to my own principles, I did not divide the artery. In the preſent caſe, having time to deliberate upon the ſteps of the operation, I detached merely ſo much of the peritoneum, as enabled me to reach the artery, as far as I conveniently could above Poupart's ligament; but not ſo far as to make it difficult to aſcertain that I ſurrounded the artery only with my finger, without injuring

any

any of the adjacent parts, nor ſo far but that I could draw down and diſtinguiſh the artery which I included in the ligature. The remembrance of the ſwelling in the external iliac glands, and of the ulceration of the artery in the former caſe, led to this difference of conduct.

The poor man was greatly exhauſted by the operation, and his leg which had been chilled by expoſure during the operation, continued very cold for a long time afterwards. It was wrapped up in flannels, to prevent the diſſipation of its own heat; but I would not apply any artificial warmth to reſtore its temperature, leſt it ſhould act as a ſtimulant.

He could not compoſe himſelf after the operation, nor did he ſleep during the night, ſo that on the following day his ſtate was very unpromiſing. His pulſe beat 160 in a minute, his tongue was covered by a dark brown fur; he looked agitated, and a purging took place, which was not reſtrained till the following night by a cordial and opiate

mixture.

mixture. Reſpecting his pulſe, it is proper to mention that it beat 120 moſt days in the week preceding the operation.

His thigh was as warm as that of the ſound ſide, his leg cooler than the oppoſite one, and his foot many degrees colder. He had however perfect ſenſation in his toes, and power of moving them. The leg and foot were rubbed with oil three or four times a day, in order to prevent any ſtagnation in the veins, and to diminiſh perſpiration. It was well covered as before by flannels.

On Monday, the 2d day (Oct. 26) the pulſe was leſs frequent: he had ſlept a good deal during the night, and ſeemed ſtupified by opium; but on the whole ſo little better, that I concluded he would gradually ſink in conſequence of the ſhock of the operation. The temperature of the limb was a little increaſed. The man however took bread and milk and other food in moderate quantities, whenever it was offered to him: the purging having ceaſed, the quantity of the opiate was diminiſhed.

miniſhed. He rather improved in the evening, and reſted well during the night; ſo that on (Oct. 27) the third day after that of the operation every circumſtance wore a favourable aſpect. His pulſe did not exceed 100, and was moderately firm and full; his appetite had increaſed: the temperature of the limb was a good deal augmented, ſo that his foot was ſcarcely colder than that of the ſound ſide; and the œdema of the limb was conſiderably diminiſhed. I now dreſſed his wound, in which he had not complained of pain, nor of any tenderneſs, when the ſurrounding parts were compreſſed. The inciſion appeared but as a line, except at the neighbourhood of the ligatures, where it was a little open, and from whence there iſſued a moderate quantity of as healthy pus as I had ever ſeen. The ſurrounding parts were perfectly natural both in appearance and ſenſation. On the fourth day (Oct. 28) he was ſtill better: his pulſe 90; his appetite good; his ſleep ſound; and his limb leſſening in ſize, and increaſing in warmth. The ſtudents at the hoſpital had dreſſed the wound

before

before my arrival, and reported that the diſcharge was tinged with blood.

On the fifth day (Oct. 29), he was ſtill better, his pulſe being but 80 when I counted it. The wound and contiguous parts looked remarkably well, but a bloody ſanies was diſcharged, which I felt unable to account for.

On the ſixth day (Oct. 30) the ſtate of his health and limb continued as well, if not improving. The bloody diſcharge however had increaſed in quantity, inſomuch that it ran through the coverings of the wound and ſoiled the bed; it had alſo become fœtid. From the firſt occurrence of this bloody diſcharge I felt conſiderable uneaſineſs reſpecting it. I could not believe that an healthy wound would ſecrete ſuch a ſanies, and I felt apprehenſive leſt the wound ſhould ſpread from diſeaſe. Nothing however took place to confirm this idea. It ſeemed probable alſo that if the aneuriſmal ſac were not entire, ſome of the blood being expoſed to the air might tinge the diſcharge from the wound,

and grow putrid. I frequently preſſed on the tumour, but could preſs no blood from the wound. In this ſtate of uncertainty it was, however, pleaſing to obſerve, that the patient's health continued in every reſpect better than could reaſonably have been expected.

The circumſtances of the caſe remained very much the ſame during the ſeventh and eighth days after the operation. On the morning of the ninth, (Nov. 2,) when I came to the hoſpital, I met Sir Charles Blicke, who told me that the poor German was dying; intelligence which equally ſurpriſed and ſhocked me.

He was indeed in a dreadful ſtate, appearing like a man far advanced in typhus fever. His pulſe was 150; his tongue covered with a brown fur; his intellect wavering, and the action of his muſcles tremulous. On examining the wound, with a view to diſcover the cauſe of this great and ſudden alteration, and preſſing on the tumour beneath Poupart's ligament,

ligament, I forced out a great quantity of blood, rendered fluid and highly fœtid by putrefaction, inſomuch that it inſtantly blackened the probe with which it accidentally came in contact.

The cauſe and circumſtances of the bloody diſcharge were now made clear; the ſurface of the expoſed coagulated blood of the aneuriſm had at firſt tinted the diſcharge from the wound, then had, by gradual diſſolution, been more plentifully commixed with it, and given it a degree of putridity. Till, however, the whole maſs had become putrid, and had been converted in conſequence into fluid, it could not be forced out from beneath Poupart's ligament when preſſure was made on the tumour; nor did it till that period excite inflammation in the ſurrounding parts by its acrimony, or derange the conſtitution by its abſorption.

After entirely expreſſing the putrid blood I waſhed out the cyſt with warm water, till it returned untinged. The relief which was

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by theſe means afforded to the poor man was very ſtriking and conſiderable. His pulſe became moderate, his intellect clear; he had ſome refreſhing ſleep, and again took food in moderate quantities. On the following day, when the integuments beneath Poupart's ligament were compreſſed, a conſiderable quantity of fœtid diſcharge and air were forced out. It was not however at all tinged with blood, and appeared to me to be merely the ſecretion from the cyſt which had contained the blood. I directed that this diſcharge ſhould be preſſed out, the cavity ſyringed, and a poultice applied three times a day; but finding it ſtill ſecreted in conſiderable quantity, I thought it right to make an opening into the cyſt beneath Poupart's ligament, to afford it a more ready exit. No abatement in the quantity, or alteration in the quality, was however remarked; it ſeemed to be ſuch as a ſloughing ſore commonly furniſhes.

This fever came on on the evening of the eighth day (Nov. 1,) after that of the opera-

tion; and I am convinced it would have ſpeedily deſtroyed him, had not the cauſe been detected and removed. The powers of his conſtitution rallied again; his pulſe was firm, and often not more than 100; he took ſufficient food, and ſlept moderately well. But the part, as has been ſaid, did not go on well, and ſeemed to prevent any increaſe of ſtrength. For a week I was not without hopes that ſome favourable change might happen, but afterwards I loſt all expectations, as his already much reduced powers were ſtill further declining; nevertheleſs, he held out more than another week, when he died on November 16, the twenty-third day after the operation. A few days before his death both ligatures came away with the dreſſings.

Diſſection.

A very ſlight adheſion had taken place between the ſigmoid flexure of the colon and that part of the peritoneum which was oppoſite to the wound, but there was no other appearance of that membrane, or of the bowels,

bowels, having ſuffered any inflammation in conſequence of the operation. The peritoneum was ſeparated from the loins, and from the poſterior half of the left ſide of the diaphragm, by a conſiderable collection of blood, which extended below to Poupart's ligament, and communicated under that ligament by a ſmall aperture with the aneuriſmal ſac. This opening was ſituated in the direction of that crevice which is found between the internal iliac and pſoas muſcles. The only rational explanation that can be given of the formation of this collection is, that the blood had burſt its way from the aneuriſmal ſac in the vacancy between the muſcles juſt mentioned; after which it would readily and extenſively ſeparate the peritoneum in the manner deſcribed. I am inclined to attribute to this circumſtance the undefinable diſturbance of health which the poor patient ſuffered during the week preceding the operation. It may, perhaps, excite ſurpriſe that this collection did not become putrid.

No particular account can be given of the aneuriſmal ſac beneath Poupart's ligament,

ſince it and the contiguous parts had ſloughed in conſequence of the irritation of the putrid blood. A ſmall aperture had been made by this ſloughing in the front of the orbicular ligament of the hip joint, and a ſmall extent of the thigh bone was, by the ſame cauſe, deprived of its perioſteum.

A bougie was paſſed from the lower end of the femoral artery into the ſac.

The extremities of the external iliac artery, which had been divided in the operation, were united together by a fine new-formed ſubſtance; the ſides of each extremity were perfectly cloſed, and a ſmall plug of coagulated blood was found in each.

Having thus given as brief an account as I am able of the circumſtances of this caſe, as they appeared to me, I cannot conclude without mentioning the obſervations of others, particularly as they may aſſiſt in ſuggeſting rules of conduct for future operations on ſimilar caſes. It has been ſaid that the irritation of the aneuriſmal bag was probably

probably a ſpontaneous occurrence, and not the effect of the acrimony of the putrid blood. But the ſuddenneſs of this attack, the manifeſt exiſtence of a cauſe ſufficient to produce it, and the total abſence of ſuch an occurrence in all other caſes of aneuriſm, render this ſuppoſition highly improbable.

It has alſo been imagined that part of the diſcharged blood might have returned from the lower end of the artery. This latter opinion is very improbable, ſince, after the complete removal of the blood, none returned by that channel: and in a ſimilar caſe which I formerly publiſhed, none returned by the inferior part of the artery, though the area of it was ſtill of its natural dimenſions, and unobſtructed. This latter obſervation had tended to diminiſh my confidence in the powers of the communicating channels, and made me wiſh to defer the performance of the operation as long as poſſible. It ſeems evident that in the preſent inſtance it was too long delayed.

It would be desirable in future to perform the operation before an extensive diffusion of blood has taken place; indeed, could the adequateness of the collateral arteries for the supply of the limb be established, it would be proper to operate before the artery has burst.

It deserves to be considered whether it might not be right at the time of the operation to open the aneurismal bag, and remove the blood. I should, however, be inclined to postpone this operation; for, perhaps, no necessity might exist, as putrefaction might take place. A few days will determine the degree of life of the limb, and would make a wound less likely to ulcerate or slough. Should signs of the putrefaction of the blood ensue, or the probability of such an occurrence become evident, I should think it necessary to make a small opening into the aneurismal bag for the removal of the contained blood. This being done, if no blood came from the lower orifice of the artery, there would be no necessity for tying it. Such are the observations that have occurred to me on this subject;

ject; I have laid both thoſe and the facts before the public as early as poſſible, that medical men may judge of the circumſtances of the caſe themſelves, and form their opinions accordingly.

Although I have ſeen the method of tying the artery in the operation for the aneuriſm, which was recommended in my laſt publication, uniformly ſucceſsful in a very conſiderable number of caſes, yet I lately met with an unfortunate inſtance of hæmorrhage after that operation, which I deem it a duty to relate.

A lady had a femoral aneuriſm, which was ſo ſituated as to leave about three inches of the femoral artery between the part where the arteria profunda femoris is given off, and the diſeaſe. On cutting down on the inner edge of the ſartorius muſcle to the veſſels in this ſituation, the pulſation of the artery was not felt, perhaps on account of the large quantity of fat in which it lay imbedded, and the want of any firm reſiſtance behind. This circumſtance made me doubt if the parts im-

mediately beneath my finger were the veſſels, and induced me to ſeparate and diſturb the contiguous parts more than I wiſhed to have done. Having aſcertained by ſuch examination that the veſſels could lie in no other place than immediately beneath the inciſion, and having divided the faſcia which binds them down, one finger was put beneath the veſſels, and the thumb upon them; the beating of the artery was then diſtinctly felt. A moderately thick double ligature was now introduced beneath the veſſels, one part of which was carried up as high, and the other as low, as theſe veſſels had been detached, and tied as firmly as it well could be. The veſſels were divided in the interſpace, at about two-thirds of the diſtance from the upper ligature, and one-third from the lower. Though the operation had been more tedious than any I had hitherto performed, and attended with more diſturbance of the parts in the vicinity of the veſſels, I entertained no doubt at the time but that the ligatures would remain on the veſſels during the uſual time, and that no

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ulceration of them would take place. The wound was closed with sticking-plaster, and the patient put to bed. She complained of great pain in the wounded parts, and of extreme sickness, which produced frequent efforts to vomit. Fever came on and restlessness, which caused a constant variation of posture, so that the wounded parts were never suffered to remain at rest. These symptoms continued in a very violent degree for nearly twenty-four hours, and though they were then mitigated, they still continued in a considerable degree. On the third day the plasters were removed from the wound, the sides of which were in contact, but the surrounding parts were swollen, and had a dusky hue. On the evening of this day a violent hæmorrhage suddenly took place, and so much blood was lost that the patient did not long survive this occurrence. On opening the wound to discover the place from which the blood had flowed, and taking hold of the upper ligature, which I thought would direct me to the open artery, it was torn away, and brought with it some sloughy

ſubſtance. There was no hæmorrhage at this time, and the ſtate of the patient rendered it unneceſſary to ſearch for the artery: we therefore waited to ſee if the powers of the conſtitution would recover, but the faintneſs continued, and in about an hour ſhe died. On the following day, the wound being examined, the whole ſurface of it was found in a ſloughy and putrid ſtate. The artery being ſlit downwards from the groin, was highly inflamed on its internal ſurface, and terminated by an orifice, which was of a pulpy feel, and had a ſloughy appearance like the ſurface of the wound. I concluded from theſe circumſtances that the artery had burſt immediately above the ligature, in conſequence of its becoming ſloughy at that part; but I cannot take upon me to ſay that this was actually the caſe, as the ligature had been removed when the wound was opened to examine from whence the hæmorrhage had proceeded. The only rational explanation which I can form of this caſe is, that from a peculiar irritability of conſtitution the patient was unuſually affected by an

operation which would ordinarily have been borne without any prejudicial derangement of health, and that the conſtitution and the parts were diſturbed in ſuch a manner as terminated in the ſloughing of the wound, and in that of the artery immediately above the place where it was tied.

On the Operation of puncturing the urinary Bladder.

Mr. Home, to whom the profeſſion is much indebted for many important improvements in practice, has of late publiſhed ſome caſes of the puncture of the bladder from the rectum, which, in my opinion, are of the greateſt importance. They not only exhibit that operation as more ſimple and ſucceſsful than perhaps was generally believed, but if the operation be as ſucceſsful in the hands of other ſurgeons, it preſents an eaſy mode of relief to a great number of unfortunate patients who have generally been left to die in miſery. I mean thoſe who have ſtrictures impaſſable by bougies, and who are ſo irritable that they cannot bear their deſtruction by cauſtic, on account of the retention of urine

urine which it occaſions. In ſuch caſes the puncture from the rectum appears moſt eligible where the bladder is contracted, as it perhaps will then ſcarcely aſcend high enough to admit of being punctured above the pubes.

But there are caſes in which the operation by the rectum cannot be performed, and by frequently meeting with theſe I have been compelled to puncture the bladder above the os pubis, and the event of the operation has been ſuch as would have led me to prefer it to any other that I had ſeen practiſed. The chief caſes to which I allude are thoſe of enlarged proſtates, where the catheter has been forced into the ſubſtance of the gland, and has torn it conſiderably; conſequently that inſtrument enters ſo eaſily into the falſe paſſage as to render it almoſt impoſſible to make it take the right one. Indeed in caſes of ſtricture, where falſe paſſages have been made, and the proſtate has been found, the perception of the bladder from the rectum has been ſo indiſtinct that I have been deterred from puncturing it, and in one caſe I made a diviſion in the perinæum, and having

having paſſed my finger beneath the arch of the os pubis a conſiderable way, I could obtain no ſuch diſtinct perception of the bladder as would authoriſe me to puſh in a trochar. But I punctured it above the os pubis, and drew off a conſiderable quantity of urine. I have therefore been led to conclude that, in ſome diſtended bladders, there is a kind of receſſion of them from the perinæum, and that when they become diſtended they aſcend proportionally higher into the abdomen.

In the greater number of caſes in which I have punctured the bladder above the os pubis, it has been on a ſudden call to the hoſpital, or ſome poor houſe; and I have had little further concern with the patient than what related to the performance of the operation.

Sometimes I have been in doubt if there was much urine in the bladder, and this circumſtance has deterred me from puncturing, except in that ſituation in which I could poſſeſs an aſſurance that I felt the bladder, and could

could puncture that viſcus: and theſe doubts cauſed me in ſome inſtances to puncture the bladder with a lancet; and in ſome caſes I have not left any canula in the bladder, in conſequence of the eſcape of the urine preventing me from readily finding the opening, which I had made. Several of the patients died, but in every inſtance the operation relieved their ſufferings; and I have never ſeen any effuſion of urine into the cellular ſubſtance, or any other bad conſequence reſult from the operation; nor do I think that ſuch events are likely to happen, if it be rightly performed. The death of the patients was fairly to be imputed to the delay of the operation, or to the degree of diſeaſe which previouſly exiſted in the urinary organs. In ſeveral patients who recovered, the progreſs of their amendment was ſimilar to that which took place in the caſe, which I am about to relate. I did not however preſerve any detailed account of them, for as I have mentioned, the patients could ſcarcely be ſaid to be under my care. I have requeſted the laſt gentleman, with whom I attended a patient

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under theſe circumſtances, to give me a particular account of his caſe, and on the accuracy of his narrative I can place perfect reliance. This caſe I ſhall relate, in order to have an opportunity of commenting on the mode of puncturing the bladder above the os pubis.

A gentleman between ſixty and ſeventy years of age had a retention of urine from an enlarged proſtate gland, which obliged his ſurgeon to draw off the urine night and morning. This was done during ten days, when the difficulty of introducing the catheter, which had gradually increaſed, became inſurmountable. I was therefore obliged to puncture the bladder, and the only place in which this operation could in the preſent inſtance be performed, was above the pubes. I therefore made an inciſion about two inches in length through the integuments, and between the muſculi pyramidales abdominis, ſo that the lower part of the wound laid bare the top of the ſymphiſis pubis. On introducing my finger into this vacancy I felt the diſtended bladder. The ſenſation produced

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by preſſing againſt the diſtended bladder is I think ſo peculiar, and ſo different from any thing elſe which could occur in this ſituation, that if an operator has once felt it, he will not heſitate in deciding that it is the bladder againſt which he preſſes. The thickneſs and tenſion of its coats, and its fluid contents are the chief circumſtances from which this peculiar feel ſeems to ariſe. When I firſt began to perform this operation, I was deterred from uſing a trochar by a fear of being miſled by my ſenſations. I cautiouſly punctured the bladder with a lancet, deſigning to introduce a catheter through the wound; but the urine guſhed out ſo violently, and the bladder became contracted ſo ſuddenly, that I could not diſcover the wound which I had made; yet under theſe circumſtances, the urine paſſed from the aperture in the bladder, through the external wound, and was not effuſed into the cellular ſubſtance. Indeed neither obſervation nor reaſoning would induce me to ſuppoſe that ſuch an occurrence is probable, whilſt there is a free external opening. The apprehenſion

ſion ſeems to have ariſen from the extenſive diffuſion of urine, in caſes where the urethra has given way. But in ſuch caſes, the urine is actually injected into the cellular ſubſtance, and with great force by the bladder, in conſequence of the channel out of the body being cloſed up. If the external wound in this operation were to be cloſed, and the exit of urine prevented by this means, then it is probable that the urine would be forced to pervade the cellular ſubſtance. It may be aſked, according to the common phraſe, if urine is likely to inſinuate itſelf into the ſurrounding cellular ſubſtance? I ſhould think not. The operator ſhould be cautious not to make any ſeparation of the bladder from the back part of the ſymphiſis pubis, that there ſhould not be even a cavity, into which the urine might gravitate. He ſhould alſo leave the external wound free and open. The firſt effect of the operation will be an inflammation, which will conſolidate the ſurrounding cellular ſubſtance, and prevent the ready impulſion of urine into it. The ſtimulating qualities of the urine will augment this inflammation,

flammation, and thereby increaſe the effect. Indeed the ſtimulus of the urine often occaſions a ſloughing of the ſurface of the wound, which however makes no alteration in the general circumſtances of the caſe. In later operations I acquired more confidence, and a belief that I could diſtinguiſh the bladder from any thing elſe by its feel; and one caſe which occurred tended further to embolden me in this operation. Being called on a ſudden to relieve a patient, who had had his urethra lacerated, and being urged to puncture the bladder by ſeveral gentlemen who were preſent, and who were certain that a conſiderable quantity of urine was detained: though I could not feel the bladder diſtended above the pubes, I conſented, as the patient was in imminent danger, to perform the operation, and having punctured the bladder with a trochar, four or five ounces only of urine were diſcharged. However a large quantity of urine gradually flowed through a canula which was introduced. The patient died, and was examined, when the cauſe of this occurrence became apparent. A large

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cyſt made by the protruſion of the internal coat of the bladder, had been formed between the bladder and the rectum, which contained the greateſt quantity of the retained urine. The orifice, by which this cyſt communicated with the bladder, did not exceed in dimenſions the barrel of a common quill. It alſo appeared that, though the bladder itſelf could not in this caſe be ſaid to have been diſtended, yet the front of it only was wounded by the trochar, and the back part was uninjured.

To return from this digreſſion to the operation in the caſe which I was relating: after I had, by an inciſion between the pyramidales muſcles, enabled myſelf to paſs my finger along the upper part of the ſymphyſis pubis, ſo as to preſs againſt the diſtended bladder, I introduced a common trochar of the middle ſize, in a direction obliquely downwards. There is an advantage, as Sabatier, in his Medicine Operatoire obſerves, in introducing an inſtrument in this direction, for it accords with the axis of the bladder, and is therefore not

likely to injure the oppoſite ſide of that organ. When I found that the inſtrument had penetrated the cavity, I withdrew the ſtilet within the canula, and then puſhed the canula obliquely downwards, ſo that about two inches of it were introduced into the bladder. On withdrawing the ſtilet of the trochar, the urine guſhed out with great force, but I prevented its eſcape, by placing the thumb of my left hand againſt the mouth of the canula, and then introduced through it in the ſame oblique direction, a middle ſized hollow elaſtic catheter, till it met with reſiſtance by touching the bottom of the bladder. After the urine was diſcharged, the canula of the trochar was withdrawn over the elaſtic catheter, which was left in its ſituation, and the end which came out of the wound was bent downwards towards the pubes, and attached, ſo as to be kept motionleſs, to a circular bandage put round the body of the patient. The wound, which was funnel-ſhaped, being wide externally, and gradually contracting to the bladder, was covered with linen, ſpread over with ſpermaceti ſalve. The urine

flowed not only through the catheter, but by the ſides of it. A ſlight inflammation occurred round the wound, ſuch as would doubtleſs tend to conſolidate the ſurrounding cellular ſubſtance. The ſurface of the wound in this caſe did not even ſlough, at leaſt in any evident degree. Four days after the operation the patient got up, and walked about his chamber, and feeling himſelf comfortable and well, he did not go to bed again till night. At the end of a week ſome few drops of urine came through the urethra, and the quantity thus diſcharged daily increaſed. At this time as the catheter ſeemed to be clogged up with mucus, it was withdrawn, and another was introduced with perfect facility. In about three weeks, as the urine came pretty freely through the urethra, the catheter was withdrawn, and the patient voided his urine by the natural channel. In ſix weeks the external wound was perfectly healed, and the patient was as well as before the retention of urine took place.

On the Tic Douloureux.

As the public attention has been of late excited to that painful affection of the nerves, called Tic douloureux, I ſhall in the next place relate a caſe of that diſeaſe, which lately came under my care, becauſe it ſeems to me, to elucidate the nature of the diſorder, to demonſtrate the degree and kind of advantage which is likely to reſult from the diviſion of the trunk of the nerve, and alſo to explain ſome circumſtances in the anatomy and phyſiology of the nervous ſyſtem, of which I have not as yet met with any ſatisfactory explanation.

CASE.

A lady became gradually affected with a painful ſtate of the integuments under and adjoining to the inner edge of the nail of the ring finger of the left hand. No injury to the part was remembered which could have brought on this diſeaſe. The pain occurred at irregular intervals, and was extremely ſevere during the time of its continuance, which was for a day or two, when it uſually abated.

abated. Accidental ſlight injuries always occaſioned great pain, and frequently brought on thoſe paroxyſms, which however occaſionally occurred ſpontaneouſly, or without any evident exciting cauſe. In all theſe particulars the diſeaſe correctly reſembled the tic douloureux of the nerves of the face. As the pain increaſed the diſorder ſeemed to extend up the nerves of the arm. After the patient had endured this painful affection for ſeven years, ſhe ſubmitted to have the ſkin, which was the original ſeat of the diſorder, burned with cauſtic. This application gave her intenſe pain, and on the healing of the wound ſhe found her ſufferings rather augmented than diminiſhed by this experiment. After four more years of ſuffering ſhe conſulted me, when the circumſtances of the caſe were ſuch as to render an operation indiſpenſably neceſſary. The pain of the part was intolerable, and it extended all up the nerves of the arm; and this general pain was ſo conſtant during the night, as to deprive the patient of reſt. The muſcles of the back of the neck were occa-

ſionally affected with ſpaſms. The integuments of the affected arm were much hotter than thoſe of the oppoſite ſide, and ſometimes the temperature was ſo increaſed as to cauſe a burning ſenſation in them. Under theſe circumſtances I did not heſitate to divide the nerve of the finger, from which all this diſorder ſeemed to originate. I laid it bare by a longitudinal inciſion of about three quarters of an inch in length, from the ſecond joint of the finger, and divided it oppoſite to that joint, by a curved ſharp pointed biſtoury which was conveyed under it. I then took hold of the nerve with a pair of forceps, and reflecting it downwards, I removed a portion of it half an inch in length, that the poſſibility of a quick reunion might be prevented. The wound was brought together by ſticking plaſter, and it united by adheſion: but the upper part of the wound, oppoſite to the upper end of the nerve, became ſlightly inflamed, and was very painful; however the appearance of inflammation gradually went off in the courſe of three weeks. After the operation I pinched the

originally

originally affected integuments ſharply with my nails, without cauſing any ſenſation; but if in ſo doing I moved the finger, then pain was felt. I found it difficult to convince the patient that the ſkin at that part was actually devoid of ſenſation, for ſhe ſtill continued to feel ſimilar ſenſations to thoſe which formerly occurred, though in a much diminiſhed degree: but ſhe became gradually as perfectly convinced as any medical man could be, that theſe ſenſations aroſe from the irritated ſtate of the end of the nerve, above the place where it was divided. The painful affection of the nerves of the arm ſtill continued, though conſiderably leſſened in violence; however it was ſufficiently ſevere to make the patient apprehend that little permanent benefit would ariſe from the operation. This pain continued occaſionally about four months, with varying degrees of ſeverity, but the temperature of the ſkin was not hotter than that of the oppoſite ſide, as it had been before the operation. At the expiration of three months, the patient aſcertained that the integuments at the end of the finger actually felt when any thing was applied to them, and this proved

a new ſource of alarm. More than nine months have now elapſed ſince the performance of the operation, and the general pains in the nerves have become very trivial; but the ſenſation of the integuments at the end of the finger, has during that time gradually increaſed, and the ſkin has now its natural ſenſibility, ſo as accurately to diſtinguiſh the tangible properties of any body applied to it. If alſo the originally affected part be compreſſed ſlightly, painful ſenſations reſembling thoſe which formerly occurred, take place.

The obſervations of Dr. Darwin relative to ocular Spectra, and the experiments of Mr. Home on the contraction of divided nerves (contained in the Croonian Lecture, inſerted in the Philoſophical Tranſactions for the year 1801) have given a kind of demonſtration that there is a ſubtile and mobile matter ſuperadded to the viſible fabric of nerves, and ſanction the uſe of the yet novel terms of the irritability and irritable actions of nerves, and I ſhall therefore employ them the few ſubſequent remarks which I have to offer.

The

The caſe above related, appeared to me to merit publication, becauſe I believe it is a rare occurrence for the tic douloureux to happen any where but in the face. In the inſtances related by Mr. Home in his Croonian lecture, the diſeaſe was the effect of an injury done to the thumb, and it is reaſonable to ſuppoſe that it would not have taken place without a prediſpoſition to it in the conſtitution of the patients. It is alſo not unfair to conclude that the diſeaſe thus occaſioned, was of a more general nature, and leſs confined to the extreme branches of the nerves, and therefore leſs ſuſceptible of cure by an operation. The caſe, which I have related ſhews, as indeed might have been concluded à priori, that though the ſource of the irritable ſtate of the nerves in the tic douloureux, may be cut off by an operation, yet that the general irritable actions of thoſe organs, which had been excited, and had continued for a long time, would not immediately ceaſe, though they might, as happened in this inſtance, gradually ſubſide.

The ſpeedy return of ſenſation, which is both accurate and acute in the preſent caſe, muſt ſurely be deemed a curious circumſtance. It cannot be attributed to a reunion of the divided nerve, ſince ſo large a portion of it was removed; for I believe in ſimple diviſions of the nerves by accident, ſenſation is ſlow in returning. It muſt I think be admitted that ſenſation in the preſent inſtance takes place through the medium of the communicating branches of thoſe organs, and probably its ſpeedy renovation was the effect of their unuſually active or irritable ſtate.

Nerves ſtrikingly reſemble arteries in their modes of communication, ſometimes they conjoin even by conſiderable branches, ſuch as muſt be manifeſt, in common diſſections; but they communicate in ſurprizing numbers by their minute ramifications. This circumſtance is not perhaps ſo familiarly known to profeſſional men, ſince it cannot be perceived unleſs in the courſe of a very minute diſſection, and to underſtand how numerous theſe communications are, the repreſentations given by

by the German authors, of their delicate and laborious diſſections, may be advantageouſly conſulted*.

The communications of nerves ſeem alſo not to have excited much attention amongſt phyſiologiſts; at leaſt I have not met with any probable conjecture concerning their uſe. I ſhall therefore take the liberty of mentioning as briefly as poſſible, what has occurred to me on that ſubject.

The opinions of Mr. Hunter reſpecting a ſubtile matter inhering in the brain and nerves, and diffuſed throughout the body, are I believe generally admitted, though variouſly expreſſed. Now if the brain and nerves be ſuppoſed in thoſe animals who poſſeſs them, to be the chief if not the ſole organs for the preparation of this ſubtile matter, then it appears as neceſſary that the nerves ſhould communicate, as that the arteries ſhould do

* See Meckel's Repreſentation of the Nerves of the Face, or Frotſcher's of the Cervical Nerves, in Ludwig's Opera Minora, or Walther's Plates.

ſo.

ſo. For if the continuity of the trunk of either of theſe organs were deſtroyed, the parts which its branches ſupply, would periſh were it not for their communication with the minute branches of other adjacent trunks. It is probable that one of the advantages derived from important organs being ſupplied from plexuſes of nerves is, as has been ſuggeſted by Soemmerring, that ſuch eſſential organs ſhould never want that animation and influence, which they derive from the nerves, even ſhould caſual obſtruction take place in ſome of the trunks leading to ſuch a plexus. But parts leſs eſſential to life, equally require that ſuch interruption of the nervous energy ſhould be guarded againſt. Have we not a plexus formed in the axilla, prior to the diſtribution of nerves, to the upper extremities? do not the ſacral nerves form a plexus, in order to form the iſchiadic or poſterior crural nerve? and may not the ſame circumſtance be affirmed with reſpect to the anterior crural, and obturator nerves, ſince they ariſe from the complicated union of the lumbar nerves, with a branch of the firſt ſacral nerve?

Theſe

Theſe communications of the nerves may not only ſerve the purpoſe which has been ſuggeſted, but, as appears from the preſent caſe, the actions which take place in the extremities of the nerves may, by them, be propagated to the ſenſorium, and thus produce ſenſation. Whether, in the preſent inſtance, the original painful actions of the extremities of the nerves may again recur, and be continued throughout the communicating branches to the ſenſorium, the future progreſs of the caſe will determine.

On the Removal of looſe Subſtances from the Knee Joint.

I ſhall next relate a caſe in which ſome of thoſe looſe ſubſtances that are frequently found in the knee-joint were removed by an operation; becauſe I think the caſe contains many intereſting particulars, and becauſe it will afford me an opportunity of offering a few obſervations on the neceſſity and mode of performing ſuch an operation. Mr. Cruikſhank

ſhank has given an account of Mr. Hunter's practice in theſe caſes, but without a detail of particulars, and there is not, I believe, any detailed account of ſuch an operation before the public, except that which is related by Mr. Ford, in the ſixth volume of the London Medical Obſervations and Inquiries. Mr. Hey has of late recommended a bandage to keep theſe bodies ſtationary, and has related ſeveral inſtances of its efficacy, and of courſe of its preventing the neceſſity of undertaking a ſerious and uncertain operation. When looſe ſubſtances exiſt in the knee-joint, and are lodged on either ſide of the patella, they produce but little inconvenience; but when they ſlip under the ligament of the patella, and become interpoſed between the condyles of the os femoris and the tibia, they impede progreſſion, and cauſe pain, and ſo much injury as to bring on inflammation in the joint. If the extenſor tendons, the patella and its ligament, can, by Mr. Hey's bandage, be kept ſteadily preſſed againſt the correſponding parts of the joint, then theſe

bodies

bodies muſt remain ſtationary on one or other ſide of the patella, and the patient will be exempted from the inconvenience and injury which their motion in the joint occaſions. Under theſe circumſtances the neceſſity for an operation is obviated; but in the caſe which I am about to relate the bandage was of no avail, for reaſons which will appear in the relation. It is not improbable alſo that though theſe bodies may occaſion much irritation at firſt, yet that the joint becoming accuſtomed to their ſtimulus may afterwards be leſs affected by their preſence, which circumſtance ought to be adverted to and aſcertained before an operation be undertaken.

CASE.

A man, about forty years of age, having fallen from a ladder, and injured his knee, ſuffered afterwards a good deal from inflammation in the joint. The joint became much better, but never perfectly recovered; and after a year had elapſed he ſlipped in walking, and again injured his knee. From this time he became ſenſible of the preſence of

two

two moveable bodies in the joint, which incommoded him conſiderably. They frequently, in walking, got between the condyles of the os femoris, and the crucial ligaments, giving him great pain at the time, and produced heat and inflammation of the knee afterwards. He bore this inconvenience for ſeveral years, till at length, coming to London, he reſolved to ſubmit to the operation for their removal if it were recommended. When I ſaw him there was a conſiderable quantity of ſynovia in the joint, the knee was hotter than that of the oppoſite limb, and in this ſtate he ſaid it uſually was. There was no difficulty in bringing the two looſe ſubſtances to the inner ſide of the joint; it required only to put that part in a depending poſition, and thoſe bodies deſcended by their gravity through the fluid, and were eaſily fixed in the ſituation to which they had fallen. I could bring them on the inner ſurface of the internal condyle of the os femoris, which is of conſiderable extent, and by placing the points of my fingers ſo as to deſcribe a portion of a circle, I could prevent them from paſſing again into the cavity of

the joint, although the limb might be moved, and the patient preſs firmly againſt them with his finger, as if he meant to puſh them into the joint. Yet when my fingers, which thus confined them were removed, the ſlighteſt touch cauſed them to diſappear, and to glide with velocity into the general cavity of the joint.

This is the ſituation, and the manner in which I think theſe bodies can be moſt conveniently and certainly fixed. The inner ſurface of the internal condyle of the os femoris preſents an extenſive and nearly plain ſurface, which terminates in front and at its upper part by an edge which forms a portion of a circle. If the points of the finger be firmly preſſed upon this edge ſo as to form a kind of line of circumvallation round theſe bodies, they cannot paſs into the joint in this direction, nor can they recede in any other, on account of the tenſe ſtate of the internal lateral ligament. Here theſe ſubſtances are near the ſurface, and may be diſtinctly felt; and there is nothing to be divided in order to expoſe them, but the integuments, faſcia, and the capſule of the joint.

Mr. Cruikſhank ſays, that Mr. Hunter preferred removing theſe looſe bodies at the upper part of the joint, as there, the bag which contains the ſynovia has leſs of the nature of a capſule. Mr. Ford, in a caſe which required the operation (and which is related in the Medical Obſervations and Inquiries), extracted the ſubſtance on the outer edge of the patella; and if the ſubſtance is large, it may undoubtedly be extracted in this ſituation. In the caſe, which I am going to relate, it would have been impoſſible to fix the looſe ſubſtances in any other ſituation than that, which I have deſcribed, and in my opinion that ſituation muſt in every caſe be preferable to any other, for the reaſons which I have mentioned.

I did not heſitate to undertake the removal of the bodies in the preſent caſe, as they could be ſo ſecurely fixed. For the patient had tried bandages without any advantage, which perhaps was owing to the quantity of fluid in the joint preventing them from acting in the manner mentioned above. His ſufferings were very conſiderable, and the neceſſary

neceſſary reſtriction in exerciſe extremely inconvenient. I thought it right to reduce the inflammation of the joint as much as poſſible, prior to the operation, and with this view directed the application of leeches, and of linen kept conſtantly damp with Goulard's waſh: ſome aperient medicine was alſo given. By theſe means, in the courſe of three days, all the fluid was removed from the joint, and it was as cool, and free from pain and inflammation as the other knee; but when I endeavoured to get theſe bodies into the ſituations in which I had formerly fixed them, I found all my efforts were in vain. There was no fluid for them to deſcend through, and though one of them could be got into the ſituation which we wiſhed, we could not, after trying nearly an hour and an half, ſucceed in getting both of them upon the condyle of the os femoris. I was therefore obliged to let the patient walk about a little, that ſome more fluid might be effuſed into the joint, and then I could bring them both into the ſame ſituation, and fix them as readily as before.

The operation was done in the following manner. Sir Charles Blicke, who aſſiſted me, preſſed the integuments of the knee, gently towards the internal condyle, and then applied his fingers in the manner I have deſcribed, round the circular edge of the bone. I alſo drew the integuments gently towards the inner ham-ſtring, and divided them longitudinally, immediately over the looſe ſubſtance, to the extent of an inch and an half. This withdrawing of the integuments from their natural ſituation was deſigned to prevent a direct correſpondence in the ſituation of the external wound, and that of the capſule of the joint; for when the integuments were ſuffered to regain their natural poſition, the wound in them was nearer to the patella, than the wound which was made in the capſule. The faſcia which covers the joint being expoſed by the diviſion of the integuments, it was divided in a ſimilar direction, and nearly to the ſame extent. The capſule was now laid bare, and I gently divided it to the extent of half an inch, where it covered one of the hard ſubſtances, which ſuddenly ſlipped through the

the opening, and by preſſing gently upon the other, it alſo came through at the ſame part. The bodies which were thus removed, were about three quarters of an inch in length, and half an inch in breadth. They had a highly poliſhed ſurface, and were hard like cartilage. The fluid contained in the joint was preſſed toward the wound, and about two ounces of ſynovia were diſcharged. I then drew the wound of the integuments gently towards the patella, preſſed the two ſides together, and cloſed it accurately with ſticking plaſter, enjoining the patient to keep the limb as free from motion as poſſible.

No inflammation took place in the knee, either on that day, or the following; but on the ſecond night after the operation the patient ſuffered a good deal of pain, and in the morning the joint felt hot, and was diſtended with fluid as it had been before the operation. I now removed the dreſſings, and found the wound was cloſed; but I felt very apprehenſive leſt the inflammation of the joint continuing, the collection of fluid ſhould alſo increaſe,

increaſe, and by diſtending the capſule, cauſe the wound to open. Having already ſeen in this caſe the beneficial effects of evaporating waſhes, which by diminiſhing the heat of a part check its tendency to inflammation, I was deſirous of re-applying them. In order to prevent theſe applications from looſening the ſticking-plaſter, and cauſing the expoſure of the wound, I made uſe of an expedient, which I have frequently employed, and which from its utility I think deſerves to be mentioned. After having ſupported the ſides of the wound in their ſituation by adheſive plaſters as at firſt, I put over them a piece of linen which extended beyond them in every direction. This linen was made to adhere to the ſurrounding ſkin, by ſmearing over the edge with a ſolution of ſealing-wax in alcohol, and afterwards varniſhing the linen over with the ſame ſolution. The alcohol having evaporated, and the ſealing-wax remaining, no liquid could penetrate and detach the ſticking-plaſter. This is the ſame varniſh with which ſome parts of electrical machines are coated, and its power of re-

maining unaffected by moiſture and moderate warmth is well known.

Folded linen kept dampt with laudanum and water was now applied, in the proportion of an ounce of the former to a quart of the latter. This waſh I prefer, for the purpoſe above mentioned, to Goulard's waſh; for the precipitated powder contained in the latter is apt to fill the interſtices of the linen, and prevent its imbibing the waſh, ſo that the requiſite evaporation does not go on. Theſe applications quickly diminiſhed the heat of the knee, and the quantity of fluid contained in the joint ſpeedily decreaſed. The wound was daily dreſſed, and in a week was firmly healed; and in a fortnight the patient might be ſaid to be well. He has ſince the operation walked as much as he was accuſtomed to do, and has not found the leaſt inconvenience.

FINIS.

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