

**A probationary essay on cancer : submitted ...to the examinationof the Royal College of Surgeons of Edinburgh ... / by George Johnston ... March 1824.**

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A  
PROBATIONARY  
ESSAY  
ON  
C A N C E R;  
SUBMITTED,  
BY AUTHORITY OF THE PRESIDENT AND HIS COUNCIL,  
TO THE EXAMINATION OF THE  
Royal College of Surgeons of Edinburgh,  
*WHEN CANDIDATE*  
FOR ADMISSION INTO THEIR BODY,  
IN CONFORMITY TO THEIR REGULATIONS RESPECTING THE  
ADMISSION OF ORDINARY FELLOWS.

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BY  
GEORGE JOHNSTON, M. D.  
Surgeon,  
EXTRAORDINARY MEMBER OF THE ROYAL MEDICAL, AND  
CORRESPONDING MEMBER OF THE MEDICO-CHIRURGICAL SOCIETIES  
OF EDINBURGH.

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MARCH 1824.

EDINBURGH:  
PRINTED BY P. NEILL.

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1824.

PROBATIONARY

ESSAY

ON

CANONICAL

RIGHTS

OF

THE

CLERGY

IN THE

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of

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OF

GEORGE JOHNSON, M.D.

OF

EDINBURGH

PRINTED BY

W. & A. K. LEITCH

MARCH 1834

EDINBURGH

PRINTED BY J. LEITCH

1834

TO

DAVID CLARK, M. D.

FELLOW OF THE ROYAL COLLEGE OF SURGEONS

OF EDINBURGH,

THIS ESSAY IS DEDICATED,

AS A SLIGHT BUT MOST SINCERE TOKEN

OF AFFECTION AND ESTEEM,

BY

THE AUTHOR.



“ Cancer is a disease which must engage the attention of every practitioner in Surgery, in a greater or less degree; for even those who have no particular turn for investigation, must be led, by feelings of humanity, to employ their minds upon the consideration of a complaint, which so frequently baffles all their skill, and destroys such numbers of both sexes, but more particularly females ”

Sir E. HOME.

circumstances, and the description which are now usually called cancer under the term Cancer, and this distinction seems not to have been made in the Greek language.

AN  
ESSAY

ON  
CANCER.

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CANCER.

THE disease which I have chosen as the subject of the following essay, has been denominated by some *Cancer*, by others *Carcinoma*. The terms are now regarded as strictly synonymous; but whether they were so considered by the ancients, as has been asserted, my knowledge of their writings is too limited to allow me to decide. CELSUS, however, appears to have considered them the appellations of different diseases; for he appropriates the one to spreading ulcers,—the consequences of an inflammation which had been neglected, or aggravated by accidental cir-



cumstances \*; and he describes what are now usually called *cancerous*, under the term *Carcinoma* †; and this distinction seems not his own, but to have been borrowed from the Greek Physicians who preceded him. But be this as it may, we shall use them throughout as merely different names for the same thing. And, indeed, it is only within these few years that any definite meaning has been connected with them; for, in former times, and even with our immediate predecessors, every hard and irregular swelling, if accompanied with pain, and almost every ulcer that did not, in due time, yield to the applications of the Surgeon, was pronounced to be cancerous;—a circumstance which renders their works, if consulted for information concerning this disease, of comparatively little utility to the student. Even restricted as the words are in modern acceptation, Cancer is a disease that attacks its victims under many a guise, and assumes in its progress many varied forms; so that, to give a definition that shall be applicable to its appearance in one case, would accord but little with that it exhibits in another. Dr CULLEN has defined it a “hard painful tumour of a particular part,

\* De Medicina, lib. v. cap. xxvi. § 31.

† Ibid. lib. v. cap. xxviii. § 2.



mostly of a gland, ending in a foul ulcer.”\* Dr GOOD, the latest and best of our Nosologists, a “scirrhus, livid tumour, intersected with firm, whitish, divergent bands, found chiefly in the se-cernent glands; pains acute and lancinating; of-ten propagated to other parts; terminating in a fetid and ichorous ulcer †.” To the former of these it has been objected, that it will apply to many local affections which indubitably are not cancerous; and which, vague as it is, seems framed to correspond merely with the appearance of the disease, when it has its seat in the female breast. To the latter, the same objections may, perhaps, be properly enough urged, for that part of it which introduces the structure of the tu-mour, seems misplaced in a definition, in so far as it cannot be ascertained until the disease has been removed. But such objections are idle. The definitions convey a general idea of the usual ap-pearance of Cancer, and the nature of the subject will not admit of any more precise.

There has been, and is, some difference of opi-nion amongst medical men, concerning the struc-tures in which Cancer may originate. That in

\* Synop. Nos. Method. Cl. iv. Ord. vi. gen. 129, 130.

† Study of Medicine, vol. ii. p. 302.



its progress it involves all others indiscriminately in a similar disease, is admitted, and has been even given as a mark by which it may be distinguished from some inveterate ulcers which have a similitude to it; but while Mr B. BELL \*, RICHERAND †, and a few others, maintain that it may commence in any one organ or tissue of the body, the greater number of authors limit its original seat to a certain number of these. Thus, M. ROUX is of opinion, that Cancer never commences but in the skin, the cellular substance, the mucous membranes, or the glandular secreting organs, and that, of these, the mammæ and testicles are alone liable to its attack ‡. SCARPA goes even farther, and thinks the existing state of pathological knowledge will warrant the assertion, that there are but two organic textures, viz. the external conglomerate glands and the skin, which serve as a nidus for the formation and development of scirrhus and Cancer ||. I feel inclined to assent, in a great measure, to this opinion of SCARPA; but there are observations on record which will not allow me to do so unreser-

\* Treatise on Ulcers, p. 305.

† Nosographie Chirurgicale, tom. i. p. 239.

‡ COOPER'S First Lines, p. 152. Lond. 1813.

|| JOHNSON'S Med. Chir. Review, vol. iii. p. 174.

vedly. Mr ABERNETHY, for example, has observed that Cancer of the mamma is not always a disease of the gland itself, but sometimes appears to be, like many sarcomatous tumours, a part of new formation \*; and the opinion of Sir EVERARD HOME, that any indolent tumour, or harmless wart, may, from irritation, or some unknown cause, assume a cancerous disposition †, seems adverse to the doctrine. Dr BAILLIE says, he has seen the muscular, membranous, and even the adipose textures affected with scirrhus ‡; and while the high authority of Mr PEARSON might be added to negative its origin in the lymphatic or absorbent glands ||; the experience of Mr ABERNETHY § and of Mr WARDROP proves, that, however rare, this is not an impossible occurrence. While, therefore, these observations seemingly prove, that the sources of this horrible disease are not so limited

\* Surg. Obs. on Tumours, p. 69.

† Obs. on Cancer, p. 145. 244.

‡ ADAMS's Obs. on the Cancerous Breast, p. 34.

|| Obs. on Cancerous Complaints, p. 5.

§ I state this on the authority of Mr COOPER, First Lines, p. 155. In the cases alluded to, however, by Mr ABERNETHY, in his Surg. Obs. on Tumours, p. 83., there are circumstances which rendered their nature doubtful to that very excellent Surgeon.



in number as SCARPA believes, yet the exceptions to his opinion are comparatively so few, that we will do well to hold it in remembrance, as a useful guide in forming a diagnosis in the cases entrusted to our care.

Of the glands liable to Cancer, the female mammæ are by much the most frequently affected. The body of the testicle is not often so, and still more rarely are the parotid, maxillary, and lachrymal glands. Perhaps no portion of the skin is exempted, but the disease has been noticed chiefly in that of the face, scrotum and penis. The external skin is, however, rarely its seat, compared to that lamina of it which is reflected inwards, and gives a coating to all the cavities and canals which have an opening outwards. This, SCARPA maintains, is the texture whence it derives its beginning, when Cancer attacks the neck of the uterus or vagina, the lips, tongue, œsophagus, the cardiac or pyloric extremities of the stomach, the rectum, or glans of the penis; the lachrymal caruncle, the internal surface of the nostrils, or larynx. This, it may be thought, is rather too refined pathology, and not altogether consistent with the observation of others; yet I feel little doubt that future re-



searches will confirm its accuracy\*. It is true, a number of other organs, very different from one another in structure, have been added to the above list; but so loose and indiscriminate is the manner in which the words Scirrhus and Cancer have been applied, that we remain doubtful whether the genuine disease was observed, or a tumour whose chief characteristics were its obstinacy, its hardness, and irregularity of surface. It is certain, that what has been described as scirrhus of the liver, spleen, ovaria, and prostate gland, approximates in no way to the disease under consideration.

A history of Cancer, as it shews itself in each of these different organs, however proper in a treatise devoted to the subject, would be much misplaced within the narrow limits of a probationary essay. It must suffice to give a brief sketch of its usual progress in the female breast, and to add those general observations which the

\* Since this Essay was written, it has occurred to me, that this account of *reflected skin* is a very doubtful piece of anatomy. And, admitting it as correct, it is so modified by its peculiarity of situation, as to become, in a pathological view, a distinct membrane. On which grounds, I think it would be right to add the *mucous membranes* to the two textures specified by SCARPA as alone originating Cancer.



modifications it assumes in other organs may suggest.

Cancer in the female breast can seldom be traced to any exciting cause. The unsuspecting patient feels at first some indefinite uneasiness in the mamma ; and occasionally pains of momentary duration, and of no severe character, shoot through it towards the axilla. The uneasiness slowly, but steadily increases, which induces her to loosen the stays, and some slight relief is obtained. After a short period, the stays are again loosened, not, however, with the same relief. She now perceives that the breast is altered in its shape ;—it has lost its roundness, and the nipple is not so protuberant as the other. The whole extent of her malady is more than suspected, and it is at this period that the Surgeon is commonly first consulted. He finds, on examination, the breast irregular in its circle,—more prominent at some parts than others ;—the nipple drawn in, and to aside, and the skin dingy and wrinkled. Though there is not any distinct and separate tumour, the glandular part of the breast is enlarged, though not much so, and pains of a particular kind are felt in it. The tumour goes on, enlarging slowly, condensing the neighbouring parts, and giving more pain and uneasiness ; while the



breast itself does not enlarge in a correspondent manner, or suffers even an actual diminution in bulk. In its progress, it becomes fixed to the muscular parts beneath, and to the skin above; the veins enlarge, and are tortuous, and the glands in the axilla become contaminated, and take up similar actions, either from the absorption of the morbid matter, or, as some have supposed, but with less probability, from irritation simply propagated along the vessels. It is yet a scirrhus, or in what Surgeons have called its occult stage. The disease goes on; the skin reddens; the surface becomes more irregular; and it ulcerates. The ulcer has a very disagreeable aspect; its edges are irregular, indurated, retroverted at some points, turned inwards at others, and its surface is rough, with indentations and excrescences, and pours out a thin sanious fluid, of a peculiar and very unpleasant smell, and so acrid and irritating as to inflame, should it touch it, the adjoining skin. But the appearance of the sore varies in a very remarkable manner. "To-day the symptoms shall be mild, the matter bland, and the breast altogether in a tranquil state; to-morrow it will be full of pain, and tumid; the discharge thin and corrosive, certainly acrid; the edges of the sore sharp, and of a fiery redness, and

the bottom full of sloughs \*.” In a more advanced stage it bleeds often, and profusely, and the neighbouring skin is, by this time, studded over with wart-like tumours, which soon also proceed to ulceration. The veins become varicose; the glands in the axilla more enlarged; perhaps they likewise inflame and ulcerate;—the pulse becomes quickened; hectic fever follows, and, lastly, a dry short cough adds to the torments of the already miserable patient, but gives the comfort which a sign of the near termination of her sufferings can afford. In this delineation, whatever may be its other defects, the pain endured by the patient is too little dwelt on. At first it is lancinating, and not very severe, but as the disease advances its severity increases, and the intervals become much fewer, and much shorter. Even before ulceration has commenced, the pains have become almost constant, and so intense are they, burning and lancinating,—after that process has continued a short time, that they constitute it, in the opinion of all, one of the worst, if not the worst, of ills that flesh is heir to.

In the external skin and lip, the first stage of cancer,—the occult,—is never well marked. A wart,

\* C. BELL, Med. Chir. Review, vol. iii. p. 197.



a hard tubercle, a dark varicose knot, has existed there for a considerable period, giving no pain, and exciting no mental uneasiness. It is cut with the razor, or, to relieve some occasional heat or itchininess in it, is rubbed by the hand; it scabs over once and again;—the irritation being repeated it heals not, but enlarges, its margins become raised, hard, red and painful, pretty like, says RICHERRAND, those of a syphilitic ulcer, but the pain is more severe, and of a different character, and the discharge is thin and ichorous\*. This description we have taken, in a great measure, from the work just quoted, but it accords very indifferently with a few cases we have had an opportunity of seeing. In these there was a tumour in the lower lip, somewhat less than a filbert, hard and circumscribed; its base deeply fixed in the substance of the lip, and its apex rising considerably above it. The exposed surface was not, strictly speaking, in a state of ulceration;—I mean there was no loss of substance;—there was no cavity scooped, as it were, out of it, but it had a warty granulated appearance, and these granulations were of a hard and cartilaginous nature, between which lines of ulceration ran, discharging a thin

\* Nosog. Chirurgicale, tom. i. p. 236.



sanious fluid. They were accompanied with much pain and suffering, and, notwithstanding the removal of the disease by the knife, two of the four cases had a fatal termination.

The commencement and progress of cancer in the reflected skin, SCARPA asserts, is somewhat similar. In many parts, it is obvious, we can judge of its presence only by the effects it produces on the constitution, and these are, unfortunately, in most cases extremely ambiguous. In other parts, however, and these the most common seats of cancer, we are able to remove our doubts by manual examination. In a case, for example, of cancer in the uterus, we find, in an early stage, that the organ feels as if it were enlarged, the cervix is thickened, the mouth open, hard and irregular, encircled by one or more malignant tubercles, and more sensible than usual to the touch. Some time after this it is felt to be ulcerated, and the ulcer presents to the finger excavations and irregular elevated edges, and discharges a thin bloody ichorous fluid, of a lixivial odour. The ulceration at first spreads superficially upon the neck of the uterus, precisely as the cancer of the skin affecting the face, but afterwards penetrates more deeply, first destroying the substance of the cer-

vix uteri, then that of its body, and, lastly, its fundus \*.

The structure of cancerous tumours has been accurately investigated of late years, and is found everywhere to be much alike, however different the organs in which they may be situated. A scirrhus tumour is very hard, more so than other fleshy tumours, and cuts something like a piece of macerated cartilage. A section of one in the breast, soon after its commencement, discovers a central nucleus, of a firmer consistence, and more uniform appearance, than the other parts, from which diverge, as from the centre of a circle, a number of whitish irregular lines, which lose themselves imperceptibly in the surrounding textures. These lines are crossed by others of a similar appearance, but less distinct, running in circles, neither, however, very complete nor very regular, so as to intersect the former, and form meshes or cells, containing a yellowish green and softish substance, which has often been compared to fat. In a more advanced stage, the whole structure has become more uniform; the central nucleus and the white transverse and circular septa have disappeared, and though ligamentous

\* Med. Chir. Review, vol. iii. p. 175.



bands are very apparent, they follow no regular course, and present no definable figure. When the tumour is examined at a still later period, when it has advanced to what may be called cancerous suppuration, we find “in the centre a small irregular cavity, filled with a bloody fluid, the edges of which are ulcerated, jagged, and spongy. Beyond these there is a radiated appearance of ligamentous bands, diverging towards the circumference, but the tumour, near the circumference, is more compact, and is made up of distinct portions, each of which has a centre, surrounded by ligamentous bands, in concentric circles \*.” Such is a succinct account of its most common appearance, and to specify the various anomalies which have been observed is foreign to my purpose. The septa, or transverse and concentric lines, have in general been said to be ligamentous or cartilaginous, but these terms, probably, are used more in the way of comparison, to convey some idea of their “outside show” to the naked eye, than as intimating that they really possess the intimate structure, and chemical qualities, of ligament or cartilage. Dr ADAMS believes they have a muscular power †; and of their

\* HOME's Observations on Cancer, p. 157-8-9.

† Observations on the Cancerous Breast, p. 44.

real nature nothing satisfactory seems to be known. As little do we seem to be acquainted with the softer intercellular substance. It has much the appearance of common fat, according to Dr ADAMS, while SCARPA mentions it as being coagulable and gelatinous. The cells in which it is contained are, according to the first of these gentlemen, "small and firm capsules, each containing its distinct portion of fat, without connection with each other but by lateral adhesion \*;" but this point needs to be confirmed.

The occasional causes of the disease, the symptoms and structure of which we have just detailed, as assigned by different authors, are numerous, but most of them seem to rest on a very uncertain foundation. I believe the majority of cases can be traced to no probable external cause, for bruises, cold, long continued pressure, repeated inflammations, repelled eruptions, the suppression of habitual discharges, and a long list of similar accidents, are set down in our elementary works regularly under almost every disease, and perhaps without much inquiry into their efficiency. In fact, they seem very inadequate to the effect, and if Cancer has ever followed their ope-

\* Obs. on the Cancerous Breast, p. 71.



ration, the circumstance will indicate a strong predisposition to the complaint, which would probably soon have shewed itself independently of them. Cancer of the Scrotum, being peculiar to chimney-sweeps, has been attributed, properly enough \*, to the soot lodging in the wrinkles of the skin, and rendered more acrid by mixture with the perspiration †. The smelters in the copper-works of Cornwall and Wales are occasionally affected with a similar disease, which the arsenical vapours to which they are exposed, is supposed to give origin to ‡; but I am not aware that in any other instances we can trace Cancer so directly to its exciting cause.

Sir EVERARD HOME has contended that Cancer is not a disease which immediately takes place in a healthy part of the body, but one, for the production of which it is necessary that the part should have undergone some previous change, connected with disease. He instances as illustrations of his meaning, and, at the same time, as

\* Dr Gosse thinks not, because the climbing boys in Vienna, who are not exposed, as in England, to the soot of coal, are afflicted with a similar disease.—Journ. of Foreign Med. and Surgery, vol. ii. p. 272.

† POTT's Chirurgical Works, vol. iii. p. 259.

‡ PARIS' Pharmacologia, p. 282.

proofs of the correctness of the doctrine, the cases in which a pimple, a tumour, or a wart, in various regions of the body, having continued for years dormant, at length, from some casual irritation, takes up a new action, and assumes the characters of a real Cancer \*. Were Cancer always preceded by some sensible disease of the description alluded to, there might be some propriety in the conclusion that there was a necessary connection between them; but when the experience of every surgeon must tell him that this is not so,—that Cancer often appears where the touch could not previously detect disease, it appears to be drawn from insufficient data. And I cannot but observe, that the cases on which Sir E. HOME mainly rests his opinion, were attended with circumstances which render it exceedingly doubtful whether they were really carcinomatous or not. I do not mean, however, to deny, that parts already diseased, being then “in a certain measure thrown out of the governance of the general economy,” may more easily assume a cancerous action than healthy textures. The cases just instanced may be deemed proofs of this; but, upon the whole, I feel disposed to coincide with Mr PEARSON, when

\* Obs. on Cancer, p. 148.



he says, "Writers have indeed said much about certain tumours changing their nature, and assuming a new character: but I strongly suspect, that the doctrine of the mutation of diseases into each other, stands upon a very uncertain foundation. Improper treatment may, without doubt, exasperate diseases, and render a complaint which appeared to be mild and tractable, dangerous or destructive; but to aggravate the symptoms, and to change the form of the disease, are things that ought not to be confounded. I do not affirm, that a breast which has been the seat of a mammary abscess, or a gland that has been affected by scrofula, may not become cancerous; for they might have suffered from this disease, had no previous complaint existed; but these morbid alterations generate no greater propensity to the Cancer, than if the parts had always retained their natural condition. There is no necessary connection between the Cancer and any other disease, nor has it ever been clearly proved, that one is convertible into the other†."

Cancer has, perhaps, never been seen in infancy, for the few cases on record, contradictory of such an assertion, are connected with circumstances

\* Pract. Obs. on Cancerous Complaints, p. 8.

which render them equivocal. It has been observed shortly after the period of puberty, but it is rare in individuals under forty years of age. When it occurs about this time, or a few years later, its progress is in general rapid, and the sufferings of the patient very great; but if its appearance has been delayed until the sixtieth or seventieth year of age, the suffering is comparatively little, and it exerts little influence on the duration of life. It is much more common amongst women than men, not from any difference in temperament, as the older writers believed, but because the organs liable to its devastation are peculiar to the female sex. Old maids, and women who do not breed, are more subject to cancer in the breast and uterus, than those who have had children, and who have nursed; and in all women it generally, but by no means always, makes its first appearance at the cessation of the menstrual discharge. It is worth remark, that the two organs on which cancer chiefly preys, are peculiar in this, that they have not "a continued action and secretion." Whilst other glands continue their functions uninterruptedly, their's is at one time called forth, and again left for an interval to subside, and, long before the termination of life, cease entirely. The fact is not uninteresting,



and it seems to render probable a very prevalent opinion, that there is really some relation, as cause and effect, between this cessation of accustomed action and the origin of cancer.

That cancer is contagious, or “ emits a morbid effluvium, which can produce the same disease in a sound person,” a very few authors have asserted, but without adducing any proofs sufficient for establishing so important a proposition. The opinion that it is hereditary is, on the contrary, very general ; and yet, there are not, so far as I know, any observations on record which give it any certainty. It is generally admitted to be both more frequent and more virulent in the high northern latitudes than in the southern regions of Europe ; and in tropical climates the disease is scarcely known.

Little as our knowledge is of the remote causes of Cancer, it is great indeed when contrasted with what we know of its proximate cause. They who have speculated on this subject seem, most of them, to have forgot that the inquiry is not a separate and detached one, but a branch merely of that which investigates the origin of tumors in general. The cause which gives rise to the mild sarcoma, is the same in kind with that which originates the malignant Cancer ; and when the

general theory has been ascertained, it will be time enough to search after the modifying circumstances. It is not a little curious, too, that whilst, in almost all other diseases, the medical antiquary can doubtingly trace but indistinct and shapeless resemblances between the ancient and modern hypotheses; in this the sameness is so close, that the difficulty is to say in what they differ. Very early in the history of our profession, Cancer was ascribed to a particular depravation of some of the humours, or to the presence of some kind of acrid matter; and, so far as I understand it, the hypothesis lately given, with such confidence by SCARPA, is but a slight modification of this opinion. At a less remote period, physicians began to reason concerning the nature of this cancerous virus, and it was found to be a "sharp corrosive acid." So when towards the close of the last century, chemistry thrust herself forward so officiously to remove the veil which overhung the first causes of diseases, and the common explanations of their phenomena, she also experimented upon the matter of Cancer, and in her alembics, its proximate cause was, according to the deductions of a physician of no mean celebrity, neither more nor less than an excess of ammonia, with a redundant development



of sulphur \*. When, again, diseases were accounted for on mechanical principles,—when a difference in the size of the containing tube, and the contained globules of blood, was imagined sufficient to raise up tumours,—Cancer, it was said, was nothing but these obstructed humours, become, from their stagnation, thickened and corrupted: and this doctrine has descended to our day unchanged †.

The only modern speculations which have any claim to originality, and this unfortunately is their only claim to notice, are those which give to Cancer an animalcular origin. I do not intend to discuss these notions, which appear fanciful enough; suffice it to remark, that Mr JUSTAMOND is said to have attributed Cancer to the operation of the larvæ of a particular species of insect; and Dr ADAMS believes the tumour to be a collection of small hydatids, differing, however, in species, and in their mode of working, from any other hydatids that infest the body; while Mr CARMICHAEL, who also allows to the disease an independent existence, places its vitality, not in the intercellular meshes, or hydatids

\* PARR'S Medical Dictionary.

† RICHERAND, Nos. Chirurg. vol. i. p. 238.

of ADAMS, but in the whitish ligamentous septæ\*.

I come now to a question which has been much agitated, and which has been deemed of great importance, since, upon the conclusion at which we may arrive, depends, it has been said, the propriety or impropriety of removing the disease by a surgical operation. Is cancer a constitutional, or is it a purely local, disease? Even so late as towards the middle of the last century, the constitutional nature of Cancer seems in general to have been inculcated and believed; and, though the opposite opinion be now the more prevalent, it still continues to be advocated by some of our most esteemed writers. In its favour, it has been urged that this distressing malady commences usually without any evident exciting cause; or, when it can be traced to any such, as for example to a blow, that it is difficult, without its admission, to say why in this person that should have produced a Cancer, while hundreds remain free, upon an application of the same kind of injury to the same organ †. “A blow on the knee often produces a white swelling; but ten thousand children receive blows on the knee without any such

\* Edin. Med. Surg. Jour. vol. ii. p. 374.

† POTT, Chir. Works, vol. ii. p. 419.



effect following. In this case we resolve the difference of result, without a controversy, into the presence or absence of a scrofulous constitution ; and, without this view of the subject, we should find ourselves at a loss for an answer. And unless we apply the same reasoning to Cancer, we shall remain at an equal loss\*." It is further argued, that cancerous complaints are found occasionally to affect distant organs simultaneously ; or, after the removal of the parts primarily affected, that they often reappear in others remote, and which, as far as could be ascertained, were previously healthy. It may be possible to account for a few of these cases, on the supposition that the specific matter had been taken into the system by absorption from the original tumour ; but such a supposition will not reasonably account for the relapses, when the diseased parts have been removed in a very early stage, or when the appearance of the disease in two distant organs is nearly contemporaneous. There are few surgeons, I presume, who have seen much of Cancer, and who have not observed both *mammæ* to be affected, the one very shortly after the other ; and examples of Cancer in the breast coexistent

\* Good, Study of Medicine, vol. ii. p. 804.

with Cancer in the stomach \* or uterus, though rare, are every now and then met with. The lamentable want of success in curing Cancer by its removal; the circumstance that patients, even though the disease itself should not return, often die, after the operation, of a general and undefined constitutional disturbance †; and the hereditary predisposition to its growth, are other facts which have been stated as extremely favourable to the doctrine.

They who contend that Cancer is a local disease, as much so at least as other tumours are, say that the operation is unsuccessful, because a sufficiency of the surrounding substance has not been removed, or that it had been undertaken when the absorbents had become contaminated, and success was not to be anticipated; but if performed in proper time and manner, they assert, the result will in common be as favourable as in other affections. Cancer, too, is generally solitary, and

\* My friend Dr CLARK has met with a case of this description. SCARPA, however, states that it "rarely or ever happens that two really legitimate scirrhi are met with in the same individual." *Med. Chirurg. Review*, vol. iii. p. 176.

† "I know not how to account for it," says Dr ADAMS, "but where every thing has appeared to succeed, the patients have in many instances died within a year or two after the operation." *Obs. on the Cancerous Breast*, p. 114.



will often remain in a quiescent state for many years; and so far is it, like other morbiferous poisons which have a tendency to perpetuate themselves, from tainting the constitution more deeply, in proportion to the length of time it has acted upon it, that, on the contrary, were the removal of the part equally complete, of two patients, one of whom had been afflicted with Cancer seven months, and the other seven years, the latter patient would be esteemed in less danger of a relapse than the former\*. But the most conclusive argument has been derived from those cases which have been traced directly to the effects of an external injury, or to the repeated irritations of a part previously diseased. In these we see Cancer as it were excited in the part by a local and mechanical cause; and, without the operation of that cause, there seems no reason to believe that the disease would ever have existed there. Finally, the analogy between cancerous and other sarcomatous tumours is very close, and, if we extend the constitutional doctrine to one, we must of necessity allow it to embrace all the others.

I trust to have stated the arguments on this question with impartiality, and to have omitted

\* PEARSON on Cancer, p. 30, 31.



none that were likely to influence our decision concerning their respective merits. I mean not to weigh them individually, or to canvass what importance is due to each; but viewing them as a whole, the evidence in proof of its being a local disease, seems to preponderate. But, should the contrary opinion be preferred, I must remark that it ought not, as has been hastily concluded, to influence our minds concerning the propriety of the operation as a mean of cure;—that must rest altogether on the result of experience, and not on any doubtful and hypothetical discussion. Nor is analogy in favour of any such conclusion; for we do not hesitate to remove a limb affected with white swelling, though it is peculiar to the scrofulous constitution.

When a patient, with a disease which we suppose to be cancerous, presents herself to us, should it be seated in an organ the removal of which is practicable, and no constitutional disorder dissuade, and it has not made too great a progress, we ought to urge its immediate removal. A long, varied, and extensive trial of all the most potent medicines in the *Materia Medica* has sufficiently proved their utter inadequacy to the cure of Cancer; and to delay the operation from any hope of deriving benefit from them, is not only a trif-



ling with the complaint, but conduct highly reprehensible, since every day diminishes the chance of cure which the sufferer has who submits to it. It is true, that she, too, often finds even in this remedy, not that security which she had expected, but it unfortunately affords her the only chance of getting quit of a disease, of which no drug can free her, or arrest perhaps even its progress.

I know of no data by which we can determine what proportion the cases that do well after a surgical operation, bear to those that relapse. The results of the experience of a few individuals have been published, but they are too few for this purpose, and so opposite, that we may, with RICHTER, well doubt, if they really speak of the same disease. "Of near sixty Cancers," says Dr MONRO *primus*, "which I have been present at the extirpation of, *only four patients* remained free of the disease for two years. Three of these lucky people had occult Cancers in the breasts, and the fourth had an ulcerated Cancer of the lip \*."

\* Med. Essays and Obs. vol. v. part. i. p. 346. Edin. 1752. In the concluding paragraph of his paper, he adds, "My practice since the former editions continues to confirm what I have here said concerning the frequent return of Cancers, notwithstanding many attempts of different kinds to prevent it."—The first edition was published about 1740.

Mr HILL, on the contrary, tells us, that, during thirty years' practice, he had extirpated, from different parts of the body, eighty-eight genuine Cancers, *which were all ulcerated except four*; and *all* the patients, *except two*, recovered and continued well \*. Mr FEARON, whose practice appears to have been extensive, and who, like Mr HILL, operated at all stages of the disease, also asserts, that *two only* of his cases had an unfortunate result †. These statements are made by men of whose veracity no doubt can be entertained:—Whence then comes, it may be asked, the striking contrariety in the results? The latitude and uncertainty with which the term Cancer was at that time, and is too often, even yet, applied, will, perhaps, afford a solution of the question. From the time of WISEMAN, until within these few years, Surgeons had been in the custom of dividing Cancer into the Benign and Malignant. In the former class, they included complaints, to appearance truly as horrible and dangerous as the other, but which will go on to

\* I refer for a more minute and accurate account of Mr HILL's success to COOPER's Surgical Dictionary, who, however, does not take it from the original work, but from Mr B. BELL's Treatise on Ulcers.

† Treatise on Cancers, p. 210. Lond. 1790.



ulceration, without much disturbance to the constitution, will continue in that state for years, and contribute, perhaps, little to shorten the duration of life. I cannot doubt, that the greater number of the cases of Mr HILL and Mr FEARON were of this, or even of a less malignant description; and who can do so, when they consider for a moment, what has been the result of subsequent experience? Where is the Surgeon, however cautious he may be in undertaking, and however expert and bold in executing, his operations, that can now boast of such uniform success? More particularly when they are performed in the ulcerative stage, for that was the state of almost all of Mr HILL's patients. Dr MONRO again confines himself evidently to cases of the latter class. He was a close observer of disease, of a discriminating turn of mind, and not apt to confound cases, so different in their progress, under one denomination. And as at his time, it was customary to operate after ulceration had taken place, sometimes even when the neighbouring glands had become contaminated, his want of success, so far from being surprising, is only what our present knowledge would lead us to expect \*.

\* Other attempts have been made to reconcile the results of the experience of MONRO with that of Mr HILL, and had any of them



“ I am ready to confess,” says Sir EVERARD HOME, “ that, in all cases where the disease had arrived at that stage; in which it has acquired the power of contamination, I should be inclined, from the experience I have had, to doubt the success of the operation, and therefore would not venture to press it upon the mind of any patient \*.” “ If,” says Mr CHARLES BELL, when speaking of such cases of cancerous mammæ as I have endeavoured to delineate in a preceding page, and of which I conceive Dr MONRO to write, “ if the operation were to be performed only in such cases, its reputation would have a very rapid decline †.” And, with these, the experience of SCARPA strictly corresponds. “ I must ingenuously declare,” says that very eminent Surgeon, “ that I have been unsuccessful, and disappointed in my expectations, whenever I have extirpated the scirrhus, accompanied by unequivocal signs of the tumour having entered into the

appeared satisfactory, I would not have attempted another still. See that of Mr B. BELL, in his Treatise on Ulcers, p. 307. Dr ADAMS supposes, but, as I think, without sufficient reason, that of the eighty-eight cases operated on by Mr HILL, *five only* were cancerous mammæ, *two of which only* were cured. Obs. on the Cancerous Breast, p. 113.

\* Obs. on Cancer, p. 173.

† Oper. Surgery vol. ii. p. 136..



second stage. In the whole course of a long practice," he adds, "*three cases only* of extirpation of genuine scirrhus of the breast have had a prosperous result with me, these being the only three in which I was so fortunate as to perform the operation within the first months from the appearance of the disease, before the unpleasant sense of pruritus and heat had taken place, and consequently that of the lancinating pains \*."

These melancholy statements, while they corroborate the opinion of Dr MONRO, are quoted with the further view, not of condemning the operation as useless, but of impressing strongly on the mind, the caution necessary to be observed before taking up the knife; and the serious duty of making at least an endeavour to trace the causes of failure to their source, that the surgeon may not uselessly subject his patient to a painful and generally much dreaded operation. And this is the more requisite, when we remember, that it seems now to be agreed, in accordance with another conclusion of Dr MONRO, that if the disease recurs after its removal by surgical means, it is always more violent, and more rapid in its progress to a fatal termination,

\* Med. Chirurg. Review, vol. iii. p. 179.



than it probably would have been, if left to itself.

One cause of failure, and in no distant period perhaps no uncommon one, arises from the practice of removing the diseased part merely, without a sufficient quantity of the adjoining substance. Mr HUNTER observed, that a disposition to cancer exists in the surrounding parts, prior to the actual occurrence of the diseased action ; an observation of the utmost importance, since it shews the impropriety of making the circumference of the tumour the limits of our incisions. Unless, too, every portion of the ligamentous rays, which shoot from the centre of the disease into the cellular substance, and even sometimes into the fibres of the subjacent muscles, be removed, the cancer will inevitably return. And as in no instance can the extent of these septa, or of the cancerous disposition, be accurately ascertained, the removal of the whole breast ought, in every case of genuine cancer, to be recommended. Mr PEARSON seems adverse to the operation being performed in Cancer “ during the period of its augmentation,” on the ground that there may be many diseased glands or nuclei yet too small to be perceptible to the senses, and which are apt therefore to be allowed to remain. The objec-



tion is of course completely obviated by adopting the recommendation of taking away the whole breast, which that much esteemed surgeon in fact advises ; and, indeed, were it not so, the objection goes the length of doing away with the operation altogether, for by what signs are we to tell when the disease has attained its full growth ?

There can be no doubt, however, that the unsuccessful result of the operation is more commonly to be ascribed to the lateness of the period in which it has been undertaken. This may be inferred from the facts which we had occasion to state, when discussing the opinions of Dr MONRO. Enlargement of the part, attended with frequent, or constant, and increasing pain ; diseased glands in the axilla, small indurated glands round the breast, diseased and ulcerated skin, adhesions to the pectoral muscle, and also to the ribs, were deemed at one time very insufficient reasons for declining to perform the operation \*. Nay, in our elementary works of surgery, we are still recommended to attempt to cut away the disease, even though it should have been some time in a state of ulceration, “ when such a measure can be so executed as not to leave a particle of

\* FEARON on Cancers, p. 81.

the cancerous mischief behind\*.” This proviso confines the advice within such narrow limits, that we shall probably never be called upon to consider its propriety. It is an advice, at all events, which I feel no inclination to follow, and which modern experience will not warrant. To eradicate the “rooted evil,” is at that time impossible; and the stimulus of the knife imparts to it a more than natural rapidity. “There is also another reason,” to use the words of Sir EVERARD HOME, “against performing an operation under dubious circumstances, which is, that it is a peculiar character of cancer, when the original disease has once arrived at the state of an open sore, not to continue to make progress as it did before, but often to remain for months, and even years, with very little apparent increase, although the disease is making rapid advances in those parts which have been contaminated from it†.” Mr C. BELL, whose opportunities of observation have been seldom equalled, gives us an advice very different from that which we have been combating. To him it is quite clear, that “*if the nipple be fully retracted*

\* COOPER’S Surg. Dictionary, Art. *Cancer*.

† Obs. on Cancer, p. 175.



*for any considerable time, the operation has been too long deferred.* The retraction of the nipple will indicate, he thinks, the general extent of the ligamentous bands, which rise up from the original centre of the disease, and extend betwixt the ducts of the nipple, for these, by condensing and destroying the spongy texture of the part, are the cause of its retraction. Now, it unfortunately happens, that, by the time these ligamentous bands have, by extending in one direction, produced the retraction of the nipple, they have, in another, extended into the cellular membrane, beyond the margin of the gland \*.”—SCARPA, too, informs us, that unless the operation have been executed “*before the commencement of the lancinating pains, and infection of the lymphatic glands connected with the seat of the occult cancer,*” it will never be attended with success †.—But if the operation be done previous to the time marked by SCARPA and BELL, recent statements encourage us to hope, that, in general, we may thereby accomplish a radical cure. Mr NOOTH tells us, that of 102 scirrhus cases, where he performed the operation, *in the early*

\* Med. Chirurg. Review, vol. iii. p. 199, 200.

† Ibid. p. 178.

*stage of the disease*, all remained free from any return of the complaint\*. And FLAJANI asserts, that of twenty-seven operations performed by him, "*in the first months after the appearance of the disease*," two only were succeeded by relapses, and these also appear to have been cured by a repetition of the operation †.

Before proceeding to the operation, there are some circumstances, unconnected with the tumour itself, which ought also to be inquired into. The breast opposite to the one diseased, ought in all cases to be minutely examined; and our particular attention ought to be directed to the state of the functions of the uterus; for, if these be much out of order, and there be reason to believe that the disease has commenced in either organ, I should think the Surgeon would most benefit his patient, and save his own reputation, by declining to operate ‡.

\* HOME's Obs. on Cancer, p. 171.

† Journ. of Foreign Med. and Surg. vol. iii. p. 173.

‡ "A surgeon, who is said to have great skill and success in removing cancerous breasts, has said, that in many truly cancerous affections of that part, he had found, on examination, that the uterus exhibited marks of the same disease, and that the state of the uterus was his guide in determining him to extirpate, or to avoid operating upon diseased breasts. If the uterus was discovered to be affected, he refused to perform the operation, having constantly found it unsuccessful under such circumstances; yet it does not fol-



It is, perhaps scarcely necessary to remark, that the preceding observations apply exclusively to Cancer of the female mamma. The operation much oftener succeeds in the Cancer of other parts, either because it can then be more freely removed, or because it is really less malignant in its character. Still, however, success is not so inviolable, as to free the Surgeon from anxiety concerning the result, or to permit him to give any decided assurances that his patient shall not have a recurrence of his complaint.

It must not be inferred, from what I have said above, that all medical treatment is of no avail in cancerous disorders. So far from it, that if, with the local disease the general health had suffered, and there was evident disorder of the digestive organs, I would deem it improper to operate until some attempts had at least been made to improve the one and rectify the other. "I would impress it on the young Surgeon," observes Mr CHARLES BELL, when speaking of operations in general, and the remarks are peculiarly applicable to the present purpose, "as a duty of

low that all extirpations of the breast will be succesful, if the uterus be free from disease."—Queries published by the Medical Committee of the Society for investigating the Nature and Cure of Cancer, in Edin. Med. Surg. Journ. vol. ii. p. 386.

the first importance, that he study thoroughly the state of the constitution. He will, in practice, find it of the greatest use to him: it will save him from the commission of errors, which ought to leave behind them something worse than regret. Before the Surgeon performs a formidable operation, or interferes even slightly with any delicate organ, he ought carefully to study his patient's constitution. His countenance, his eye, his tongue, his appetite, and the colour of his discharges, ought to be examined; and perhaps, by removing the disorder of the system generally, the necessity of the meditated operation may be avoided \*."——It is contended by Mr ABERNETHY, and his numerous disciples, that there is even a necessary connection between Cancer and a disordered state of the health in general, and more particularly of the digestive organs †; and

\* Oper. Surgery, vol. ii. p. xxii.

† The intimate connection between local and constitutional disease was very early observed. "Si quando autem ulcera oris Cancer invasit, primum considerandum est, num malus corporis habitus sit, eique occurrendum: deinde ipsa ulcera curanda." CELSUS de Med. lib. vi. cap. xv. The doctrine is an induction from facts numerous and indisputable, but has of late been carried to such an extent as, not undeservedly, to subject it to ridicule. One might almost imagine that Mr PRIOR had anticipated these gentlemen,

"I say, whatever you maintain  
Of Alma in the heart or brain,  
The plainest man alive may tell ye,  
Her seat of empire is the belly," &c. &c.

Alma, Canto iii.



if we consider such an opinion as well grounded, an attention to the above advice will be deemed indispensable. But this opinion of theirs is, upon the whole, very uncertain, since I think few there are but must have seen the disease well formed, and considerably advanced, where no symptom indicated any previous or existent constitutional derangement, and where, in fact, the patient herself was conscious of none such. It hath in it this only of certainty, that, if constitutional derangement do exist, it will aggravate the local malady, and ought to be carefully attended to, both before and after the removal of the part.

Mr ABERNETHY is inclined to think, that the disease, though it may be checked, cannot be made to recede by that medical treatment which lessens the bulk of other sarcomatous tumours\*. This opinion, according to our present knowledge, seems unfortunately to be but too true, and has become so general with the Profession, that they listen with the utmost indifference to any proposal for the cure of Cancer; and are apt to consider him from whom it proceeds, either an artful charlatan, or at best the dupe of his own credulity. When we consider the structure of the disease,—so hard and so unvascular, that our finest

\* Surg. Obs. on Tumours, p. 70.



injections never fill but the principal arterial trunks of the diseased gland ; when we remember that no proposed remedy has ever yet stood the test : when we know, that even the firm and long continued application of bandages does not lessen the really carcinomatous tumour, what other conclusion can we form, than that it is beyond the powers of the absorbent system, and cannot be dispersed by topical applications, or general remedies ? Granting all this to be true, yet let us not consign our patient to despair. A further experience may teach us a more cheering doctrine ; and, in the mean time, though our art be here weak, it is not powerless :—it can stay the march, it can alleviate the pain, it can lessen the misery of her deplorable malady. And, 'moreover, we have sometimes, as an encouragement to perseverance, the pleasure to find our fears ill founded,—to see the tumour melt away before well directed means ; for we cannot always certainly distinguish the genuine Cancer from a more tractable malady. “ *Discernere autem cacoëthes, quod curationem recepit,*” says CELSUS, “ *a carcinomate, quod non recepit, nemo scire potest, nisi tempore et experimento \**.” And to make this distinction perhaps

\* De Medicina, lib. v. cap. 28. § 2.



equally difficult now as it was in the time of CEL-SUS, Sir EVERARD HOME, with that candour which becomes a great Surgeon, confesses, “that it is not possible, in practice, to distinguish, in all cases, between cancerous and scrofulous tumours, after they have advanced to a certain size\*.” My eminent and much respected preceptor Dr ABERCROMBIE, whose name I can never mention without feelings of the deepest gratitude, writes me, that “a very severe and alarming looking case,” of supposed Cancer in the mamma, brought to Edinburgh for operation, got well, under his care, by repeated leeching, and the regular use of saline purgatives and small doses of the tartrate of antimony. Dr HUIE informs us that he had removed, “by the exhibition of small alterative doses of mercury, without any local application whatever, a foul and irritable ulcer of the lip, with such an indurated base, that it had been pronounced cancerous by three respectable Surgeons†.” And cases to a similar purport are to be found in most of the

\* Obs. on Cancer, p. 167. “Quomodo Cancer ab aliis ulceribus mali moris dignoscitur? Ego quidem me nescire ingenue fateor, nescire se alii quoque viri probi fatentur.”—RICHTER.

† Probationary Essay on Scirrhus, &c. p. 23.



Treatises which have been published on this disease.

I have, then, to consider what mode of treatment is to be recommended, when, either from the unwillingness of the patient, the advanced stage of the disease, or the situation of the part, no operation can be undertaken. And here, I shall very briefly state, without any reference at present to the peculiar practices which have been in vogue at different times, what, after the most attentive examination of the subject, appears to me the most to be preferred.

Before the disease has proceeded to ulceration, the local treatment is to consist of the repeated application of leeches; the avoiding as much as may be, any motion of the affected organ itself, or of the parts adjoining; and the prevention of change of temperature, by the constant wear of some soft wool or cotton.—The number of leeches to be applied, and the frequency of their application, must of course be as various as the constitutions of the sufferers, and the more or less rapid progress of their malady; but, in general, it will seldom be necessary to apply more than four or six at a time, or to repeat this more than twice in the week. To remove the cutaneous inflammation which occasionally arises from their



bites, a weak solution of the acetate of lead may be useful ; but the long continued use of cold lotions to cancerous tumours, with the purpose of effecting their dispulsion, is a practice that can be productive only of evil consequences. If their application is continued long enough to produce any possible effect in a disease so obstinate in its character, and so little amenable to remedies, we either call up a reaction of the vessels of the part, or induce a chilliness, or even rigors, without having gained any advantage to compensate for these inconveniencies. These objections do not apply to the application of sheet-lead, in very thin layers ; and if in this should either the practitioner or patient fancy any virtue to reside, we see nothing to forbid its use.

After the ulcerative process has commenced, there seldom will be further need of local bleeding. We have remarked, that a cancerous ulcer is subject to sudden changes in its character,—it is now a foul and sloughing sore, and again soon assumes a red and irritable surface. The nature of our applications must vary with these changes, and one must give place to another, when, from use, or increased virulence in the sore, the first has lost its accustomed power. In the sloughing state, warm, soft, and soothing poultices are required,

and those made of hemlock, carrot, or turnip, occasionally with an addition of recent charcoal, have in general been preferred, from their superior power in improving the nature of the discharge, and destroying its disagreeable foetor. Fomentations with the decoction of the narcotic plants, or with a watery solution of opium, are beneficial auxiliaries.—In its usual state, astringent and sedative lotions are more useful and convenient. Lime-water, and solutions of the acetate of lead, to which a certain proportion of laudanum may be advantageously added, allay the pain and irritation, and lessen the discharge from the sore. “Oily dressings promote the discharge, and keep the woman uncomfortable to herself, and disagreeable to her neighbours\*.”——When the surface throws up fungous excrescences, it may be useful to remove them by the ligature, or the application of an arsenical powder or ointment:—and to suppress the bleedings, which both alarm and weaken the patient, “our only resource is to put a piece of rough lint upon the part, and to compress it steadily for some time with the finger†.”

\* C. BELL, Oper. Surgery, vol. ii. p. 137.

† Ibid. p. 388.



In directing a proper constitutional treatment, the surgeon must be guided by those indications which a close attention to the peculiarities, or idiocracies, of each individual, will probably discover. In the minds of some practitioners, there seems to be some almost indissoluble association between the disease and its supposed specific remedy,—between cancer and hemlock, or iron, or iodine, or some other drug of equal repute, which they administer in all cases, and under all circumstances. Gross and pernicious as is such empiricism, it is occasionally gainful enough, for the man who thus practises his profession by chance, it is to be presumed, will not be over strict in marking the characters which distinguish genuine cancer from some of its less immedicable allies; and some happy cures of these gain him a reputation, which no subsequent failures, however numerous, can shake. I am far from denying to these medicines all utility in Cancer: I believe, on the contrary, that they possess considerable power when prescribed, not at random, but with judgment and discrimination.

It will in general be necessary to confine the unfortunate victim of cancer to a milk and vegetable diet, and to prohibit strictly the use of all spiritous, vinous, or fermented liquors. The



utility of such a practice has been amply proved by the testimonies of the most respectable men in all ages ; and more real good, it appears to me has resulted from an attention to it, than from all the vaunted nostrums of regular and irregular practitioners united. An almost total abstinence, for weeks, or even months, from every thing but water, has been recommended by M. PONTEAU, Dr LAMB, and a few others ; and there cannot remain a doubt, after an examination of the cases they have adduced in its support, that the practice may be carried to a great extent, without any detriment to the general health, and with marked relief to the local disease. Mr PEARSON has, in particular, related one case, in which this practice was adopted in a delicate female, afflicted with, it was supposed, cancer in the uterus, which is deserving of much attention. But there are few patients who will submit to such rigid abstinence for a sufficient length of time, to obtain much benefit from it, and in many others it is not advisable that they should do so.

We ought further to urge a continuous and daily use of some of the saline purges, largely diluted ; and I think a very minute quantity of the tartrate of antimony would be, in general, an useful addition, since it quickens their operation,



and seems to have, according to the account of the French surgeons, greater power in correcting the deranged functions of the digestive organs. Should the tongue indicate much disorder in these, small doses of the common mercurial, or of the compound calomel pill, will be requisite, but their use must not be continued so long as to affect the system, for mercury, given to this extent, has uniformly proved prejudicial. A little blood may, in many cases of cancer in the internal viscera, be drawn from the arm, with relief to the more urgent symptoms; and an issue in some convenient part of the body ought seldom to be omitted. This is a favourite remedy with the French in this disease, and was so with us, when the humoral pathology was in fashion, but seems now to be too much neglected. “It is a curious fact, and worthy of particular notice, that no person with an old ulcer in the leg has ever been known to have cancer, though the ulcer was not suspected to be cancerous\*.” When ulceration has made some progress, we must call to our aid the more powerful narcotic medicines, not with the view of curing the disease, but to ease the wretched patient of her sufferings, and smooth her rugged

\* Queries of Medical Committee, &c. Edin. Med. Surg. Journ. vol. ii. p. 389.

path to the grave. In their use, the advice of Mr C. M. CLARKE to exhibit first the less powerful, and when these have lost their effect, to proceed by gradual steps to the administration of such as possess greater efficacy, is important, and ought to be attended to. But our chief reliance, after all, is to be placed in opium, and this drug, by giving it in various forms and combinations, may be so managed as to retain its power for a great length of time, and without any detriment to the constitution.

Though such is the practice which I consider most advisable in cancerous complaints, it would perhaps be improper to conclude this Essay, without adverting shortly to some of the most famous empirical practices which have prevailed, or do still find advocates, in some of our profession. In tracing this part of the history of Cancer, the student finds much wherewith to be astonished and perplexed. He finds cases exhibiting, it is said, all the usual symptoms of the disease, minutely detailed, and treated successfully by men of experience and probity; and the fortunate result attributed, and to all appearance justly, to the operation of some stated remedy. The cases are not isolated and solitary, but numerous, and



collected and treated in hospitals, where they are open to the inspection of every one, and where they who doubted might have satisfied themselves by personal observation. That, however, there is some fallacy in these experiments, the fact that the remedy has, in the space of a year, or two, or less, lost its reputation, and yielded its place in the estimation of the public to some other, and that again to another, will convince him : and it will be well if such contradictions and uncertainties do not occasion an over-scepticism in receiving evidence on these points, as pernicious, perhaps, as an easy credulity. And, after all, it may not be impossible, nor even difficult, at least in many instances, to account for the contradictory reports which have been published on the subject, by the knowledge that many very different diseases have been described under one common term, and which the present state of pathological science does not even yet enable us satisfactorily to distinguish.

Of no medicine as a specific for Cancer has more sanguine expectations been entertained than of *Hemlock*. It was first recommended to notice by STOERCK of Vienna, and his reports of its effects were so favourable, that “every body,” as Dr FOTHERGILL says, “made the extract, and

every body prescribed it \*.” These experiments, alas! did any thing but confirm the statements of the German. Some thought it was a useful palliative; others had observed no effect, either good or bad, from its use; and others condemned it as positively hurtful. The difference in these results must in part be attributed to variety in the qualities and preparations of the medicine; and in part to the term Cancer having been used more or less precisely by the different experimenters. It seems now to be agreed that its claims to be reckoned a specific are as nothing, and that its power even as a palliative is but inconsiderable. Yet it continues to be prescribed by many, either from the power of habit, or from a desire to be thought doing something, or from some vague and baseless hopes, rather entertained than expressed, that possibly some healing virtue may reside in it.

Dr AKENSIDE, about sixty years since, made a series of experiments on this subject with the *corrosive Muriate of Mercury*, but his success was too indifferent to induce him to persevere, or to tempt any other to repeat them. *Arsenic*, on the contrary, has found many advocates. It was employed, according to Dr GOOD, so early as

\* Med. Obs. and Inqs., vol. iii. p. 414. Lond. 1767.



about the beginning of the eleventh century, and amidst many vicissitudes of opinion, still maintains some degree of reputation. Its effects, it is admitted, are variable and uncertain, "though generally speaking, it proves beneficial; and, in some cases," adds Dr GOOD, with no improper degree of caution, "*may* produce a radical cure."\* There is sufficient evidence to shew that it is the most effectual of any medicine we possess, in some very obstinate and untractable sores that affect the cuticular membranes, and have generally, in our systematic works, been treated of in the same chapter with Cancer, but really very dissimilar; but that such a fortunate result has ever followed its use in genuine Cancer, they whose opinions are most to be depended upon assuredly deny. In those cases, however, of Cancer, which originate in the external skin, where no operation is permitted, and where no particular delicacy of constitution forbids its administration, I feel much inclined to advise its trial. I am no advocate for the unnecessary exhibition of such deleterious drugs, but here the inveteracy of the malady will fully justify the use of them. *Iron*, however, of all the mineral tonics, has, in modern times, been the most lauded. The preparations of this metal

\* Study of Medicine, vol. ii. p. 819.

which are chiefly used, are the Ammoniate and the Carbonate. Mr JUSTAMOND and Dr DENMAN preferred the former, and both of them have spoken of its effects in surely very exaggerated terms. What may be the extent of its utility in glandular affections in general, we have not at present to inquire into,—our business is solely confined to its use in cancerous complaints. Even in these, Mr JUSTAMOND gave it under an impression that he was in possession of a remedy somewhat deserving the appellation of a specific; and Dr DENMAN affirms that, after a trial of almost all the medicines recommended, in every stage of the distemper, he has never found any of them to possess the virtues of Ammoniate of Iron. It was given in large doses, and is said to have produced a very speedy mitigation of pain, an improved discharge, and a less fetid smell. I am not aware that there are on record any detailed set of experiments, which militate decidedly against the conclusions of these celebrated practitioners; but unquestionably the general experience of the profession is against them, and the remedy has fallen into disuse. Mr CARMICHAEL has more lately given the result of his experience on this subject to the public. He is inclined to prefer, for internal use, the sub-oxy-



phosphate, or, in defect of it, the carbonate. He uses it also as a topical application. A strong solution of the acetate or sulphate are employed in the occult stage, which, in the ulcerative, is exchanged for the carbonate, which, after being made into a thick paste with water, is applied over the surface of the sore, and renewed every twenty-four hours. I have had no opportunity of perusing the work of this author, but his cases, it has been asserted, exhibit few of the characters of the true Cancer.

Of two other methods of treatment only, do I deem it necessary to notice briefly the opinions of surgeons. The first is the removal of cancerous tumours by the use of caustics,—a practice which my personal knowledge unfortunately forbids me to say has ceased to be in use amongst regular practitioners. Many people have a dread and horror of the knife, which no reason and no assurances can remove; and some have been found to attempt, in these circumstances, the extirpation of the disease by caustic applications. They are comparatively tedious in operation, and beyond all comparison more painful. But these are their slightest objections, for they have been proved inadequate to produce the effect which it is intended they should produce; and not only

so, but really to add virulence to the ulcer, and cause it to extend its ravages with tenfold rapidity \*. That they continue to be employed by the quack, cannot be a matter of surprise, since they at once conceal his ignorance, and add to his reputation,—circumstances of much mightier moment than the welfare of his patient. “It is attended with two circumstances,” says Mr POTT, “which have greatly contributed to the support of cancer quackery ; one is, that it spares the patient the horror of an operation, which, though infinitely less painful than the effect of the caustic, is not believed to be so ; the other is, that the ragged appearance, which the bottom and sides of the parts make after having been removed by such application, is so unlike to the smoothness of that which has been removed by incision, that ignorant people are easily induced to believe, what the designing always tell them, viz. that the medicine has taken their disease out by the roots ; and that the ragged parts which they see are such roots †.”

\* HOME's Obs. on Cancer, p. 182. “Experience hath taught us, that, by such sort of medicines as these, cancerous ulcers are exasperated, and grow worse.” HILDANUS in ALLEN's Synopsis Medicinæ, vol. ii. p. 183.

† Chirurgical Works, vol. ii. p. 420.



The other method to which I alluded, is that of treating Cancer by uniform and powerful compression. The bandages are applied so as at first to make but a very gentle pressure, but their straitness is gradually increased, till at last it is augmented to a very great degree. “ If the cancer be open, the various holes and cavities are filled up from the bottom with chalk, finely levigated, and all the surface is thickly covered with hair-powder ; over this, long plaster straps are put, so as to cover the whole surface of the tumour ; over this again are placed linen compresses, bound down with the turns of a roller, firmly applied, and of six yards in length ; or over the first straps are laid a second set, bracing the parts more firmly than the first, over this a plate of lead, and lastly the long roller is carried round the chest, compressing the whole \*. This plan, when first made public by Mr YOUNG, seems to have raised some expectations that at length a remedy had been found for a hitherto remediless disease ; but these expectations were soon extinguished, and it is now added to the already too numerous proofs of the fallacy of experience, and the credulity of the public. It

\* C. BELL's Surg. Obs. part i. rep. 1.



would even appear, from the experiments made in the Middlesex Hospital, that cancerous tumours are beyond the reach of the absorbent system; for this continued compression, though it could prevent their growth outwards, only caused them to grow the more in a contrary direction; and any diminution of bulk that was observed, arose not from the diminution of the tumour itself, but from the absorption of the adjoining parts. Of eight cases of open cancer, and eight cases also of the scirrhus kind, submitted to this mode of treatment by Mr C. BELL, some of them for several months, and others for a shorter period, in none had it any salutary influence upon the specific nature of the disease. It frequently gave so much pain, that the patients could not, after repeated trials, endure it, under any modification whatever; and often it appeared to hasten the fatal event.

This cursory sketch of what has been done in cancerous complaints, forces upon us the conclusion, that still our knowledge of them is limited and defective. The remedial measures have in general been proposed by men removed from every suspicion of sinister views, and whose credibility it would be unjust to impeach; but they have confounded diseases more or less nearly al-



lied to Cancer, with the genuine affection; and it is to these that their accounts of the effects of their medicines must be restricted. HOME, and ABERNETHY, and SCARPA, and C. BELL, have done much to enable us to distinguish these from one another, and from Cancer, but much remains to be effected by future labourers in the same field. And "let us hope," to adopt the words of the Medical Committee of the Society for investigating the nature and cure of this disease, "let us hope that, when precise distinctions are made between Cancer and resembling diseases, and between the various kinds of Cancer, appropriate and efficacious methods of treatment of each disease will follow, to the great benefit and relief of the afflicted, and to the credit of the profession."



THE END.











