A new and successful mode of treating certain forms of cancer : to which is prefixed a short practical and systematic description of all the varieties of this disease, showing how to distinguish them one from another, and from tumours, etc., simulating them / by Alexander Marsden.

ON A NEW AND SUCCESSFUL MODE OF TREATING CERTAIN FORMS OF CANCER

BY

ALEX. MARSDEN. M. D.

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SECOND EDITION.

BY

ALEXANDER MARSDEN, M.D., F.R.C.S.E.,

SENIOR SURGEON TO THE CANCER HOSPITAL, LONDON AND BROMPTON, AND CONSULTING SURGEON TO THE ROYAL FREE HOSPITAL, GRAY'S INN ROAD, FELLOW OF THE ROYAL ASTRONOMICAL SOCIETY, ETC., LATE SURGEON TO THE AMBULANCE CORPS BEFORE SEVASTOPOL, GENERAL SUPERINTENDENT OF THE ROYAL FREE HOSPITAL, AND CURATOR OF THE MUSEUM, ETC. ETC.

LONDON:

J. & A. CHURCHILL, NEW BURLINGTON STREET.

MDCCCLXXIV.

1874.

LONDON:
WYMAN AND SONS, PRINTERS, GREAT QUEEN STREET
LINCOLN'S-INN FIELDS, W.C.

FIRST EDITION, 1869.

Dedicated to the Committee of Management of the Cancer Hospital.

GENTLEMEN,

IT is to your exertions and excellent management that the Cancer Hospital owes its present prosperous position; and it is to you I owe the opportunities I have had of studying this disease on an extensive scale (6,000 cases). It affords me the greatest pleasure to thank you for the liberal means you have always placed at the disposal of your medical staff for the benefit of the patients — no restrictions of any kind having been placed on the use of expensive medicines, surgical appliances, nutritious diet, wine, &c., making your institution resemble a Home for the Sick more than an ordinary hospital; and while you have invariably afforded us every opportunity of trying all new

modes of treatment, you have always protected us and our patients from the host of pretenders having secret remedies for the cure of this disease. That you and all those philanthropic noblemen, ladies, and gentlemen, who have so liberally supported our truly Christian charity may long be spared to continue the good work, is the sincere wish of

Your obliged and obedient servant,

ALEX. MARSDEN.

PREFACE TO THE FIRST EDITION.

The plan of treatment recommended in this volume has been most successful in my own hands, and in those of many other surgeons who have adopted it. It is not intended to supersede the use of the knife, but to be used for those cases in which that instrument would be useless, or in which a good caustic can do the work better; as such I offer it to the profession at large.

In the first part, I have endeavoured to give a concise but systematic description of every form of Cancer, and Tumour simulating Cancer, in order that practitioners and students, whose opportunities of studying this disease have been limited, may be enabled at once to distinguish each variety by its own peculiarities. I am not aware that this has before been attempted, and must plead it as my excuse for the many shortcomings of the present volume.

It affords me great pleasure to acknowledge the valuable services Mr. Hayward, our excellent house surgeon at the Cancer Hospital, has always rendered me in all my investigations; and to our artist, Mr. C. D'Alton, I feel deeply indebted for the beautiful and unique collection of drawings from life his pencil has produced.

December, 1868.

NOTICE TO SECOND EDITION.

In offering a Second Edition of this little work, I am happy to state that further experience has strengthened my faith in the value of the application recommended, and many other Surgeons who have tried it, express the same opinion, and have been equally successful. I have carefully revised the text and have added two chapters to the first part, one on Cancer of the Uterus, the other on the Microscopical Appearances of Cancer, and their value as a means of practical diagnosis.

I take this opportunity of thanking Dr. Crombie, our house surgeon, for his efficient assistance, and for the warm interest he has taken in the success of the remedy.

ALEX. MARSDEN.

65, LINCOLN'S-INN FIELDS, LONDON,

December, 1873.

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INTRODUCTION.

ONLY a few years since hospital physicians and surgeons of the highest standing, as well as general practitioners, gave the poor sufferers from Cancer who applied to them but one reply, —"Your case is hopeless; we can be of no service to you;" and they spoke the truth. Cancer was then looked upon as rare, and the death of those afflicted with it as certain. There were many medical men who had scarcely ever seen a case, and comparatively harmless tumours even in the present day are confounded with Cancer, often from ignorance, and by irregular practitioners frequently from design. If we glance at the columns of the medical press of twenty years ago, we shall find few cases recorded, and no rational mode of treatment recommended, with perhaps the exception of the knife. Although a few leading medical men had for some time carefully studied

this malady, so far as their limited field of observation would permit, it was not till the establishment of the Cancer Hospital, twenty-two years ago, that the first grand step was taken. Here hundreds of cases are collected from all parts of the world, and a field of observation presented such as cannot be found elsewhere: every variety of the disease and every caprice of its development may here be seen. Malignant growths in infancy, and those advanced to the fearful ulceration of cancer are made familiar to the eye. The previous history of every patient is taken, all former treatment carefully inquired into, all collateral circumstances accurately noted. To this institution it has been my good fortune to belong since its foundation, and I need hardly say that neither myself nor colleagues have allowed any opportunity to pass unnoticed without learning much concerning the progress and treatment of this disease. It is not my present intention to enter on the general treatment of Cancer, but to draw attention to a practical method, to the development of which I have devoted years of careful observation, and can now confidently recommend. I however think it desirable to give a slight sketch of the various forms this disease assumes, and afterwards to point out those to which this mode of treatment may be applied, with hope of success. I shall also pass under notice those diseases and tumours which may be

mistaken for Cancer, to some of which this treatment may also be applied. I divide Cancer into five orders, and some of these present several varieties. Thus:—

ORDER 1. Scirrhus.

Varieties.—1. Ligneous Scirrhus, globular.
2. ,, ,, Radiated or branched.
3. ,, ,, en masse.
4. ,, ,, cuirass-formed.
5. ,, ,, atrophic.
6. Lardaceous ,,
7. ,, ,, cavernous.

ORDER 2. Medullary.

Varieties.—1. Fungoid Medullary.
2. Lardaceous ,,

ORDER 3. Epithelial.

Varieties.—1. Hard Epithelial.
2. Soft ,,
3. Surface ,,
4. Deep ,,
5. Warty ,,
6. Pedunculated ,,

ORDER 4. Melanotic.

ORDER 5. Cystic or Colloid.

Varieties.—1. Cystic or colloid, in combination with scirrhus or medullary cancer.

2. Cystic or colloid, in combination with adenoids, &c. (not cancerous).

3. Cysts, or colloid matter alone (not cancerous).

Besides these five orders there is a disease, although strictly speaking not cancerous, viz., lupus (rodent ulcer), almost as malignant and destructive. Tumours are also met with, which cannot be classed under any particular head, many not being malignant, others running from one variety to another, or exhibiting the characteristics of even two or more at the same time.

Cancer attacks females in preference to males, in the ratio of about five to one, scirrhus being the most frequent enemy of the former, epithelial of the latter; each sex is also more liable to the disease in one region than another. To illustrate all these points, I cannot do better than give the following table, derived from the records of the Cancer Hospital, since its foundation :—

STATISTICAL STATEMENT OF PATIENTS (CANCEROUS AND OTHERWISE) RECEIVED FROM THE COMMENCEMENT, IN THE YEAR 1851, UP TO THE 31ST DECEMBER, 1872.

	Males.	Females.	Total.
Out-Patients	1,215	6,219	7,434
In-Patients	861	2,464	3,325
	2,076	8,683	10,759

Of In-patients discharged with disease arrested or relieved	1,779
Treated by operation and discharged well (the bulk of these were cancer cases)	449
Successfully treated without operation, and discharged well (some of these were undoubted cancer but many others were of a doubtful character, or non-cancerous)	283
Died	440
In hospital at the end of the year	53
Admitted, although incurable	321
Total	3,325

Situation of Disease.

Male.		Female.	
Face and Lips . ..	819	Breast	5,952
Tongue	539	Special Organs	1,603
Special Organs	162	Face and Lips	279
Arm and Hand ..	64	Tongue	234
Bones of Face	73	Eye	48
Breast and Breast-bone	99	Side	24
Eye	31	Arm	91
Abdominal Viscera ..	81	Abdominal Viscera ..	119
Back	21	Fauces and Œsophagus	82
Thigh and Knee ..	16	Foot	26
Fauces	38	Rectum	21
Foot	7	Neck	112
Rectum	40	Shoulder	10
Neck	55	Thigh and Knee ..	31
Side	1	Head	7
Shoulder	3	Axilla	21
Ear	4	Ear	3
Nose	9	Mouth	12
Mouth	6	Leg	5
Head	1	Nose	1
Leg	6	Back	1
Knees	1	Pelvis	1
Total ..	2,076	Females ..	8,683
		Males ..	2,076
		Total ..	10,759

NATURE OF DISEASE.

	Male.	Female.
Surface or Epithelial	1,423	587
Hard or Scirrhus	187	5,706
Soft or Medullary	54	286
Bony or Osteoid	32	5
Cystic	9	290
Lupus—Non-malignant Tumours, &c.	371	1,809
	2,076	8,683
Males		2,076
Total		10,759

In the second or ulcerative stage of the disease..	3,894
Average duration of disease previous to coming to the Hospital	28 months
Had relations previously affected with cancer,	1,197
Average age when attacked	43 years
Had been operated on previous to coming to the Hospital	828
Average lapse of time before the disease returned,	11 months
Cases ascribed to blows and other causes ..	921

This table, drawn up by the House Surgeon, cannot be regarded as perfectly correct, although every care has been taken to make it as much so as possible. Statistics of disease never have been, and never can be quite accurate. This much I may, however, say, it is the only table on a comprehensive scale that has ever been attempted. The difficulty that can never be got over is that, for various reasons, the surgeon loses sight of a number of patients after a few

weeks or months treatment. We have not thought it desirable to fully tabulate the statistics of the out-patients, such an attempt being, for various reasons, liable to error, but I find nearly 3,000 discontinued attendance, from residing at too great a distance, or were unable to attend from some other reason. Many of these cases, doubtless, are dead; many perhaps might have been cured or greatly relieved. About 2,000 cases were discharged relieved, and 700 apparently cured, out of 7,434 out-door patients. In estimating the value of these figures, it must not be forgotten that the average duration of the disease previous to coming to the hospital is two years and four months, so long a period indeed, that all hope of cure has long since been removed in the majority, and even arrest rendered highly improbable in many. Thus it will at once be seen that the cured and relieved would bear a far higher ratio, if compared with the number of recent cases treated, say that had not existed more than one year; still higher if six months. Nor in considering the number of deaths known to have occurred amongst the in-patients, viz., 440 out of 3,325, must this fact be forgotten, and also that many poor creatures are brought in a dying condition. It is not my practice to operate in cancer, unless all other available means have failed; and it is, therefore, most gratifying to

find, that of the whole number operated on, none have suffered any ill effects, and 449 were discharged well, an ample proof I think, that the knife has not been injudiciously employed.

CHAPTER I.

THE FIVE ORDERS OF CANCER.

ORDER I.—SCIRRHUS AND ITS VARIETIES.

I SHALL now proceed to inquire into the peculiarities and distinctive features each order presents, the first being scirrhus or hard cancer, the varieties of which are as follows:—

Varieties.—1. Ligneous Scirrhus, globular.
2. „ „ radiated or branched.
3. „ „ *en masse.*
4. „ „ cuirass-formed.
5. „ „ atrophic.
6. Lardaceous „
7. „ „ cavernous.

These are the seven decided varieties presented, and we shall find each possessing something

innately its own, yet all having appearances in common.

1. *Ligneous Scirrhus Globular* is the type of this order; the term was first given it by M. Velpeau, the distinguished French surgeon, who considered it to possess the hard and resisting feel of wood. It is only by making such comparisons that an idea of this kind can be conveyed from one person to another; but we must be careful not to mistake the special point of comparison, since two things that resemble each other in one or more properties may differ widely in every other respect, and in this instance it is the general feel of wood—its hardness and texture—that are taken to illustrate the properties of scirrhus, and not any of its other qualities, which are quite incomparable. For this reason I do not think M. Velpeau has selected the best substance to describe this variety of cancer, as there are other things that resemble it more nearly than wood. Thus wood cannot, without great labour, be cut with a knife, except with the grain, and in this case is split rather than cut. "Ligneous scirrhus" can be easily cut in any direction, and will not split; it feels like solid India-rubber, and in appearance, when cut, resembles a stringy turnip more than anything else, but is elastic, and from the surfaces a thick cream-like juice (cancer juice) exudes. Of the seven varieties of scirrhus, it will be observed that five

are of the ligneous or harder kind, two only being of a softer nature, forming the link between scirrhus and medullary cancer.

Ligneous scirrhus globular is generally first discovered by accident. Thus, in one case a lady, while dressing, finds she has a hard lump in her breast, perhaps only the size of a bean, or it may be as large as a walnut; in another, her attention is first arrested by a shooting pain. In each instance, the disease may, and in all probability has, existed for some weeks or even months without giving pain, or in any way attracting notice; but no sooner has the discovery been made than the patient becomes alarmed, and believes she has a cancer; and should it be so, and of the globular kind, we may expect to find the following appearances.

The tumour, provided it is in the breast, will feel deeply seated, of a slightly elastic but hard nature, more or less globular in form, the surface not perfectly smooth, but giving the idea of a bundle of lactiferous tubes strongly knotted together, and although freely moveable in the breast, and its size pretty accurately defined, yet apparently composed of the gland itself, rather than a distinct and separate formation. Up to this time the skin has undergone no particular change, but as the disease advances it will present very peculiar and characteristic appearances; the attention will first be arrested by its becom-

ing more dense, and of a pale or even leaden hue; gradually it will be attracted or drawn as it were to the tumour, until it becomes adherent to some portion. The surface of the breast is now drawn to a central point, giving rise to deep puckerings radiating from it. Should the tumour be in the region of the nipple, the latter becomes retracted. The patient will experience lancinating pain shooting through the breast, severe and frequent. Such is globular scirrhus in its first stage. Now begins the second. The skin over the tumour is by this time firmly attached to it, the puckerings become deeper and harder, and the central portion usually presents a smooth appearance of a red colour, and is moist. It is here ulceration will commence, or else around the nipple a large deep ulcer will soon be formed, eating its way into the breast, its edges becoming thick and prominent and overlapping the surrounding skin. The tumour increases in size, the ulceration spreads, a profuse discharge pours from the surface, the patient sinks from exhaustion or dies from hæmorrhage. This is the course of unchecked scirrhus. During the progress of the disease the glands in the axilla most probably become indurated, and the arm on the affected side greatly swollen and œdematous.

I have here given the history of this form of scirrhus briefly, describing it as it is found in its most virulent shape, when it runs through its

different stages in a fearful and rapid way. Frequently, however, the symptoms are less severe, and the entire development of the disease takes place more slowly. But even in its worst form it may sometimes remain for years, under judicious treatment, in a stationary condition, or better still, it may occasionally retrograde.

2. *Ligneous Scirrhus, Radiated or Branched.*—This variety runs through its course in a manner very similar to that just described. The two kinds are closely allied, for both may at different periods be seen in the same tumour, or even exist at the same time in separate ones. On examining a tumour of this kind, instead of the circumscribed form, we shall have great difficulty in ascertaining the extent of the disease, for while in globular scirrhus its growth takes place in a uniform manner, the radiated throws out roots in various directions, altering the tissues through which they pass, and gradually converting them into cancerous structure. These roots or bands are easily felt by the hand, but can rarely be seen by the eye. It is this form of cancer from which the disease probably derived its name, from the resemblance seen by some in it to a crab with its claws extended. This variety differs from the preceding only in its want of uniformity; the one is round and circumscribed,

the boundaries of the mass being accurately determined, while the other from a nucleus or centre throws out roots in various directions. These bands or cords, easily felt at their origin, will be found, if traced by the finger, to become less dense as they proceed from the common centre or nucleus, their terminations being lost in the surrounding tissue. The second stage of both forms is the same. But it will be obvious, that to remove the round, well-defined mass of the former, will be an easy task in comparison with the difficulty of extirpating the root-like confusion of the latter.

3. *Ligneous Scirrhus en masse.*—Here the whole breast will commence to enlarge at once. It is generally not noticed until some time after it has commenced, in most cases giving but little pain, and merely imparting a fulness to the gland, which does not in any way alarm the patient. Having acquired a certain size, it becomes more dense, and pain comes on; it still continues to harden, while the pain increases, and the skin (which in all probability was affected from the first) begins to present peculiar appearances, becoming non-elastic, and showing depressions and prominences, which, as the disease advances, become more conspicuous. After a time ulceration commences, and proceeds much in the same manner as in the radiated and globular scirrhus.

Operation by the knife is in this form inadmissible at any period.

4. *Ligneous Scirrhus, Cuirass-formed.* — At one time this was considered a very rare form of the disease, and in the first edition of this work I stated that it had seldom been seen in this country, but unfortunately, further experience has shown that examples are of too frequent occurrence to be considered exceptional. It is, perhaps, the most dreadful form of cancer; that in which the sufferings of the patient are greatest and the skill of the surgeon of the least avail. The following case may be taken as an excellent example:

Christiana V.C—, age about 65, a highly accomplished and amiable lady, had, for a year and a half, suffered from a ligneous scirrhus (globular), which, not yielding satisfactorily to treatment, was, in April, 1856, removed by Dr. W. Marsden and myself, and in a short time the wound healed. All went on well for some months afterwards, when, unfortunately, she was attacked with violent diarrhœa and vomiting; a neighbouring surgeon was sent for, but after a fortnight's treatment, the patient still remaining in a dangerous condition, I was again called in, and found that although the diarrhœa, &c., had left her, she was in a most prostrate condition, and had, in my opinion, been kept far too low. By tonics and a

more generous diet she regained strength. Unfortunately her old enemy had taken advantage of her weak condition to renew its attack, and once more I found indications of cancer; these, although at first slight, were very ominous, for within six weeks, eight or ten hard patches had made their appearance in and around the cicatrix. These patches, at first about one-sixth of an inch in diameter, slightly elevated above the surrounding surface, flat, and of a dull red colour, soon began to enlarge, and others to be added to their number; and as they increased in size and number, they coalesced and became harder, forming dense plates of one, two, or even more inches in diameter. At an early period they appeared only on the front of the chest, afterwards on the back, until the whole thorax was completely encased, as in a vice. The breathing, during all this time, gradually became more and more difficult, till at the end of a few months, the patient died of exhaustion and suffocation. Such is the terrible course of cuirass-formed cancer.

Two cases are also related in Dr. W. Marsden's translation of M. Velpeau's work, one of which I give verbatim. "Amongst the unfortunates whom I have seen in this state, I shall mention an English lady dwelling in the Champs Elysées, and in whom the entire chest, from the flanks to the neck, from the umbilicus to the larynx, from the loins to the occiput, had undergone the

ligneous transformation, and who was, besides, covered with scirrhous ulcers, with a crowd of cancerous crimpling (bosselures), as far as the armpits, and even on the shoulders. This poor woman, whose arms were thrice their natural size, and hard as marble, had the respiration so small, so short, that she resembled a person in a state of strangulation, or one whose chest is violently caught in a vice, unable to move arms or head, experiencing at every instant the most atrocious pains; she presented, when I saw her with Dr. Skiers, her attending physician, the most afflicting spectacle which can be imagined, uttering piercing cries, demanding death, without having the power of inflicting it, and incessantly praying for some one to administer a dose of opium sufficient to procure an eternal sleep."

5. *Ligneous Scirrhus Atrophic.*—In all the preceding varieties, growth has been a main feature. We must now pass under our observation, a form of cancer differing essentially from all others, viz. the "atrophic," in which the tissues are condensed, hardened, and shrivelled up. In the first indications of this disease, the nipple, which in a healthy condition, boldly protrudes from the areola surrounding it, is found to be encompassed by a deep fossa of a dirty red colour, discharging an unhealthy ichorous secretion, and may, by an inexperienced person, be mistaken for an ordinary

sore nipple, but by a careful examination, this error is easily avoided, for, on closely inspecting a case of this kind in its earlier phase, this fissure will be found formed, not by ordinary ulceration, but by the nipple being retracted or drawn into the mamma, and, of course, forming a deep pucker around it. At first, nothing more will be noticed, but in the course of time, the breast under the nipple will become hardened and contracted, the skin shrivelled, of a dirty colour, and of low vitality, and the nipple becomes almost buried in the mamma, with an ichorous discharge exuding all around it, as already mentioned. In this state the patient may remain for years, being able to perform many of the usual duties of life, suffering no very great pain, and the cancer undergoing but little change. This must be regarded as favourable, for, on the other hand, ulceration may extend and soon involve the whole breast. As such, however, is not the usual course, atrophic scirrhus may be considered one of the slowest and least terrible forms of cancer, and in skilful hands life may generally be prolonged for years, with tolerable comfort to the patient. In all varieties of cancer past hope of cure, the aim of the surgeon should always be to induce this "atrophic" condition.

6. *Lardaceous Scirrhus.*—This variety strongly resembles the ligneous scirrhus *en masse*, and is

principally distinguishable from it by being less dense, in consistency being between it and the medullary or encephaloid. It occurs more frequently in stout persons and those with full breasts than in the spare; in those of the phlegmatic more than in the sanguine temperament. This, more than other forms of cancer, often exists for a long period before the patient is aware of its presence; and even when discovered to her, she cannot easily be induced to believe it otherwise than normal. This is not at all to be wondered at, for frequently the disease may be present for many months without the least pain, and there are many women whose breasts, more particularly about the period of menstruation, assume a swollen condition, much resembling this disease at an early period. The tumour, which may or may not be distinct, is generally deeply seated. I believe it never has a tendency to the branched variety, and always strongly resembles that of scirrhus *en masse*, but is of a less dense feel. It may increase to a considerable size before it attacks the skin, but when it does so, it is in much the same manner as in other forms of scirrhus.

7. *Lardaceous Scirrhus Cavernous.*—This is a very peculiar and important form of cancer, which I have never seen described. Many very striking examples have come under my notice, and when

once seen it can never be forgotten, nor confounded with any other form of cancer. I have named it as above: cavernous scirrhus. I believe it attacks persons only of considerable *embonpoint* and firmness of flesh, its specific feature consisting in the formation by a peculiar kind of ulceration of a deep cavern-like ulcer, with but little or no previous swelling or hardness. Its usual seat of attack is either mamma, generally on the inner side, or midway between them over the sternum. These cancers usually give but little pain for some time, and before ulceration has set in, it is difficult to induce the patient to believe there is anything the matter with her, and it is then only after the most careful examinations, that the true character of the disease can be surmised. At an early period, however, an impression will be conveyed to our touch, that at a certain depth, the tissues are a little more dense and full than usual, but nothing like a distinct tumour will be found. This density and fulness will, after a very variable time, become a little more perceptible, and perhaps occupy a rather larger area. The tissues have, in fact, become impregnated with the germs of cancer in the most insidious manner, but suddenly a spot on the skin will become red or hard, and from this point ulceration will extend inwards, with astounding rapidity; an ulcer of a cup-like shape is formed, which quickly and surely increases in size and depth, eating away and burrowing in the

mass of the tissues in all directions, and forming a vast cavern-like ulcer. The walls of the cavity have a pretty healthy appearance, are hard, and constantly endeavouring to throw out healthy granulations; the surrounding structures seem perfectly healthy, but perhaps a little more dense than usual (as in the first appearance of the disease), and the edges of the wound, although hard, are well defined, and on a plane with the surrounding parts. A cursory examination of these caverns gives no idea of their real extent; for example, Mrs. R., a patient of mine, a month or two before she died, appeared, at first sight, to be suffering from an ulcer of no very great size, situated on the inner side, and a little below the left breast; but on lifting up this breast, which, though large, looked healthy, one of these enormous caverns would be discovered, into which a man could have thrust both his fists, and extending nearly to the collar-bone. These ulcers, considering their extent, do not discharge very copiously, but a pearl-like liquid exudes from and adheres to their sides, and at an advanced period of the disease they often bleed freely.

ORDER II.—MEDULLARY CANCER.

Varieties.—1. Fungoid Medullary.
2. Lardaceous ,,

This order differs essentially from scirrhus, inasmuch as scirrhus is characterized by hardness, the medullary by softness; but in the breast, at an early period of the disease, they are not often distinguishable from each other, and it is only as the tumour advances that the distinctive features of each are seen: to other parts of the body this does not apply so much. By M. Velpeau and others, medullary cancer has been divided into two varieties.

The fungoid form is characterized by being very soft and growing in a cauliflower-like mass, easily broken down, and having a great tendency to bleed freely from a number of small points. This form of disease may exist and remain dormant for years (*vide* Case No. 3), but when in an active state proceeds more rapidly than any other kind of cancer. *The lardaceous form* is not quite so soft, and does not break down so readily when touched with the finger, and shows in a less marked manner the vegetable-like appearance. With those exceptions, one history will suffice for both varieties.

In tracing this species of cancer from its first

appearance in the breast to its full development, the following peculiarities will be observed:—A small tumour will be discovered, at first not distinguishable from scirrhus, as it in all respects resembles it, except perhaps that it may be a little softer and not attended with pain; but, as the disease advances, a most marked difference will be observed in the course of each. As the tumour increases in size, the skin, instead of being puckered, hardened, and drawn to the tumour, as in scirrhus, will be protruded, by degrees assuming a conical or nodulated appearance; at the same time it will be thinned and glistening, more deeply tinged of a red or violet colour, and a number of minute vessels may be seen ramifying over its surface. This nodule (but there may exist more than one) has a hard base, which is in fact the original tumour; it will continue to increase in size if left unchecked, and will sooner or later burst and discharge, in some cases a considerable quantity of hæmatic pus, in others not much. As soon as this discharge has taken place, from the bottom of the cavity so formed a fungoid growth commences, and after a time appears externally, and now being freed from all restraint, the rapidity of its progress is wonderfully accelerated, and an enormous mass is the result, sometimes ulcerating, sometimes sloughing, sometimes bleeding, and with few exceptions always increasing.

ORDER III.—EPITHELIAL CANCER.

Varieties.—1. Hard Epithelial.
2. Soft ,,
3. Surface ,,
4. Deep ,,
5. Warty ,,
6. Pedunculated ,,

This order of cancer is very common, particularly in the male sex; on reference to the Statistical Table it will be seen that of 2,010 persons so afflicted, 1,423 were males, 587 females. But it is most remarkable that, although a very large number of lip cases make up the former, only a very few have occurred among the latter. It is this form of cancer that is peculiarly amenable to the arsenical mucilage, and many cases that could not be attacked with the knife may be perfectly cured by its use, generally with but little pain. In the Table we say, "Surface or Epithelial Cancer;" this is not a strictly correct definition (although generally considered so), for in some cases it commences deeply seated. In this opinion I am supported by Sir James Paget.

Epithelial cancer attacks all parts of the body, but is most frequently seen on the lower lip, tongue, special organs, breast, arm, hand, &c. At its first appearance it rarely excites the alarm

of the patient, and to an inexperienced person, there is then nothing to be seen, or felt, of a serious nature. It may commence (in the lip, for instance), as a small fissure, something like the cracked lip seen in winter, or as a small hard spot situated on the surface, and accompanied by soreness of the mucous membrane; sometimes it will be a tumour deeply seated; sometimes it will project from the surface, in the form of a hard scab covering a sore; this latter is most usual in the lip. In the tongue, pain of a slight nature, or a feeling of stiffness of one side of the organ, generally first attracts attention; and this is followed by hardness, redness, and pain of a lancinating character, but occasionally dull and continuous. Commencing in this way, the tongue becomes swollen and indurated to a great extent, occasionally so much so, that the whole of it is involved, before any ulceration takes place. It is by no means uncommon, however, for ulceration to form the commencement of the disease, in which case it generally appears at the side, sometimes at the tip, rarely in the centre. In syphilitic ulceration of the tongue, the reverse of this is the rule, and should always be borne in mind in our diagnosis of the disease, together, of course, with the previous history of the case. The first appearance of epithelial cancer can almost always be traced to some exciting cause: of the tongue

and lip, for instance, to the irritation caused by the tobacco-pipe or cigar, or to the contact of decayed, sharp-pointed, or dirty teeth, to blows, &c., as in Case No. 16, which is one of medullary cancer, that was clearly excited by the scratch of a rusty nail. Hence I am of opinion, that by attention to the teeth, and the avoidance of smoking, a person even having a tendency to epithelial cancer of the tongue or lip may, as a rule, delay the time of its first appearance, and perhaps escape it altogether.

I do not think it necessary to discuss the varieties of epithelial cancer separately. Perhaps, of all the forms it assumes, the warty is the most common. In many examples of this disease attacking the lip, labium or scrotum (chimney-sweeper's cancer), before ulceration, the part feels swollen, moderately hard, smooth, and shining, but, as Sir James Paget observes, "more often it is coarsely granulated, or tuberculated, or lowly warty, like the surface of syphilitic condyloma, deriving this character usually from the enlarged and closely clustered papillæ. The surface is generally moist with ichorous discharge, or covered with a scab, or with a soft material formed of detached epidermal scales. The firmness or hardness of the diseased part is various in degree in different instances; it is very seldom extreme; the part, however firm, is usually flexible and pliant, and feels moderately tense

and resilient on pressure. Commonly, it is morbidly sensitive, and the seat of increased afflux of blood. Its extent is, of course, various; but before ulceration the disease makes more progress in length and breadth than in depth; so that when, for example, it occupies the whole border of a lip or of a labium, it may not exceed the third of an inch in thickness.

"In other instances, or in other parts, a large mass is formed, the surface of which, when exposed by washing away the loose epidermoid cells which fill up its inequalities, is largely granulated or tuberculated, and is planned out into lobes by deeper clefts. Such growths are upraised, cauliflower-like; and with this likeness may be broken through the clefts into narrow-stemmed masses, formed each of one or more close-packed groups of enlarged tuberous and clavate papillæ. The surface of such a growth shows usually its full vascularity, for if it be washed it appears bare, and, like the surface of common granulations, has no covering layer of cuticle. It may be florid, bleeding on slight contact, but more often it presents a dull or rusty vermilion tint, rather than the bright crimson or pink of common granulations, or of such warts as one commonly sees on the prepuce or glans penis." *

* Vide "Lectures on Surgical Pathology," p 703.

Sometimes epithelial cancers are seen in the form of a disc, two- or three-eighths of an inch thick, surrounded by healthy tissues, half the thickness projecting above the surrounding skin or mucous membrane, the other half below, and generally more or less warty. They may also grow in the form of a cone, and if covered with a scab, look something like syphilitic rupia, and occasionally they grow pedunculated.

ORDER IV.—MELANOTIC CANCER.

Surgeons and Pathologists differ much respecting the distinctive character of the black cancer; some, viz., Velpeau, Maisonneuve, Marsden, &c., regarding it as a distinct variety or order of carcinoma; others, viz., Paget, Bérard, Broca, &c., holding that it is merely the medullary or scirrhus, with the presence of a black pigment, deposited in and exuding from the tissues. Undoubtedly from the surface of an ulcerated medullary or scirrhus cancer, a thick black discharge often takes place, continuing to do so as long as the disease lasts. The following is an example:—

Mrs. H—, aged 65, first consulted me in 1860. She had about two years previously noticed a small hard tumour in the left breast, the size of a nut, accompanied by severe shooting pain.

Dr. Bateman, who first saw it, pronounced it cancer, and recommended removal; to this she would not submit. The tumour increased in size and ulcerated. It was now that my father, the late Dr. Marsden, and myself, first saw her. It was a true scirrhus cancer of the lardaceous variety. A fungus growth appeared through the opening, and, overlapping the breast on all sides, soon covered the entire gland. The whole mamma appeared as if it had been turned inside out; the diseased mass was about four inches in diameter, and projected from the surrounding parts about two inches. During the last six years of her life, it continued to discharge copiously, a thick black matter, which no application would stop, although the carrot poultice and the chlorate of potash lotion checked it, and cleansed the part for a time. This lady visited me for about six years. I was enabled to keep the cancer quite in abeyance, and to within a month of her death she was as well as when I first saw her; and, with the exception of occasional bleeding, and the constant black discharge, suffered no great inconvenience. She died from old age and disease of the lungs.

In this case the cancer was concentrated in the breast alone, and remained there for years. But cases occur in which, the breast being the original seat of disease, ulceration has taken place in the axilla; the former situation pre-

senting the ordinary appearance of cancer, the latter discharging copiously a thick pigmentary matter; and in other parts of the body similar appearances may be observed. On the other hand, cancerous plates, varying in diameter from one line to the size of a five-shilling piece, for the most part occupying the skin, and also small rounded tumours occur, which, from their very commencement, are characterized by the presence in their structure of a black or blackish deposit, which peculiarity continues with them; and even should these plates or tumours be removed by caustic or the knife, and others return in their place, or at distant parts of the body, the same black appearance will almost invariably be observed. Under these circumstances, I think we cannot but admit the melanotic cancer as a distinct variety, in which the presence of carbonaceous-like matter is seen, from the commencement to the termination of the disease; but we must also acknowledge the frequent appearance of it, at any period after ulceration has begun in other forms of cancer.

ORDER V.—CYSTIC OR COLLOID.

Varieties.—1. Cystic or colloid in combination with scirrhus or medullary cancer.

Varieties.—2. Cystic or colloid, in combination with adenoids, &c. (not cancerous).

3. Colloid matter or cysts alone (not cancerous).

In an examination of colloid tumours, it is necessary to divide them into three varieties, viz.: 1st. Those in which the colloid character is found united with the medullary cancer, or with the scirrhus, with which last, however, it is not very often seen. These indicate a form of cancer truly malignant, and much to be dreaded. 2nd. Those tumours harmless in themselves, adenoids, &c., in the centre or other parts of which the presence of colloid matter does not render them less harmless. 3rd. Those which from the commencement are composed of colloid matter alone, and which must be regarded as non-malignant.

1. *Cystic or colloid, in combination with medullary or scirrhus cancer.*—Its most common seat is the breast (but it may occur in any other part of the body), and once fully established, is most unmistakable, from its large size, the rapidity of its growth, and a peculiar elastic feel indicating fluid confined. A scirrhus or medullary cancer, having for some time progressed in the ordinary manner, suddenly commences to en-

large rapidly; the skin becomes highly vascular, shining, and tense. This change is caused by the presence in the tumour of one or many cysts, generally containing serum of a pale straw-colour, sometimes tinged with blood and even pus, at others thick and jelly-like; it may be colourless, or of a green tinge, and is often quite opaque. The breast may continue enlarging without ulceration, until it attains the weight of twenty pounds or more, becoming, as may well be conceived, a most dreadful burthen to the patient. Sooner or later, these cysts burst through the skin, and discharge in one, more frequently in many places, and an immense sloughing ulcer is the result.

2 & 3. These varieties are rarely curable without operation; they are generally very slow in their progress, and often remain for years without causing inconvenience, except from their size and situation. Their removal is mostly an easy business and an effectual cure.

CHAPTER II.

CANCER OF THE UTERUS.

The usual forms of this disease very closely correspond in their clinical character and significance to those occurring in the breast, while much of the apparent difference is due to the difference of situation and nature of the organ involved. Thus as in the mamma, so in the uterus, scirrhus is the predominant variety, being more often, however, of the infiltrated than the globular form; in both it usually begins without any indication of constitutional disturbance, and during the continuance of the patient's ordinary health; in both, also, a feeling of uneasiness rather than pain is the first symptom that excites suspicion and leads to an examination, and this detects in both cases alike the first positive index of the disease in the hardness and rigidity of the part affected. The similarity extends to the most important features throughout the progress

of the disease. At first the hardness is felt to be beneath the surface, and confined to a limited portion, usually of the cervix of the uterus, near the os externum, although the amount cannot, except in the globular form, be strictly defined; and in consequence of this situation, any additional secretion is more probably due to the concurrent irritation of the superficial healthy parts than to any excretion from the subjacent disease. It is not until it has reached the surface that the discharge, corresponding with the discharge from the breast, when the cancer has broken through the skin, occurs. But before this takes place, a large portion of the uterus may be affected, especially when the disease is of the infiltrated form, just as it may spread over the chest to a very great extent without forming an ulcer at any part of the surface. If this be the case, the neck and body of the uterus are found enlarged and indurated and almost immovable; but as the finger cannot be introduced far through the os, the exact condition must be ascertained per rectum. When ulceration takes place, the neck is almost invariably the first to suffer, and when so removed, the finger can then reach for some way into the cavity of the uterus, which is usually found excoriated and fissured. It is at this stage that the most serious complications occur, for previously, as a rule, the discharge has not been so great as to cause much inconve-

nience, and the pain of the process, except occasional dull aching pains, that are of a depressing nature and referred to the lower part of the back, appear in the majority of cases to be far less than might be anticipated. But now the discharge is largely increased, and the disease is extending to organs of greater sensibility, organs also, the impairment of whose function is a serious embarrassment to the patient. Here, too, it will be observed that the parallel between the disease in the breast and in the uterus is still maintained; for it is not while cancer is confined to the breast, notwithstanding that in itself this is a much more sensitive organ than the uterus, that pain produces its most decided effects, but only when the disease has passed on to the surrounding parts and thereby at the same time enfeebled their functions. Neither the breast nor the uterus is necessary to the performance of the individual and essential functions, and consequently, so long as the disease is limited to them, the patient is not crippled, but incidentally, in the exercise of indispensable organs. But as the uterus is further converted into scirrhus, the portion of ureter lying between the uterus and bladder becomes affected, usually in the way of obstruction, and hence follows difficulty of conduction of urine from the kidneys to the bladder, and consequently dilatation of

those tubes. This seems to be the origin of those deep-seated pains at the lower part of the back and loins, so grievously complained of by all who suffer from the disease at the period when it begins to extend beyond the uterus. The increase of calibre of the ureters steadily continues throughout the course of the disease, so that at death they are often found dilated to the size of the small intestines, in which case the kidneys also have usually undergone dilatation of their calices, and scirrhus transformation of their structure. But before death occurs, sometimes many months before, the bladder and rectum are very frequently seriously implicated, and often so completely changed in structure that they become wholly incompetent to the discharge of their special functions, and give rise, as a matter of course, to the most distressing symptoms. It being in the essential nature of the disease to render all the parts affected hard and immovable, in proportion as they are made adherent to neighbouring parts, it follows that when the bladder and rectum are fused, as not unfrequently happens, into one mass with the uterus, their power of expulsion is entirely lost, and this is only a preliminary affliction to the loss, on the part of the sphincters, of their power of retention; the conjoined result being that the excreta can neither be retained nor expelled at will, but con-

tinue to escape incessantly, producing a complication of misery of the severest kind. The progress of the disease within and above the pelvis is no less disastrous, for the peritonæum becomes studded with scirrhus products, and the psoas and iliacus muscles are not unfrequently invaded and metamorphosed in the same manner, and sometimes completely so. The glands in the groin fall under the power of the disease in turn, and by exercising pressure on the neighbouring veins, in consequence of their enlargement, they give rise to swelling of the whole lower limbs, just as a similar affection of those in the axilla produces the same condition in the upper extremities. The disease is in the main, as the description is intended to convey, extended by a process of infection by continuity and proximity of structure, although, of course, organs are found affected that stand widely apart from its original source, or what is recognized as the original source. Thus the liver and lungs are sometimes cancerous to a greater or less extent through infection, perhaps, by the lymphatic or venous system.

While the disease is thus spreading, and disorganizing the tissues in all directions, there is a constant discharge from the pelvic organs through one or more of their outlets, the consequence of destructive ulceration, which is also

attended by occasional outbursts of bleeding. This necessarily rapidly undermines the constitution of the patient, and the last stage of existence is at hand, when the resources of the system have thus been finally drained. The only circumstance that naturally mitigates the condition of the patient in this deplorable state is that for some time previous to death she is generally relieved from all pain, and her suffering is thus reduced to sickness and discomfort from the discharge, which admit of great amelioration, by proper nursing and treatment.

Medullary cancer of the uterus is not so common as scirrhus, from which it differs in a practical point of view mainly in the comparative rapidity of its progress, and that chiefly in consequence of frequent hæmorrhage, which forms one of the most alarming features of the disease. In other respects it closely resembles scirrhus in gradually extending beyond the uterus, and disorganizing the neighbouring organs, and in subsequently infecting those more remote. Although named medullary or soft, it is only the thoroughly diseased tissues that present this character; the tissues that are newly attacked are often as hard as in scirrhus, and the function of organs is impaired and destroyed by the same process as in that disease.

Some doubts have been expressed as to whether the so-called cauliflower excrescence is a true cancerous affection, as the disease may in some cases be completely extirpated. Virchow considers that at its origin it is a simple papilloma, which, when left to itself, becomes by-and-by cancerous. There can be no doubt that at an advanced stage the disease is truly malignant, and causes death in precisely the same way as the ordinary forms of medullary or epithelial cancer, by frequent hæmorrhage, and destruction of surrounding organs. Like most other diseases of the uterus it originates in the neighbourhood of the os, and is felt as a soft irregular excrescence with granular surface, and fixed at its point of attachment by a pretty extensive base. It is of rapid growth, and may become so large as to fill the whole vagina, and even protrude through the vulva. It is perhaps of all the forms of malignant disease of the uterus the most amenable to treatment, as excision may be performed with success, and the actual cautery also be used with great advantage, in either removing or keeping the growth within bounds.

Epithelial cancer occurs in the uterus and vagina as in other parts covered by mucous membrane; but although it may at first be confined to one tissue, it soon invades the surrounding textures, and terminates in much the same manner as the other forms of the disease.

It deserves to be noticed that cancer frequently affects the ovaries at an early stage of the disease in the uterus, and it is not improbable that these organs may in some cases be the primary seat of the disease.

CHAPTER III.

LUPUS, OR RODENT ULCER.

Varieties.—1. Lupus exedens.
2. Lupus non exedens.

1. *Lupus exedens*, called also herpes exedens, rodent ulcer, and noli me tangere. This is a disease almost as terrible as cancer, and equally malignant; its most frequent seat is the face, near or upon the alæ of the nose. Lupus is generally regarded as a skin disease, but this variety of it, although perhaps confined to the skin at first, afterwards attacks the deep-seated structures. The end of the nose, or some part of the face, first swells, with a bright red shining appearance; tuberculated points soon appear projecting from the surface, presenting even a more highly inflamed appearance than the previous swelling. The disease may remain in this condition for a long period, sometimes better, some-

times worse, the patient not being fully aware of the really awful nature of the complaint. But the surgeon well knows, that sooner or later the disease will assume an activity terrible to contemplate. Active ulceration commences, and from this time all the adjacent structures yield to its destroying influence. The nose is gradually eaten away, the lips follow, tooth after tooth falls from the jaws, and from the depths of the cavernous-like ulcer, dead and putrid pieces of bone come away. The victim is selected, all must succumb. The nose aud mouth are but as one hideous cavern, the eye drops from its socket; the poor sufferer calls upon his Maker to take him; his prayers are heard, his agony is done; for welcome death has made him his own.

2. *Lupus non exedens*, called also herpes. This variety is a severe form of skin disease; it particularly attacks scrofulous children and delicate persons in after-life. It commences by the appearance of one or more shining red tubercles; others soon follow; these coalesce and ulcerate, spreading over the surface of the face, one part healing while another is being attacked; and should the disease not be arrested, most dreadful deformity is caused by the cicatrices and puckerings produced by the constant ulceration and repair going on. It is a disease very difficult to cure.

CHAPTER IV.

NON-MALIGNANT TUMOURS, ETC., THAT MAY BE MISTAKEN FOR CANCER.

1. Keloids.
2. Fibroids.
3. Adenoids.
4. Osteoids.
5. Simple Hypertrophy.
6. Hæmatic Tumours.
7. Abscesses.
8. Fatty Tumours.

1. *Keloids.*—These tumours, although decidedly non-cancerous, are very tedious and difficult to cure. They partake more of the character of fibrous tumours, and seem to fill up the gap between them and true scirrhous cancer. They are usually found in old cicatrices, particularly those of burns, but may be seen in parts otherwise perfectly healthy and uninjured. As a pri-

mary disease, they first appear in the form of a small wart or hard plate, situated in the skin; they give rise to no pain, and their mode of growth is very variable, sometimes remaining stationary for years, and sometimes growing rapidly. They do not, however, usually attain any great size, unless injudiciously interfered with. When their seat is an old cicatrix, it appears as though the tissue became gradually more and more indurated, forming a tumour projecting from the surface. These tumours have no tendency to become deep-seated. When cut through with the knife, they will be found almost dry, crisping under the scalpel like scirrhus, but no cancerous or other juice exuding from them. These keloids return with the greatest obstinacy after removal, but always in the same situation; they do not appear in any way to affect the glandular system, or general health, and the adjacent tissues are in a perfectly normal condition. It will, therefore, be evident that they do not, except under peculiar circumstances, endanger life, and are principally objectionable on account of the deformity they cause.

2. *Fibroids.*—The most marked clinical distinction between a scirrhous cancer and a fibrous tumour,—the variety of cancer which the latter most resembles,—is found in the difference of the mode of connection with the healthy tissues that

subsist between them. The *cancer* invariably attracts towards it the surrounding tissues as if it absorbed them into its own substance, thereby producing an evident diminution of their normal amount, as well as a change in their character; for, together with the actual subtraction by conversion into scirrhus, the remainder of tissue in the part involved is visibly altered, being likewise in process of subtraction. This last is revealed by the adhesion of the most proximate elements to the tumour, and the consequent impossibility of moving the tumour without also moving this portion of tissue, and *vice versâ*, it being obvious that besides this movement *en masse*, the result of the adhesion, there is a diminution of freedom of movement, the result of the "substitution," as Lebert names it. The *fibroma*, on the contrary, does not absorb the normal tissues into its structure, and although connected with the neighbouring parts at one or more points, is not fused with them all round, as in the case of cancer. It follows, therefore, that there is no diminution of freedom of movement, nor do the tumour and surrounding tissues necessarily move *en masse*.

Fibrous tumours have usually a regular contour, more or less approaching the oval or round, and are smooth on the surface. They grow in almost all parts of the body, but are most frequent in the uterus and breast, and in the nasal and orbital

cavities. They are subject to various modes of degeneration when not removed, sometimes softening by what is said to be a transition from fibrous to mucous constituents, and sometimes hardening by deposition of calcareous materials in their structure. The result, in either case, may be ulceration of the superficial or surrounding parts. When removed they do not usually return, although cases are not unfrequent of persons having more than one fibrous tumour of contemporary growth in different situations, and of successors to those that may have formerly been extirpated.

3. *Adenoids.*—So named by Velpeau. These are a class of tumours quite distinct and differing essentially from all cancers, as well as from simple hypertrophy of the breast, or enlargement, the result of inflammation. An adenoid will be recognized by the following peculiarities; viz., a tumour having a firm but elastic feel, the surface not perfectly smooth, but with roundish projections from various parts of it, and being, as the name implies, gland-like. It will be found to move freely amongst the tissues in which it is buried, in no way drawing them along with it, and being, as it were, a perfectly isolated body. Should it attain any great size and approach the skin, this membrane will not become involved with it, as in cancer, but simply thins and gives way before it. Thus adenoids can readily be diagnosed from

cancer, as these, when moveable, always drag the surrounding parts with them; moreover, they do not in any way implicate the surrounding tissues, but merely increase in the midst of them. Their isolated character and free mobility will always distinguish them from simple hypertrophy of the breast, or induration of the lactiferous ducts.

4. *Osteoid Tumours.*—The extreme hardness of such growths is the circumstance most likely to lead to their being mistaken for scirrhous cancer, but their situation, and the distinctness of the outline between them and the surrounding tissues, will usually serve to distinguish them. They occur principally in close connection with bone, as outshoots from or concretions deposited in them, and it is possible for the finger to detect their margin in a much more precise manner than with a cancer, which, although equally hard perhaps when grasped *en masse*, cannot be traced to its edges so accurately, in consequence of their blending insensibly into the neighbouring tissues. This, of course, does not apply to osteoid cancer, which appears to be a transformation of some of the other forms of cancer into a substance more or less resembling bone by the deposition of calcareous matter. It is a rare form of the disease, and usually occurs in the ends of the long bones, as in the femur and humerus.

Osteoid tumours are very rarely met with in

the breast, and when they do occur it is usually in very old people, whose tissues are in progress of calcareous degeneration. In such cases, the tumour is rather a calcareous concretion than a true bony growth. I removed a few weeks ago from the breast of a healthy female, aged 47 years, a bony tumour that in this respect is highly remarkable. It occupied the centre of the breast, was fully as large as a man's fist, and felt densely hard before removal. It had been growing for three or four years, but did not cause pain or inconvenience until it attained some size, when its great weight became a source of constant discomfort. The centre of the mass, on section, was dense and ivory-like, and less hard towards the outside, where there were attached pieces at different points of well-developed cartilage. It appeared to be a true bony formation, as the microscopic canals distributed throughout were quite manifest.

5. *Simple Hypertrophy* of the breast, partial, or of the entire gland, occurs from various causes, and although there is no difficulty in distinguishing it from the adenoids, yet much may be experienced in deciding between it and the medullary or scirrhous cancer, particularly at an early stage. The following signs of distinction may be found useful:—Scirrhus is a dry, hard, and not very elastic tumour; hypertrophy feels humid and elastic,

although pretty firm; sharp lancinating pains almost always accompany scirrhus, but are wanting in hypertrophy; as the former advances, the skin becomes hardened, or indurated bands appear; in the latter this is not the case. Between medullary cancer and simple hypertrophy many singular analogies exist.

6. *Hæmatic Tumours* may be confounded with medullary or melanotic cancer, but are not likely to be so with scirrhus. They are known by the absence of much pain, by their being less soft than medullary cancer, less hard than scirrhus. The system generally is but little affected by their presence; and in cases of old standing,—for they may remain for years, and attain the size of a child's head,—the neighbouring glandular structure remains perfectly healthy. Surgeons of the highest standing have, however, been mistaken, and taken these tumours for true cancer. When removed, they do not return.

7. *Abscesses*, under certain circumstances, may strongly resemble colloid or medullary cancer, and *vice versâ;* for these cancers may, at one or more points, so distinctly fluctuate under the finger as to be mistaken for abscess. It is, therefore, desirable, when great uncertainty exists, to make an exploratory puncture with a needle. I believe, however, that a surgeon who has had

sufficient opportunities of observing the course and progress of medullary cancer will seldom be mistaken in his diagnosis. The previous history of the case must be considered, the cause which produced it be sought for, and the manner of its development traced; these, with the condition of the patient's health and of the surrounding parts, will for the most part form a basis on which to found a correct opinion.

8. *Lipomata or Fatty Tumours.*—These are more likely to be mistaken for abscesses than for any variety of cancer. They are destitute of all the characters of the latter disease, except that occasionally, from proximity to nerves, or from other incidental causes, they may be the seat of considerable pain. They are rare in any situation, except as out-growths from the subcutaneous adipose tissue; but may appear on any part of the surface of the body, although the shoulder or back, about the scapula, and the sides and hips, are their ordinary localities. They have no definite shape, and are uniformly soft, a character which distinguishes them from abscesses as much as the absence of fluctuation. They are perfectly harmless, and need to be removed only when they cause pain, or produce inconvenience from their size.

CHAPTER V.

ON THE MICROSCOPICAL APPEARANCES OF CANCER, AND THEIR VALUE AS A MEANS OF PRACTICAL DIAGNOSIS.

Since the structure of malignant tumours has been submitted to minute examination by the microscope, much diversity of opinion has been expressed regarding the interpretation to be put on the various appearances, and much discrepancy manifested in the description of the appearances themselves. Not to go beyond the writers of some twenty years ago, it was usual with them to admit a great variety of elements as the special products of cancer growth. Thus they had a great deal to say about peculiar granules, cells, nuclei, intercellular substance, fibrillar substance, or stroma, fluid matters, blood-vessels, nerves, lymphatics, and a great many other peculiar and incongruous materials. Dr. Walsh circumscribed their number within more

moderate, but still sufficiently extensive limits, mainly to granules, free nuclei, cells, fibrous substances, fatty matters, and blood-vessels, and denied that the lymphatics and some others of the alleged constituents ever appeared as true offshoots from a cancer growth. It would be beyond the scope of this chapter to enter into a detailed history of their further reduction; but gradually the speciality or peculiarity that was thought formerly to attach to them and distinguish them from the same kind of structure in the normal tissues or in non-malignant tumours, was discovered to be fictitious, and accordingly abandoned as affording any mark of specificity; and I shall just therefore at once refer to the enumeration which our great English pathologist, Sir James Paget, makes under this head. "The elementary structures of the cancer substance," he says, "are chiefly two, namely:—(1) certain cells and other corpuscles; and (2) a nearly homogeneous intercellular substance in which these lie embedded." He further distinctly states, in commenting on the supposition that the fibrous tissue formed in cancers is a new-formed proper cancerous structure, his opinion as follows:—

"I have dwelt the more on this point because the current method of describing all cancers as composed of a peculiar 'stroma,' the meshes of which are filled by a peculiar cancer juice,

appears to me very deceptive and often incorrect. The expressions, as they are commonly used, imply that the fibrous tissue or stroma, and the cells and other materials which form the juice, are alike proper and essential to the cancer. But I believe that in the large majority of cancers of the breast, the only 'stroma,' the only substance that would remain, after removing all that is cancerous, would be the structures of the breast itself."* A further simplification is in view when Rokitansky affirms that in some cancers all that is really and truly cancerous consists of an accumulation of nuclei only, which of course he does not profess to regard as peculiar nuclei, or at any rate distinguishable as such.† It would be tempting to rest here, as far at least as simplicity is concerned, but obviously for diagnosis there would be little to speak of as positive. Later pathologists, however, have begun to turn the wheel in the opposite direction, and we find now that besides cells and granules and a special stroma, cancer has, according to their view, recovered its lost blood-vessels and lymphatics, and the direction being once reversed, it would be hazardous to speculate on how many of its old and well-known habiliments may in like manner reappear in the discoveries of the

* "Surgical Pathology," p. 620.

† "Lehrbuch der Pathologischen Anatomie." Erster Band, s. 250. Wien, 1855.

immediate future. In keeping closely, however, to a simple summary or short review of the subject, for the purpose of eliciting the value of those microscopical observations for practical diagnosis, I must of course confine myself to the particulars that are generally agreed upon, and pass over those that are the subject of dispute. Now if we compare Sir James Paget's proposition with that, say of Mr. Arnott, who has lately published a work with the precise object of demonstrating microscopical diagnosis in this department of pathology, and who defines cancer as "a growth possessed of an alveolar fibroid stroma, containing epithelioid cells in a clear fluid, and without intercellular substance," we shall find that the comparison discovers no agreement except in regard to one point. Thus, while Sir James admits an intercellular substance, he denies the existence of any special stroma, and Mr. Arnott, while he admits a special stroma, denies the existence of any intercellular substance. The one point of agreement is as to the presence of certain cells which are called epithelioid or epithelial-like by the one, and allowed by the other, in many instances at least, to resemble the cells of epithelium. Were I to depart from the strict function of reviewer and express an independent opinion of my own, I should most certainly agree as to the absence of a special stroma and the presence of an intercellular sub-

stance, that is, intercellular in the only legitimate sense of the term, viz., something between the cells. But, for the reason already stated, attention must be here directed solely to the cancer cell, or more correctly cells, as they are the only universally admitted elements.

Now it was at one time thought proper and strictly correct to speak of *the* cancer cell, because it was then believed that each individual cell was marked by a specificity that clearly distinguished it from all other cells whatever, physiological and pathological. Had this really been the case, our search for a sure and trustworthy diagnostic sign among microscopic appearances would have ended here, to the great relief of practical men, who would not have been much disposed, as far as diagnosis is concerned, to go further afield in quest of more than enough. If you know an individual by a never-failing and infallible personality, that is all that is required for distinguishing purposes. But, unfortunately, the speciality that we have already seen dismissed in turn from all the many elements where it was once allowed to reside has, so to speak, long ago had notice to quit the cell also; that is to say, the speciality of the cancer cell is no longer the reigning doctrine of pathologists.* It is true,

* To show how extraordinary the views ofone microscopist often appear in the eyes of another I select as a specimen, the following quotation from Virchow, which has a special bearing,

more than one distinguished pathologist still adheres to the belief of diagnosing cancer by the microscopism of a single cell; and on this point Sir James Paget says: "Many of the cells of cancer may be somewhat like gland cells or epithelium cells, yet a practised eye can distinguish them even singly." I have attentively perused "The Surgical Pathology" throughout

besides, on the subject above discussed :—" Quant aux éléments morphologiques, on demandait dans l'origine à voir comment était fait ce qui exerçait une influence si délétère sur le corps ; et l'on n'attendait rien moins des micrographes que la démonstration de cellules spécifiques cancéreuses, sarcomateuses et tuberculeuses. On sait qu'il suffit de demander très-catégoriquement une chose pour qu'il y ait des gens qui se mettent en mesure de satisfaire à cette demande ; c'est ainsi que les micographes de l'époque, mus par la meilleure volonté, se sont laissé entraîner par cette précision générale. On en est alors arrivé dans le fait, non-seulement à décrire des éléments spécifiques, mais on s'est encore de nouveau efforcé de distinguer, au moyen de ces éléments spécifiques, les tumeurs hétéroplastiques des homœoplastiques."

Notwithstanding the quiet smile at "les gens mus par la meilleure volonté," and their smartness in answering the popular demand with a cell fantastic and sui generis, it must be conceded that those who hold, or held, the belief of its real existence, could reasonably applaud the diagnostic virtues of the microscope, having at least thereby conjured up a distinct and definite spectrum, a thing that cannot be said of some of their diagnosing successors, whose spectra are in the last degree obscure and cloudy. There appears to be some whose eyes are endowed with the remarkable power of seeing whatever it is thought scientific to see, and of being stone-blind to whatever it is thought not scientific to see, however much it may have been a year or two ago.

its many eloquent and lucid pages, yet I have nowhere met with any definition or description in so many words of what this distinguishing characteristic is. Yet if there be a specific difference in the cell from all others, what and where is it?

It will not be denied that the celebrated author of the "Cellular Pathology" has a practised eye, and yet it appears he cannot discover anything in the cancer cell that would enable him to distinguish it from an epithelial cell; and I believe Dr. Beale concurs in this, and Dr. Beale is not second to any microscopist in the world. The specificity of the cancer cell, therefore, as far, observe, as any visible quality reveals it, is ignored by some of the highest authorities. What then of the diagnostic powers of the microscope? There is still a specific difference that may, we are told, be detected by the microscope, and it depends not on the qualities of any individual cell, but on something that may be seen when a number of cells are assembled *in congressu*.*

* Dr. Green, in his "Handbook of Pathology and Morbid Anatomy," after describing the character of cancer cells, continues:—"Cells precisely similar to these are met with in other morbid growths, and even in the normal tissues. There is thus no specific 'cancer cell.' It is the general character of the cells, together with their mode of distribution in the meshes of a fibrous stoma, that determines the nature of the growth to which they belong" (p. 168). It is to be remarked that in the opinion of Virchow this specificity attaching to the

Now we cannot help remarking that on the face of it this looks a very doubtful refuge, especially for the particular something that has had to decamp so often before, and, coupled with the mystery of how this may be, does not strengthen our expectation of its standing in good stead as a certain diagnosis, simply because diagnosis means, in plain English, a seeing through and through. The individual members of a conclave of Catholic bishops are fallible men like the rest of us, but sitting under the proper ecclesiastical auspices, they are an infallible body; and on this as a religious belief, we are not disposed to pass any opinion, because true religion is inseparable from mystery; but in science we do not admit mysteries, simply because nothing is science until it ceases to be mystery. How then about the specificity that hovers around a number of cancer cells when they are assembled together? There are two characters said to be, by which the malignant nature of such a corporation may be detected in spite of the perfectly innocent face so successfully assumed by its members when taken to task individually. First, they group together in great disorder, huddling over each other at all angles and in all ways; and secondly, they are very diverse one from another, in all their characters,

general character, or, as is meant, the variety of characters existing among the cells, and their distribution, is just as absurd as the specificity of the cell itself.

that is, in size, shape, and colour. Now, in regard to both characters the question immediately suggests itself, to any judicial mind, what degree of disorder and what degree of variety constitutes the speciality? Obviously we have here to deal with a thing of degree and not any definite quality, and, accordingly, unless that degree can be determined with precision, there is no diagnosis for us. As to the first character, we may dismiss it very curtly, for manifestly our diagnosis, the most important diagnosis at all events, has to be made before the removal of the supposed tumour, and although we may then summon before us a few cells by a not very desirable proceeding (not unsung, however, as an achievement of science), how on earth can we determine their pre-existing relations, whether of order or disorder? And even supposing we have a microscopist by our side to scrutinize the tumour while the knife is still in our hands, of what avail? If he adopts the scraping plan and submits the juice to examination, he is surely not looking for the grouping character as a means of diagnosis, and considering the admitted difficulty of making a thin section offhand, and before the mass has been submitted to some hardening process, the absurdity of the research in reference to any measure of the moment regarding the patient on the table is past comprehension. But then as to the second character, the variety, namely, of

appearances presented by the cells. We repeat our question: what amount of variety constitutes the special and characteristic feature of malignity? The possibilities for variation in this respect are, in fact, beyond all computation, infinite. In size cells may vary from $\frac{1}{100}$ or more of an inch to the $\frac{1}{10,000}$ or less of an inch; in shape they may have a thousand outlines that cannot be expressed in the protean vocabulary of round, oval, pyriform, caudate, lenticular, *et hoc genus omne*, that lamely struggle with infinite imperfection to figure them forth: in colour they may vary with all the variety of bodies by whose surface the light is absorbed, or through whose substance it passes in different degrees.* Who needs to be deeply versed in the laws of variations and combinations to be convinced, when these facts are put before him, of the almost incalculable difference that may exist between even two cells, not to speak of a whole field of them where they swarm in countless numbers. To compare each with each, indeed, under the three aspects specified in a truly scientific manner, so as to determine with exactitude the real amount of variety, this I maintain would be utterly impossible. The

* What I have here called colour is usually mentioned as structure. The colour, however, is a direct sensation, the structure is an inference, and between those two things there is often a great gulf fixed, and consequently we have here an easy inlet for microscopical fallacies.

diagnostic microscopist may object that such exactitude in determining the full amount of variety is not necessary to establish a practical diagnosis. Admitted; but then, the to him fatal interrogation still recurs: what amount of variety? Oh, perhaps, to make short work of it, "a *general impression* that there is variety, greater, that is to say, than would be seen if the cells were not malignant." And is it come to this? A general impression! Well, I can only say, if I am going to diagnose on the strength of general impressions, I can do it without any elaboration by the microscope. An able and admirable writer, Sir Henry Thompson I mean, has explained to us what general impressions signify in medicine and other things, and I for one repudiate them, if they are to be made the basis of important practical measures. With the diagnostic specificity of the microscope reduced at last to this, the vaguest of all vagueries, may we not conclude that it is on the point of again vanishing, as it has so often done before, when it has been apparently much more securely intrenched.

It will surely not be thought, in thus adducing reasons for the belief that the microscope has as yet revealed no distinctly reliable criterion for the certain diagnosis of malignant growths, I am in any way disparaging their microscopical examination for this or other purposes, far less casting any aspersion on the use of the great in-

strument itself. All that is here advanced is that as yet nothing has been pointed out by microscopists of any practical value in enabling us to judge who is and who is not the subject of the malignant disease known to surgeons as cancer; and, further, that in view of this we sincerely consider it a mistake to produce uncertainty by leading off attention from the really palpable characters that present themselves more unmistakably than by any other method to the hand and eye, that will only take the trouble to learn how to look and feel for them. It is too easily and too conceitedly assumed by those who will have everything decided by appeal to the microscope, that *its* use necessarily implies science, while the use of one's own eyes simply can never amount to more than a rough-and-ready sort of empiricism. The point affects neither the utility of the microscope nor the eye of the practical, but not on that account less scientific surgeon. What is demanded in the interest of truth and of surgery is that the pretensions of the microscope be submitted to the same kind of impartial criticism as all other methods of observation, and not allowed to pass unchallenged from a superstitious veneration for its subtle powers of inspection.

CHAPTER VI.

VARIOUS TREATMENTS THAT HAVE BEEN RECOMMENDED.

To the unfortunate individual suffering from cancer, all the preceding information sinks into insignificance, in comparison with the question, Can you cure me of my cancer? This opens out a new, vast, and important field, which, with the reader's kind permission, I will proceed at once to discuss.

Since the remote period at which medicine and surgery first were studied as sciences, up to the present time, the chirurgeon has more or less directed his efforts, to find a cure for this disease, but up to within a very recent period, these labours had been carried on in an unsystematic manner, and those pursuing them had such a limited field of observation to work upon, that but small results were to be expected, and small indeed they were. Up to the year 1851 few of our celebrated surgeons had turned their attention seriously and earnestly to the study of it,

but their efforts were cramped, the cases coming under their notice being few and far between, presenting no opportunity of constantly watching the various forms of cancer, the ever-changing character of each particular case, or of distinguishing with anything like certainty, which is of such paramount importance, between some harmless tumours and the most deadly cancers. All praise is due, however, to these men for their noble efforts to benefit their fellow-beings, and for their zeal and energy in a task so difficult. Every one will agree with me, that the first step to be taken for the proper investigation of an obscure and terrible disease, is to bring together for continued observation as large a number of cases as possible. The old adage, "Practice makes perfect," is, in the study of cancer, to a certain extent applicable, for he who, with the usual amount of knowledge, has constantly under his observation dozens of cases, must in a short period gain such experience regarding them as cannot be hoped for by one not possessing such advantages. It was to attain this end, that at an advanced period of life, in the year 1851, Dr. Marsden, for a second time, determined to found a hospital, in this instance for the treatment of cancer; and, like his first effort, by the blessing of God, it has been crowned with success, such as he alone anticipated. These two glorious institutions, "The

Royal Free Hospital," founded on the principle that poverty and disease are the only passports for admission required, and "The Cancer Hospital," stand in the front rank amongst the noble institutions of our country, and are the best monuments to their founder's memory.

Since 1851 more than 7,000 cases of cancer have been under treatment and my own immediate observation, and nearly 1,500 more of a doubtful character sent to the hospital as cancer, to which may be added a large number of cases in my own private practice. Well, then, surgeons of the Cancer Hospital, out of this vast field what have you discovered? Have you found the specific for cancer? Have you rendered the disease no longer terrible? Alas! to the two latter of these questions I candidly answer, No; but to the first I can with pleasure and sincerity say, *Much*. We have discovered how, with almost unerring certainty, to distinguish at the patient's side true cancer from false. We have discovered a better method of treating true cancers, a method certainly resulting in longer life, and far less discomfort to the patient: in many cases we have discovered means of perfectly arresting the disease, and many more have been sent out of our hands, so far as time can show, cured.

The valuable statistical table, page 14, has occupied a period of twenty-two years in forma-

tion. Every new patient on coming to the hospital is entered in the medical register of the institution, the previous history and present condition of their case taken, and their treatment and progress recorded from time to time; the answers given by each patient to the following questions being recorded in the case-books kept for that purpose. Thus :—

CASE No. 2725.

Name . . .	Rosina H——g.
Residence . . .	Thurloe Place, Walworth.
Age	Thirty-six.
Date of Admission .	November 13, 1860.
Parts affected . .	Left breast.
Married or single .	Married.
Number of Children, and if suckled. .	None.
Catamenia present or not. . . .	Yes.
Any Relations affected	Yes, mother died of cancer.
If complicated with any other disease . .	No.
When first attacked .	Two months.
If attributable to any injury . . .	No.
If a smoker . .	———
What previous treatment . . .	None.
If operated on, and how soon returned . .	No.
If ulcerated, and when	No.
Present character .	A tumour in the breast, the size of an orange. An Adenoid.
Other observations .	March 18th, 1862, discharged cured.
Treatment . . .	

[Here follows the treatment adopted at each visit.]

From these records of cases in the hospital, and those attending as out-door patients, it will at once be seen what care has been taken to insure accurate statistics; thus enabling us to compare the results of various treatments with the view of discovering the best.

In the treatment of this disease, I cannot lay too much stress on the importance of being able, at an early period, to determine between malignant tumours and non-malignant; for if the patient place herself under the care of a practitioner unable to do this, it is obvious that she labours under a great disadvantage, as his treatment must not only be guess-work, but may, and in all probability will, result in great damage, perhaps converting a simple case into one of most serious importance. There is more mischief done by the application of strong and stimulating ointments, liniments, &c., to incipient cancers (these being sometimes mistaken for harmless tumours) than can well be imagined, even by surgeons taking a high place in their profession.

From time to time, in the treatment of cancer, all kinds and sorts of substances have been recommended, and by the unscrupulous puffed off as specifics. Amongst other things that have at some period or other been believed in, I may mention cod-liver oil, mercury in various forms, iodine, iodide of potassium, bromine, arsenic, bark, soda, potash, sarsaparilla, hemlock, opium,

morphia, nitrate of silver, preparations of gold, ointments of belladonna, iodine, mercury, camphor, &c.; caustics of gold, arsenic, bromine, manganese, antimony, sanguinaria canadensis, potash, the Vienna caustic, zinc, and the acids. Amongst the surgical means that have been recommended are congelation, or freezing the cancer; compression, performed by subjecting the disease to severe and constant pressure; extirpation by the knife; the écraseur, or chain-saw; or by the application of ligatures of silk or wire. Cutting and caustics have been combined, the caustic being applied, and after a lapse of time the mass scored with a knife and the caustic again used in the fissures so produced. Each and every one of these drugs and plans has had its strong supporters and been a nine days' wonder; but I am bound to admit, none of them can be looked upon as a certain cure for cancer, although in certain cases the most beneficial and gratifying results have been produced.

For some time past, Condurango, an American plant, has been most highly extolled as possessing a wonderful curative power in this disease. After a long and careful trial of it, I am reluctantly obliged to admit that in my opinion it is absolutely useless for this purpose. The same must be said of Hydrastes, Guaco, Chilidonium, Sanguinaria, and the Missisquoi waters.

The plans of treatment by compression and

freezing the cancer we will at once dismiss as very objectionable (though still advocated by some)—the former, however, the worst of the two—and at once pass on to the caustics. Many of these have much to recommend them, the best certainly being arsenic, the chloride of zinc, and the potassa fusa. These are all-powerful, but the two latter cause great pain and are less efficient. The potassa cum manganese is a caustic which the maker vaunts as the most effective and painless yet discovered. Some years ago I came to the conclusion that it was a dirty, painful, and inefficient application, and I have seen no reason to change my opinion. The removal of cancer by the knife I do not intend to discuss here, but in the majority of cases, as presented to us, it is the most humane and efficient means we command. Removal by ligature is in a few cases, where the growth proceeds from a small pedicle, a very proper proceeding.

Bloodless operations are now all the rage, and Prof. Dittel's mode of gradually removing tumours by strangulation has been to some extent used in this country. I am at a loss to perceive any benefit that can arise from its adoption in any operation, and I have seen that it is singularly ill-adapted to the removal of malignant tumours from the breast and other parts. If we wish to perform a bloodless operation, we can do so without pain by the ecraseur, or galvanic cautery, and accom-

plish in less than ten minutes, what would take more than as many days by Dittel's process, and with much more certainty that all the disease has been taken away; and when we compare this operation with the ordinary one as performed by excision, it becomes astonishing that any surgeon should expose his patient to the risks and pain of a plan so inferior. The claim that this operation gives great immunity from pyæmia is erroneous; already at least one case has been followed by it, and nothing is more rare than to find this disease ensuing on a well-conducted excision. The operation for the removal of mammary tumours as now performed is most satisfactory, and a search for new plans not only a waste of time, but a positive injury to those on whom they are tried.

Before quitting this subject, I think it right to caution all who suffer from this disease against the host of pretenders who lie in wait to plunder them: an insight into the *modus operandi* adopted by these gentlemen may be gained by the perusal of a pamphlet I lately published on the subject.*

* "Cancer Quacks and Cancer Curers. A Warning addressed to Sufferers." Wyman & Sons, Great Queen Street, Lincoln's-Inn Fields. Price 1s. 6d.

CHAPTER VII.

THE TREATMENT BY ARSENICAL MUCILAGE.

As before stated, I do not now intend to discuss the treatment of cancer generally, but to lay before you a particular plan that I have now followed for the last seventeen years with the greatest success, and which is applicable to many forms of cancer. This mode of treatment has only been made public, so far as a few cases have appeared in the *Lancet* and *British Medical Journal;* but although my late father and myself have practised it for the length of time above stated, it may be called new, inasmuch as I would not venture to bring it before the profession and public until I had thoroughly tried it myself, and time had proved its value. I had, moreover, other motives for this delay. How many new and wonderful things do we hear of, daily puffed off before the world by those seeking notoriety and popularity rather than truth, that the experience of a few weeks only proves to be a flimsy tissue of vain hopes,

which, before their year of birth has terminated, have been buried in the oblivion they deserve; besides, it has been my good fortune to see as many, or more cancer cases than any other medical man, and on this account I feel that I ought not to offer any suggestions relative to the treatment of this disease, unless they be such as are worth listening to; unless they be such as have not been heretofore before the public, and if new, which I claim for those in this little volume, unless they be such as, by long aad practical experience, I have thoroughly tested myself. Many of my friends, knowing my opportunities for studying this disease, have expressed their surprise at my long silence, but I did not wish to add my name to that long list of authors, of whose books it may be said that, if suddenly swept out of existence, nothing would be lost to posterity. The literature of cancer has of late been most prolific, and hardly a month passes but some volume is added, in most cases prettily enough illustrated with coloured plates, but not with new ideas.

I need not say that these remarks do not apply to the works of Velpeau, Walsh, Paget, Bennett, Cooke, Pemberton, Collis, and others, each of which, at the time of publication, added greatly to our previous knowledge.

The arsenical mucilage mode of treatment is applicable to all forms of cancer except the cystic

or colloid, provided they have not exceeded certain limits, viz., four square inches, and then not more than a fourth must be attacked at once. When a cancer has exceeded this limit, I know of no means that ought to be used to extirpate it but the knife; and it must not be supposed, because I so strongly recommend the arsenical mucilage, that I would discard the use of this instrument, for, on the contrary, in many cases it is our only hope.

The paste may be applied to cancers situated on any part of the body except inside the mouth or nose, parts, in fact, where the use of the curative agent would be dangerous. I do not recommend its use when the disease is deeply seated, but for many cancers on or near the surface, this mucilage is the least painful and most certain remedy I know. During the last twenty years I have fully tried every known caustic, and now firmly believe that this is the best.

The application of arsenious acid is not new; it has been used in various ways and compounds, but hitherto such success has not attended its use as to make it appreciated as it ought to be. The mode I adopt is as follows. A thick paste of arsenic is made according to the following formula :—

Arsenious acid, ʒ ij.
Mucilage of gum acacia, ʒ j.
To be well mixed together, and made into a thick paste.

The patient's health having been attended to, the whole of the cancerous surface is to be spread over with this paste, provided it is not more than a square inch, and the paste must be sufficiently thick not to run; a piece of dry lint is then pressed on to the part, overlapping the paste half an inch all round; this must be left for a short period, say ten minutes, by which time any superabundant paste will have been taken up by the extra lint, which is then to be carefully cut away with a sharp pair of scissors; in an hour, or at most two, the lint covering the paste will have become dry and hard, and it will adhere closely and firmly to the cancer. In the course of twenty-four hours the surrounding parts will commence to swell, become red, and to a certain extent inflamed, and the patient will experience a drawing pain. In general this is by no means severe, and does not last more than one or two days. At the expiration of from forty-eight hours to three days, according to circumstances, bread-and-water poultices are to be constantly applied and changed every two or three hours; the pain, redness, and swelling will by this time have subsided, and a distinct line of demarcation be seen extending entirely around the cancerous mass; the skin ulcerates, and a fissure is formed, separating the slough from the healthy tissues; the fissure continues to deepen, until the entire cancer comes away,

leaving a healthy cup-like depression, varying in size and depth according to the mass removed. Healthy granulation will now commence, and it will be well to continue the poultices for some time; indeed it often happens that no other application need be used. Of course we must be guided by circumstances, for granulation proceeding too rapidly, too slowly, or in any abnormal manner, must be treated according to the known rules of surgery. Great diversity will be found as to the time of the slough coming away; in cases of small extent and not extending deeply into the tissues, the periods will vary from six to fifteen days, but in those of greater size, from twelve to thirty. In some instances only one application of the paste will be necessary, but it will in general be found advisable to apply it every second or third morning, till the desired effect is produced. No rules can be laid down as to how often this must be done. The experience of the surgeon and the progress made must decide. When it is intended to re-apply the paste, the former piece of lint must be carefully soaked for some time with warm (not hot) water, and after it has come away, the mucilage be used as before, recollecting that until the last application that is intended has been made, poultices as a *rule* are not to be used, unless under special circumstances; and that after a decided line of demarcation has been formed, no

more paste is to be applied. In general it will be found that after the slough has come away, the whole of the disease has been removed; but sometimes this will not be the case, and then the mucilage must again be had recourse to (*vide* Cases Nos. 6, 8, and 9); in others it will be found desirable to remove a portion of the dead cancer before another application of the paste (*vide* Case No. 3). This, however, is only necessary when the cancer becomes hard and callous, and will not allow it to penetrate. I have also used this remedy in some cases after operation by other means. For example, not very long ago, a gentleman applied to me, who was suffering from a pedunculated epithelial cancer, situated below and a little behind the right ear, quite of a mushroom shape. The broad flat part was four inches and a half in circumference, half an inch thick, and grew on a stem less than three-quarters of an inch in diameter. It was removed in a moment with a noose of silver wire, but the root still remained; one application of the paste brought this perfectly away in eight days, and a fortnight after the patient was well. Neither the knife or ecraseur could, I think, have accomplished this so well, and no other caustic would have performed the task so cleanly and satisfactorily. One of the most pleasing and wonderful phenomena connected with the mucilage is the extraordinary power of election it appears to

possess; for if put on with only ordinary care, the cancer alone is attacked, the healthy structures remaining untouched, and the disease ultimately rolling out of a perfectly healthy wound.

This treatment I have used with equal success in cancer on the lip, face, head, arm, hand, abdomen, breast, penis, testicle, labium, scrotum, and foot. I have never seen any bad results from its use, except in one case, and in this the evil was temporary only, and occurred in one of our earlier cases, some years since. At the same time, I must caution those who are inexperienced in its use that it is a dangerous remedy in unskilful hands, and requires constant watching; neither can it be used, as I before stated, to cancerous surfaces of greater extent than four square inches, and then only a small portion must be attacked at one time.

Many cases of scirrhus and medullary cancer are amenable to this treatment, particularly at an early stage, but to the epithelial it is peculiarly adapted. It is true that this form of cancer is frequently found to attack the tongue, and that, except in the earlier stages of the disease, carcinoma of this organ presents to the surgeon a truly difficult task; but on other parts of the body we have this variety under very great control. I may say that a patient suffering from epithelial cancer, coming under treatment at

anything like a reasonable time from the first attack, may, in nine cases out of ten, feel sure of a perfect restoration to health; such was not the case ten years ago. This reassuring fact becomes more valuable when we consider that of all the forms of cancer, about one in four is epithelial. I had an extreme case under my care about four years since, a man in whom the disease had so far advanced that I quite despaired of effecting any good, and indeed so told him. This poor sufferer had the whole of the lower lip and chin affected with the disease. The mass projected fully an inch, and was two and a half wide, extending from one angle of the mouth to the other. This patient, to my surprise, got quite well; all the disease was removed, and the lip assumed an almost natural appearance. General W. had consulted many medical men without benefit. He suffered from epithelial cancer of the cheek. That eminent surgeon Mr. Fergusson (now Sir William Fergusson) saw him, and recommended removal. To this he was not inclined to submit. The opinion of Dr. W. Marsden was then sought, who advised this mode of treatment, and in a few weeks the General was perfectly well, and remains so still. His Royal Highness the Prince of W. (a foreigner) had an epithelial cancer near the angle of the eye. His Continental surgeons assured him he could not live three months unless operated on. To this he would not consent, but came to

England, and when last I heard of him, was almost well (some years after his prognosticated death). Case No. 4, of J. H., is another excellent example; also Case No. 3, of Mrs. W., a medullary cancer healed in the same way; and I think it possible that, had J. N. (Case No. 16) been at an early period of the disease subjected to the same course, he might have recovered. I once saw his Grace the late Duke of G., who was suffering from an epithelial cancer of the lower lip, of which he died. We were not then so familiar with this plan as now, or his life might in all probability have been prolonged. Many of these cases, whilst undergoing treatment, do not require the administration of any medicine. Some weakly patients will be benefited by a tonic both before and during the application. The following is what I frequently give (called guttæ No. 5) :—

Hydrochloric Acid, ʒ j.
Tincture of Opium, ʒ j.
Compound Tincture of Bark to ℥ iv. Mix.

A teaspoonful to be taken in a wineglass of water twice or thrice a day.

This may be given with or without the opium. The bowels, &c., should always be carefully attended to. In plethoric patients, the following, a simple but favourite old prescription of my late father, I find very beneficial (Pulvis Sodæ cum Jalapa) :—

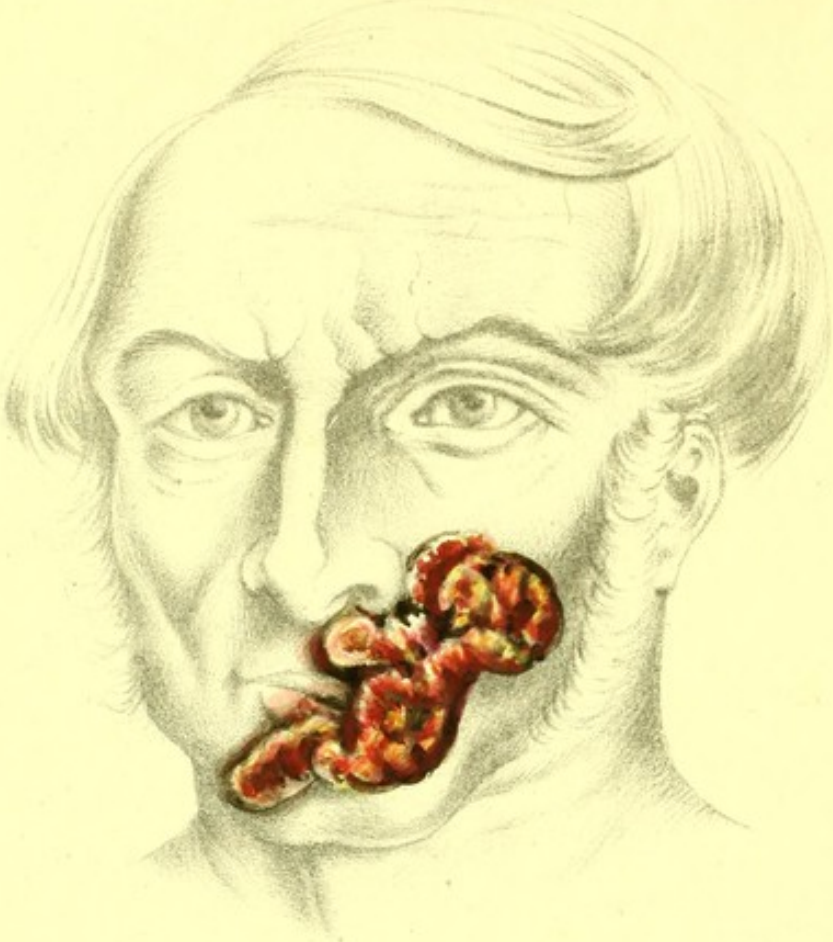
Carbonate of Soda, ℥ ss.
Powdered Jalap, ʒ j. Mix.

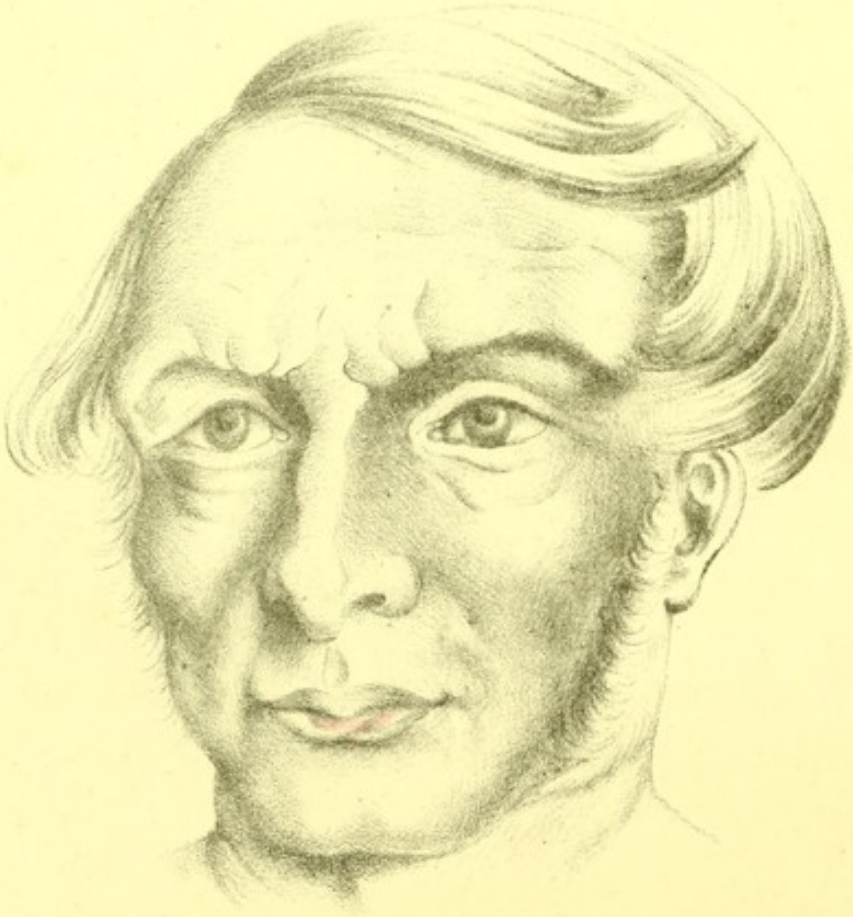
Divide into twelve powders, one to be taken twice a day in a wineglass of water.

This I sometimes prescribe without the jalap; a simple dose truly, but alkalies, particularly carbonate of soda, have undoubtedly a tendency to arrest the growth of cancer.

I have great pleasure in stating that this treatment has proved highly successful, not only in my own hands, but also in those of many other surgeons, particularly in the country, to whom I have communicated the mode of application.

I is also stated in the *Medical Times and Gazette* that by a topical application of arsenic, the surgeons of Pope Gregory XVI. cured his Holiness of a cancroid of the nose, and that the cure was permanent till the time of his death, eight years after.





CHAPTER VIII.

ILLUSTRATIVE CASES.

The following cases have been selected out of a number of successful examples of this treatment :—

Case No. I.—Charles M., æt. 70, admitted October 13th, 1858, discharged cured, May 13th, 1859.

Notes of the Case.—The disease began about one year and a half ago, and affects about half of the lower lip and the angle of the mouth; the disease has a most formidable appearance, as may be seen in drawing No. 1, representing the appearance of disease at the time of admission, and also condition of same parts after recovery. He has undergone treatment in the Worcester Infirmary without benefit. The patient suffers also from rheumatism of the right leg. The disease was not hereditary, as far as was

known to the patient. The liq. plumb. was tried at first without benefit.

November 10th.—Arsenical mucilage first applied, and medicine given for the rheumatism.

November 15th.—The application continued at intervals of five days.

December 9th.—The slough has come away; to continue medicine, and apply calamine cerate to ulcer.

December 27th.—The mucilage again applied. Bark and nitric acid taken twice a day. Pulv. sodæ cum jalapa, one in water every night.

January 12th.—Slough has come away, but the parts are still very much indurated; to apply potassa fusa.

March 14th.—Disease has improved up to this time; poultices and lotions of calomel and liq. plumbi have been at different times used.

March 21st.—Bark and ammonia to be taken, and calamine cerate used.

April 9th.—The ulcer gradually contracting. A weak arsenical lotion to be applied three times a day. No medicine.

May 10th.—Discharged cured. Although the diseased surface operated on in this case was extensive, the eschar left is very small.

Case No. 2.—Mrs. W. F., æt. 46, from Manchester, first consulted me March 10th, 1860. She is married, and the mother of seven children.

Notes of Case.—This lady has in the right labium a hard tumour the size of a walnut (scirrhus), rather deeply seated, and ulcerated on the inner side; she experiences severe lancinating pain, and the surrounding parts have lately become red and inflammatory. First noticed a slight hardness about seven months since; her general health is good.

March 12th.—The mucilage was applied.

March 14th.—Parts more inflamed; to poultice with bread and water.

March 16th.—Inflammation much less; mucilage again applied.

March 18th.—Slough beginning to separate; to poultice.

March 22nd.—Slough has come away. Some hardness remains at the bottom of the sore. The mucilage applied to it.

March 26th.—Slough beginning to separate; to poultice.

March 29th.—Slough has come away, leaving a perfectly healthy sore, circular, an inch and a half in diameter; to continue poultices.

March 31st.—Granulation proceeding very rapidly, and all hardness, redness, and inflammation gone.

April 10th.—Poultices have been used till now. The cavity is not more than half an inch in diameter. To take bark and nitric acid.

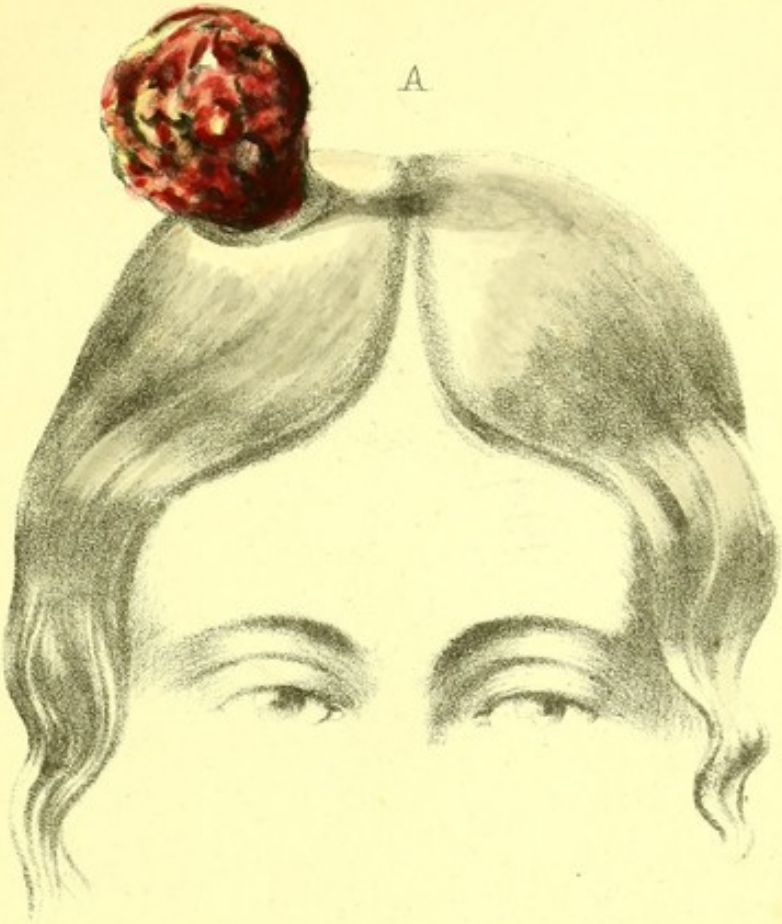
April 22nd.—The sore quite healed, but tender;

to continue the tonic and apply simple ointment spread on lint.

April 26th.—The patient returns home to-morrow; she is quite well.

Case No. 3.—Mrs. W., a monthly nurse, æt. 71, was for some time a patient of mine at the Royal Free Hospital for prolapsus uteri; being relieved of this complaint, she one day drew my attention to a growth on her head. She remarked that a small sore appeared on her head from some slight injury when only seventeen years of age; it had never properly healed from that time to the present, but that during the last few weeks it had greatly increased in size, particularly during the last fortnight, causing her great alarm, but at this period she had no distinct idea what the disease was. On removing her bonnet and cap I was horrified to see a medullary cancer growing from the top of the head, in appearance like a large strawberry (see plate II. A). I at once persuaded her to go into the Cancer Hospital, which she did in a few days; but even in this short interval the cancer had made great progress, indeed, had doubled in size. On her admission, June 20th, 1860, I at once boldly attacked it with the arsenical mucilage, and had the satisfaction to find that no increase took place after the first application. The use of the paste was con-

A.



B.

tinued every alternate morning. On the tenth day the mass had become dry and hard, and with a blunt knife I removed the upper half; the interior I found as dry and hard as the exterior. This being the case, I pared off another slice, about the eighth of an inch in thickness, and in the centre now found there was some vitality. The paste was again applied as before, and in the course of a few days the whole remaining mass came away, leaving a circular patch of pericranium exposed, the size of a five-shilling piece, presenting a white and glistening appearance; healthy granulations formed the margin (see plate II. B). During these operations the patient suffered no pain, and her constitution was well supported with tonics and generous diet. As soon as the separation had taken place, warm bread-and-water poultices were at once applied, and the air carefully excluded, granulation proceeded rapidly, and in a month's time she left the hospital quite well, and the disease never returned.*

Case No. 4.—Job H., æt. 67, from Chelsea Hospital, was admitted into the Cancer Hospital February 4th, 1862, with an epithelial cancer of the lower lip.

Notes of the Case.—Fifty years ago had a blow

* This patient died of bronchitis five years afterwards, aged 76. Her head remained perfectly well.

from a piece of coal being thrown at him. The lip bled freely at the time, and a small black speck has remained ever since. About six months ago this began rapidly to enlarge and ulcerate. On admission into the hospital the lip presented an indurated lump, the size of a horse bean, of a dark colour and ulcerated. Very little pain.

February 5th.—Arsenical mucilage applied.

February 10th.—Bark and nitric acid given. During the next ten days the mucilage was applied every morning, and sloughing promoted by the constant use of bread-and-water poultices.

February 21st.—Tonic continued. Mucilage continued night and morning. Poultices as before.

March 4th.—The tumour has entirely come away, leaving a cup-like depression very ready to bleed. To be kept constantly wet with black wash. This treatment was continued till the 26th, when simple ointment was used. Healthy granulation duly proceeded, and on the 6th of April he was discharged cured.

During the application of the paste the patient experienced very little pain. The disease never returned. Hearing that this patient was dead, I wrote to the medical officer of the Royal Hospital, Chelsea, and found the cancer never returned. The following was the interesting reply I received :—

ROYAL HOSPITAL, CHELSEA,
November 1st, 1873.

DEAR SIR,—In reply to your note, I beg to send you the following statement relating to J** H**l*m, who was under your treatment in 1862 for epithelioma of the lower lip. J. H. was a native of Belper, Derbyshire, a labourer; enlisted on the 25th of March, 1816, when twenty years of age; he was six feet high, of fair complexion, brown hair, and grey eyes; served in the Second Life Guards for twenty-five years, all his service being in England; he was discharged from the service 21st August, 1841, on account of shortening of the right leg, the result of this leg having been twice fractured by his horse falling on him; he received a pension of 1s. 0½d. a day. He was admitted into Chelsea Hospital 1st January, 1854, reverted to out-pension 1st January, 1865; re-admitted 1st January, 1869; and died of tubercular disease of the lungs on the 21st January, 1872.

I believe he bequeathed £5 to the "Cancer Hospital" as a mark of his gratitude for the relief he received there.

Allow me to be, yours faithfully,

T. L.

CASE No. 5.—Richard E., æt. 45, a warder of excellent character at one of the Middlesex prisons, admitted April 8th, 1860, with epithelioma of lower lip.

Notes of Case.—The disease appeared three years and a half since, and the patient's health is by no means good; he has a tendency to dropsy.

April 11th.—The mucilage applied, and a diuretic mixture prescribed three times a day. By May the disease was all removed. Cer.

simplex was used, and bark and nitric acid given.

End of May, left the hospital apparently quite well. All hardness has disappeared.

February 10th, 1863.—Re-admitted, with induration of left side of lower lip, but no ulceration. The lip remained well up to a short time ago, when he found some hardness, accompanied with itching pain. His health is very good.

February 11th. — Mucilage applied every morning. Pulv. sodæ c. jalapa; one to be taken every night.

February 13th. — Lip inflamed: to apply bread-and-water poultice three times a day.

February 20th.—Slough separated; to apply lotio nigra. He is very fat, and his breathing short; to take the following:—

℞ Spirit. Ætheris Nit. ℥ ss.
Potass. Acet. ʒ iss.
Sodæ Carb. ʒ j.
Elaterii gr. j.
Aquæ ad ℥ xvj. Ft. mist.
Three tablespoonfuls to be taken every night.

March 20th.—The lip is now quite well, no induration, no pain; his breathing much better, and he returns to his duties at the prison.

This patient, a short time before he came under treatment, was brought up before the visiting justices of the prison in which he is

employed, by the surgeon of the establishment, and reported unfit for duty, in consequence of his having cancer of the lip, and therefore incurable. It was a hard case for the man, for by being discharged then he would have lost his retiring pension. Fortunately, however, for him, one of the magistrates was a member of the committee of the Cancer Hospital, and had seen some of our successful cases before. This gentleman felt convinced that if we had him under our care he might have a chance of cure. He therefore pleaded with his brother justices that before they discharged him as incurable, he should be allowed leave of absence to go into the hospital, with what result has been seen. His pension has by these means been secured to him, and he retained his situation.

Case No. 6.—Mrs. K., æt. 32, consulted me in May, 1859. She was suffering from a scirrhous cancer. On the inner side of the left thigh a tumour projected from the surface about three-quarters of an inch, circular in shape, flat and ulcerated on the top; it seemed to grow from a depth of three-eighths of an inch in the tissues, and moved with the skin. The patient first noticed a slight hardness about a year ago, and imagined it was caused by riding on horseback. This was an excellent case for the mucilage, and the disease was removed in a month, and healed

up in little more than six weeks. I made three distinct applications, a slough being separated by each, the third bringing away the last portion of the tumour. On each occasion, as soon as the line of demarcation appeared, bread-and-water poultices were applied till the slough separated. No other application was used except during the healing, when a weak spirit lotion was applied. This lady was well five years after, but I have not heard of her since. She remains so, I have no doubt.

Case No. 7.—Elizabeth H., æt. 74, of Twickenham Common, came under my care June 17th, 1862, with epithelial cancer of the lower lip. Discharged cured, August 1st, 1862.

Notes of Case.—Irregular ulceration with indurated base. First appeared five months since as a small pimple. No relatives affected. Has had nitrate of silver applied without benefit.

June 20th.—Mucilage applied every other morning.

June 26th.—No effect produced.

July 4th.—The mucilage has been applied four times, and a line of demarcation has appeared. To take a stomachic mixture.

July 15th.—The cancer has come away, no hardness remaining. Health good. To use black-wash, and continue the mixture.

July 25th.—Healing slowly. Health good.

July 28th.—Complains of great pain in abdomen and sickness. Has been frightened by thunder. Mustard poultice applied to abdomen, and brandy given.

July 29th.—Much better in all respects.

August 1st.—Is now quite well. Lip perfectly sound.

She has called three or four times since, quite well.

Case No. 8.—Jane F., æt. 43, the wife of a mechanic residing at the east end of London, first consulted me in June, 1860.

Notes of Case.—Has been married many years, but only had one child. Her general health is pretty good, but she has worked very hard, and looks much older than the age stated. Says she received a blow about three years since on the left breast, and felt great pain at the time, which has never quite left her. Ten months before consulting me noticed a tumour the size of a small walnut, which slowly increased in size, and ulcerated about the middle of April (1860). When I first saw her, her breast, which was rather small, presented a circular ulcer about five inches in circumference, the edges of which were rather elevated above the surrounding parts, and had for its base what was evidently connected with the tumour, a globular scirrhus in the second stage. She complained of severe lancinating pain,

and one of the axillary glands was indurated to the size of a large pea. On the 2nd of June I applied the paste all round the edges of the ulcer, and about four days after the slough began to separate, and soon came away, leaving the edges perfectly healthy. I then applied the mucilage to the bottom of the ulcer, to the extent of one inch in diameter, which included all the surface not previously attacked. The breast became inflamed and rather painful; on the second day bread-and-water poultices were applied, and the slough separated on the tenth day; the wound looked healthy, and granulations rapidly sprang up. The poultices were continued, but finding some hardness still remained at the deeper part, I a third time used the mucilage, which soon brought away the remaining portion of the tumour. From this time the edges of the wound were kept loosely pressed together with lint compresses and a bandage. It healed rapidly, a weak spirit lotion being used. Early in August she was quite well. I saw this patient in 1865. She was then quite well, and the enlarged gland in the axilla had disappeared. She promised to return if any change took place. I have not heard of her since.

Case No. 9.—George H., æt. 55, admitted May 20th, 1862; discharged cured, Sept 5th, 1862.

Notes of Case.—This patient has an epithelial

cancer of the lower lip of considerable size. First appeared twelve months since. Has had it burnt with caustic, and used various treatments, but the disease has continued to progress.

May 21st.—The arsenical mucilage to be applied daily, and the soda and jalap powder to be taken every night in a wine-glass of water; bark and nitric acid being taken at 11 a.m. and 4 p.m.

May 31st.—No effect from the application; to be used twice a day.

June 4th.—The lip swelled, and slough beginning to separate.

June 11th.—To poultice with warm bread-and-water.

June 13th.—Slough separated; some induration left around. To use Hyd. subchlor. ʒ j., Cerat. Cetac. ʒ iij. ft. ung.; apply twice a day.

June 18th.—Health very good. Ulcer caused from slough has nearly healed, but as there is still much hardness, the mucilage to be applied twice a day.

June 21st.—The lip much swelled and inflamed, but the health good; to use cold poultice only.

June 23rd.—The swelling and inflamed state of lip much lessened. The mucilage to be applied every morning.

June 28th.—Lip swelled; to poultice.

July 5th.—The slough has come away; around

the ulcer is much softer, but still some induration at the upper part of the wound. To use lotio nigra.

July 30th.—The ulcer has healed, with the exception of one point, still indurated at upper part; the mucilage to be applied to that spot.

August 19th.—The application has produced a small slough, which has separated and left the parts soft, and a healthy-looking sore. To apply lotio nigra.

September 5th.—The ulcer has healed, the neighbouring parts are quite natural, and no induration remains; his health has been good the whole time. Discharged cured. This patient promised to return to the hospital should any unfavourable appearance take place. He has not done so, and is, no doubt, at present quite well.

Case No. 10.—Robert W., æt. 85, came under my care August 18th, 1863; discharged cured, September 22nd, 1863.

Notes of Case.—Epithelial cancer of lower lip. The surface of the lower lip is irregularly ulcerated and considerably indurated; general health good; no relatives affected; cannot trace it to any injury; says it began as a small wart.

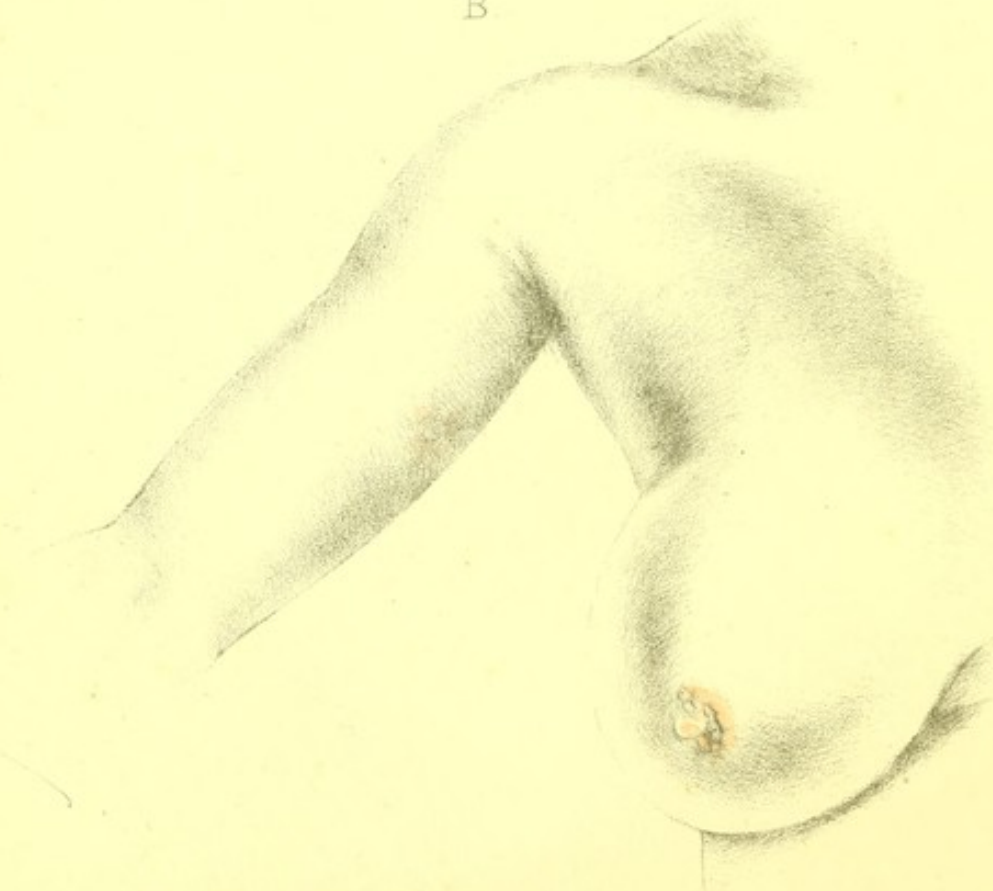
August 18th.—The mucilage applied.

August 20th.—The mucilage repeated.

August 22nd.—Again applied; the part beginning to slough.

A

B



August 25th.—Appetite not good; to take a tonic mixture.

August 26th.—Lip going on favourably; to use bread poultices.

August 30th.—The slough has separated, and the wound looks healthy; to continue poultices.

September 5th.—Appetite much better; to use black-wash.

September 15th.—The lip has now quite healed, no hardness remaining, and his general health is very good; promised to return if the disease re-appeared, but has not been since.

Case No. 11.—Mrs. J., of Croydon, æt. 43, has had a cancer on the inner side of the arm, three inches below the axilla, for a year and a half. She attributes it to a blow. Having got up a ladder in the winter of 1862, there being snow on her boots, she fell through, and hung on by her arm; she experienced great pain at the time, and shortly after a swelling appeared, which soon assumed the appearance of a dry epithelial cancer. Mr. Wood, of King's College, to whom she showed it, told her it was cancer. On the 26th of May, 1864, she came under my care; the disease was then about the diameter of a crown piece, and projected from the surface of the arm three-quarters of an inch, hard, dry, and horny on the summit, vascular and red at she base; it moved freely with the skin. (See plate III. A.) The arsenical

paste was at once applied, and repeated every third day. On the twelfth day a decided line of demarcation was seen between the tumour and the sound skin, and at the end of three weeks it came completely away. Bread-and-water poultices were now applied, and at the end of the sixth week the eschar was quite healed, and the patient cured. (See plate III. B.) During the treatment, not being in good health, she took with advantage, for the first fortnight, the following mixture :—

℞ Acidi Citrici,
Potassæ Bicarb., aa ʒ ij.
Tinct. Cort. Aurantii ʒ ss.
Aquæ ad ʒ viij. Misce.
Two tablespoonfuls to be taken three times a day.

After which bark and nitric acid were administered; the application of the paste gave but little pain : the disease has not returned.

Case No. 12.—Captain S., master of a Danish vessel, trading between Newcastle and Denmark, first consulted me October 6th, 1864. He was suffering with an epithelial cancer of the lower lip, deeply seated, and about the size of a marble. It was well defined, very hard, and the mucous membrane of the lip over it was ulcerated. The pain, particularly when exposed to the cold wind on his voyages, was very great; he has been under treatment, but the tumour continues to increase.

October 7th.—Mucilage applied.

October 11th.—Mucilage re-applied.

October 13th.—A line of demarcation has formed. The adjacent parts are swollen and red; he has experienced a slight drawing pain since the first application. To use bread-and-water poultices.

October 16th.—The cancer has come away; to continue poultices.

October 20th.—Some hardness remains at the deeper part; the mucilage re-applied.

October 24th.—To poultice.

October 26th.—Another slough has come away; to continue poultices.

October 29th.—The sore looks healthy, and granulation is proceeding rapidly; to use very weak black-wash.

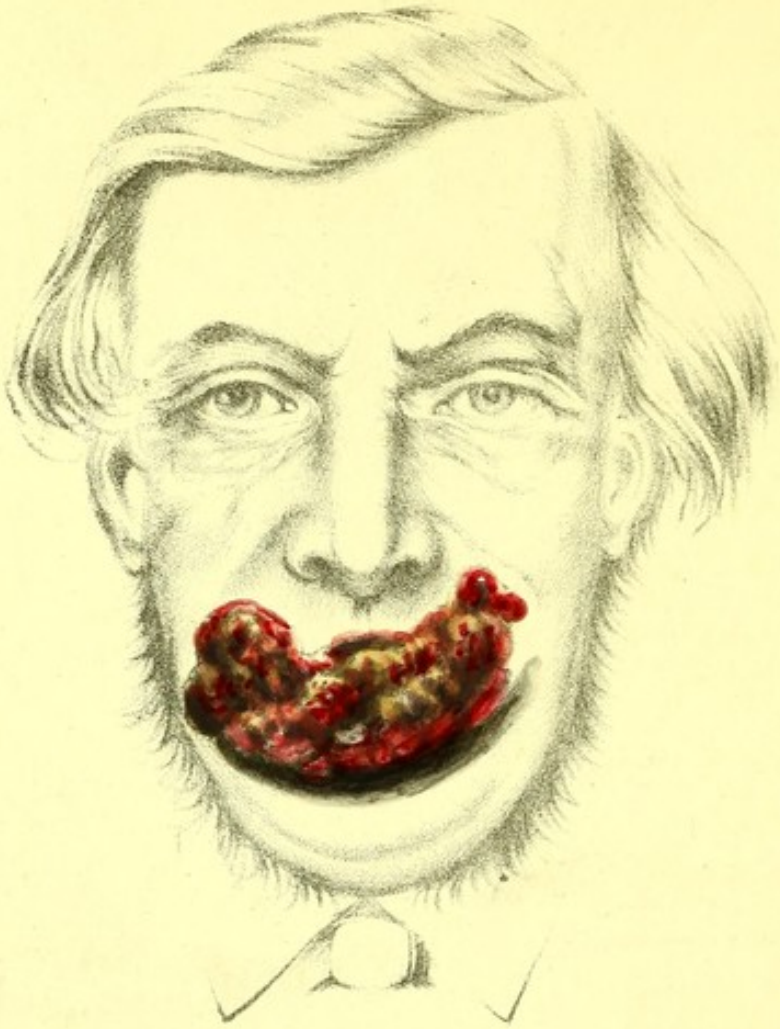
November 3rd.—Has been unable to call since the 29th, but the lip is now quite well, and presents a perfectly natural appearance. Promised to call on me should the disease re-appear in the slightest degree, but have not seen him since.

Case No. 13.—Mrs. A. L., æt. 42, came under my care in December, 1862, with an epithelial cancer of the right foot; mother died of cancer in the breast; has been suffering from the disease for the last two years, and has undergone various treatment without relief; says the disease has spread very rapidly during the last six weeks.

On examination I found a soft warty growth of an irregular oval shape, projecting about an inch from the dorsal surface of the foot, six inches in circumference; it was firmly fixed at its base, and bled very readily. The patient complained of her health failing, and was really in a critical condition. In this case, instead of applying the paste at once, I removed the mass by the knife to a level with the surrounding skin without pain, ice and salt having been previously applied; the worst of the disease still remained. Three days later I used the mucilage, and spread a thin layer over the whole surface. On the twelfth day the slough came away, leaving a perfectly healthy wound, which completely healed in three weeks. I had recourse to the knife in this instance, owing to the state of the patient's health, for by this means I was enabled to attack the deep portion of the disease almost at once, and thus facilitate a rapid cure. Tonics were administered, and a generous diet employed. With the exception of the mark from the cicatrix, the foot remained uninjured. The patient promised to return should the disease re-appear; but has not done so; I have no doubt she continues well.

Case No. 14.—Charles P., æt. 50, from Newbury, Berks, admitted into the Cancer Hospital November 15th, 1864, with epithelioma of lower lip; discharged cured, March 18th, 1865.

A



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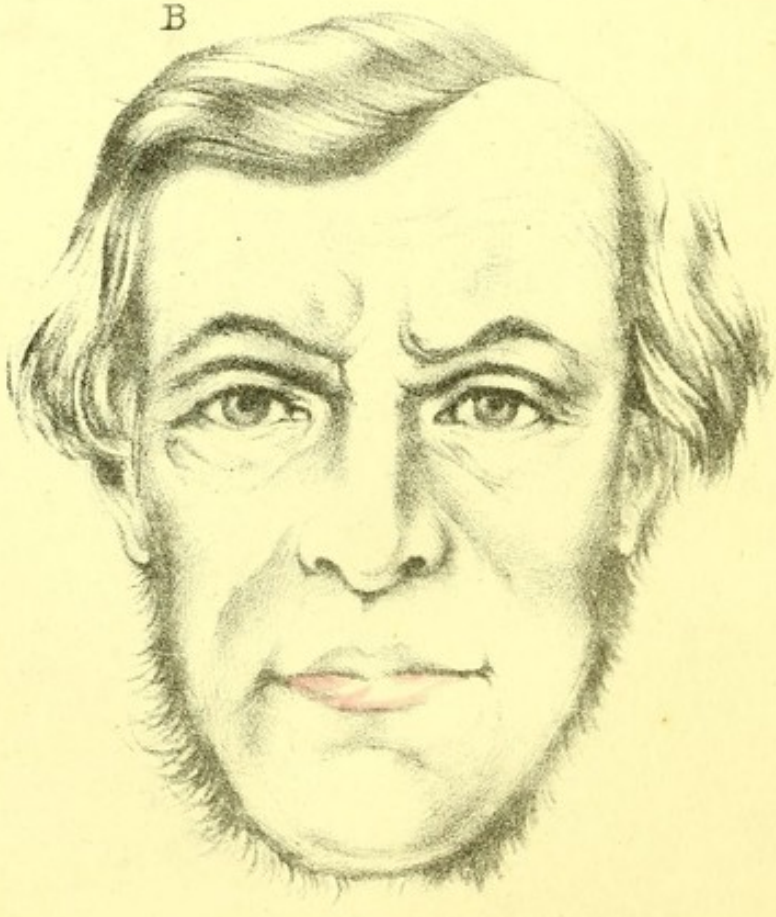

Notes of Case.—Says he has been suffering from the disease for six months; never smoked; always a sober man; no relatives affected. On admission, the whole surface of the lower lip presented a most dreadful appearance, being ulcerated from one angle of the mouth to the other, and a cancerous mass projecting from the entire length about one inch, having a hard base, and almost blocking up the mouth. (See plate IV. A.) He suffered very severe lancinating pain; general health not good.

November 16th.—The mucilage was applied to half the surface, and a stomachic mixture ordered.

November 18th.—To poultice with bread and water; lip painful.

November 23rd.—Slough has come away, leaving a still diseased surface; to repeat the application to same part.

November 25th.—Lip much swollen, with considerable pain; health pretty good; to poultice at night.

November 28th.—The swelling has subsided, and slough is separating; to apply mucilage to other half of lip.

December 2nd.—No inflammation about lip, but great pain; to poultice.

December 3rd.—Health not good, pulse low; to take bark and nitric acid three times a day, and continue poultices.

December 8th.—A large quantity of the disease

has come away, but the parts do not look healthy. His health is good, and he suffers very little pain.

December 12th.—To use black-wash.

December 19th.—To repeat the application of the mucilage.

December 24th.—To repeat the application.

December 26th.—To poultice.

January 2nd, 1865.—The last application has caused a slough to separate from one side of lip; to use the mucilage to the other half.

January 4th.—To poultice.

January 11th.—Slough separated, to use black-wash; the lip is much softer, and disease is checked.

January 14th.—The lip goes on healing well.

January 21st.—Lip is much reduced in size, and continues softer. Health good. He left the hospital for a few days, by permission.

February 1st.—Lip much softer, and has quite healed. The hardness is confined to two small points, one at the side, the other at the centre.

February 4th.—To apply mucilage.

February 8th.—To repeat the application.

February 11th.—To use bread-and-water poultice.

February 15th.—To re-apply the mucilage.

February 17th.—To poultice; lip swollen and painful.

February 20th.—A slough separated. Black-wash to be used.

March 10th.—Lip is now healed, and perfectly healthy. No hardness left, and his health excellent. (See plate IV. B.)

March 18th.—Discharged cured.

When this patient first came under my notice I despaired of doing him any good; happily the paste proved more powerful than I before imagined it. I firmly believe no other plan could have saved this man's life, the case being even much worse than No. 1.

It may also be remarked that I used the paste to a much larger surface at once than I recommend. I was guided in this by the appearance of the disease, and the result justified the means; but I cannot advise those not thoroughly experienced in this treatment to depart from the rule laid down in an earlier part of this volume.

Case No. 15.—James A., labourer, æt. 57, from Peters Chalfont, Bucks, admitted into the Cancer Hospital May 24th, 1865; discharged, quite well, June 28th.

Notes of Case.—A warty epithelial cancer, the size of a shilling, at the base of the nose, close to the inner angle of the left eye; is a healthy-looking man, temperate, and always enjoyed good health; says he has been suffering from the disease six years. It began as a small pimple, without pain,

and has gradually attained its present size. None of his relatives have suffered from cancer, nor is he aware of having injured the part in any way.

Drawing A, plate V., was taken on his admission. The arsenical paste was then applied to the disease; some swelling and inflammation of the surrounding parts was caused, but no great pain. Bread-and-water poultices were applied, and the disease sloughed away on the 7th of June. (Drawing B was taken June 5th.) Simple dressing was applied, and the ulcer healed, forming a healthy cicatrix. He left the hospital June 28th, quite well. (Drawing C was taken June 26th.)

Case No. 16.—The following is introduced, not as an example of this treatment, for it was not used, the case being hopeless when he entered the hospital, but as an extraordinary example of unchecked medullary cancer, and to illustrate the fact that cancers which in their earlier stage appear small and trifling, later on become most formidabe.

Joseph N., æt. 28, from Oldham, was admitted into the Cancer Hospital March 12th, 1858.

Notes of the Case.—His course of life has for the last four years been very irregular, and seven years since he had syphilis. The disease is a frightful cancerous growth, attached apparently to the forehead, and extending from thence backwards over a good portion of the scalp. Anteriorly

A.

B.

C.

C. D'Alton, del.

W. West, imp.

it hangs down in masses over the eyes and nose. The disease is reported to have commenced about four years ago, as a small tubercle, caused by the scratch of a rusty nail, which shortly afterwards was accidentally struck with a chisel, whilst at work. From this period it rapidly increased, and with its increase his general health gave way. A homœopathic physician, of the name of Phillips, applied nitric acid to the cancerous surface, and next resorted to paste, recommended by Dr. Fell (chloride of zinc and Sanguinaria canadensis), after which some bone is reported to have come away, but the fungus rapidly grew again, and became worse, and more hideous than ever. Whilst in the Cancer Hospital the treatment was as follows :—

March 12th.—A lotion consisting of liquor plumbi and acetum distillatum in equal parts ordered. Bark and nitric acid to be taken internally.

April 3rd.—A lotion of chloride of zinc gr. x. to water ℥j. to be used freely.

April 19th.—Nitric acid applied.

April 23rd.—Chloride of zinc applied.

April 29th.—The zinc has formed a hard crust with the lint covering the fungus, and this seems to have checked its rapid growth. Death took place May 19, 1858.

The late Dr. Knox's Notes at the post-mortem examination.—"The head presented a very shocking

spectacle. The fungus covered all the forehead, vertex, and sides of the head, and hung down in masses over the eyes and nose. On raising these up, the nostrils were found to be so compressed as evidently to have interrupted all breathing through the nose. The right eye appeared to have sunk altogether into the orbit, but the disease did not involve the integuments of the nose nor the eyelids, and seemed limited in this direction to the forehead. In attempting to remove some of the mass from the forehead, a very large abscess was opened. The disease having been taken away, and the frontal bone exposed to view, a portion of it was removed, extending from the frontal sinuses upwards to the vertex, the pericranium over the lower portion of the bone was diseased, partaking somewhat of the cancerous character, and a perforation was discovered the size of a goose-quill; through this perforation the disease penetrated into the interior, communicating with a small diseased mass involving to some extent the dura mater. In other respects the bone seemed healthy, and was merely thinned away around the margins of the opening, but nothing like caries appeared anywhere. Turning now to the interior or cerebral aspect of the osseous portion, we find that the dura mater, perfectly sound in the upper part, becomes gradually diseased on approaching the lower portion in the vicinity of the aperture, the bone being more and

more vascular, but not much thickened, if at all. On its outer surface there lay small masses of diseased structure, whilst internally similar small masses were found apparently embedded in its substance, and adhering to the surface of the brain, which they had involved to the extent of a filbert. On dividing the largest of the tumours, thus seemingly originating in the dura mater, its identity with those on the exterior of the cranium became evident, and the nature of the disease was no longer to be questioned. Thus was confirmed the original diagnosis of Dr. Marsden that the disease originated in the interior of the head. One only of the tumours had perforated the bone and thus gained the surface of the body. A similar tumour occupied the right frontal sinus; this seemed also to have made its way from the interior near the upper part of the sinus, the lining membrane of which, as well as the osseous structure, was sound, the left sinus presenting similar appearances. In both was found a bright yellow substance, the brightness of whose colours attracted the attention of the attendants during the dissection."

Cases Nos. 17 and 18.—These cases were recorded by Dr. Crombie, in the *British Medical Journal* for Nov. 2, 1872:—

"The following is a good example of the kind of cases for which the arsenical mucilage treat-

ment, introduced by Dr. Marsden, is most preferred. The tumour being a medullary cancer of comparatively small size, situated on the exterior of the body, and not penetrating deeply into the tissues at its base, all the conditions as to nature, size, situation, and connections, combined to favour the use of the remedy, and the result was as successful as could be desired.

"The tumour grew from the skin over the trapezius muscle near its anterior edge, about midway between the head and shoulder. It was quite circular at its base, with a diameter of nearly an inch, and rose about three-quarters of an inch above the level of the skin at its highest point in the centre—closely resembling, in fact, a large strawberry in size and shape as well as in colour, the whole surface having a red fleshy appearance, cut up by fissures of various depths, and thickly covered by large round granulations. It was so closely encircled by skin that it overlapped a little at the edges; the skin, however, around the base was not otherwise perceptibly altered except in colour, there being here simply an areola two or three lines in breadth, of a purplish hue, in the direction of which the veins were visibly increased and enlarged. It bled on the slightest touch, and, being extremely sensitive, was the source of constant pain. The history of the case showed that, about three years before, a small tumour appeared at the site

of the present one, and, on being lanced, discharged blood freely. It continued to bleed more or less occasionally until the wound closed, when, in consequence of its increase and the pain arising from it, it was excised; soon afterwards it reformed, and was again excised, but still kept on growing; and, at the time of the patient's admission into the hospital, on February 22nd, 1872, presented the characters described. The patient was a moderately healthy woman, 42 years of age.

"As the patient was in tolerably good health, there was no occasion for delay on that ground; and accordingly, on February 23rd, the arsenical paste (consisting of arsenious acid and mucilage of acacia, in the proportion of two drachms of the acid to one drachm of the mucilage, made into a thick paste) was laid over the whole surface of the tumour, and covered with cuttings of lint in the usual way. In three days, the diseased mass was quite moveable, and a sulcus lay between it and the skin, leaving it attached only at a small portion of the base. Bread-and-water poultices were then applied, and changed every three or four hours; and on the fourth day (February 27th) the whole mass came away in a lump, leaving in place of the tumour a conical cavity, with slightly indurated edges. The wound was poulticed in the same way as before for a few days, and then dressed with weak spirit

lotion. Healthy granulations sprung up over the whole surface of the cavity, and by the 23rd of March its size was reduced to about a third, and the induration of the edges was much less. On April 9th, the wound was quite healed, the induration had entirely disappeared, and the only indication of the former disease left was the cicatrix and an increased vascularity in the skin around it. The patient remains quite well up to the present date (October 8th)."

Another case with a tumour as near as possible in resemblance to the above, situated on the chest near the middle line immediately above the breast, was admitted under the care of a colleague on August 23rd, 1872, and was discharged well on the 17th October, after two applications of the paste in the manner above described. This patient, who is a feeble old woman of 70 years of age, was re-admitted on the 27th of May following, with a similar growth on the cheek, which she said began to grow three months before, that is, soon after the extirpation of the former tumour. By pursuing the same method of treatment she was again discharged cured on the 6th of July, 1873.

Case No. 19.—Francis Young, æt. 21, in good health, was admitted into the Cancer Hospital October 1st, 1870, for epithelioma, growing from the skin on the inside of the thigh, to which it

was adherent. He had received a kick on the part six months before the appearance of the growth, which began two years ago, and is now the size of a pigeon's egg, and projects considerably above the surface. The skin for a little way around the base is congested and reddened, but not otherwise affected by the disease. Arsenical mucilage applied to one half of disease on Oct. 6th; complained of some pain, and had poultice applied on Oct. 11th; a portion of a pretty large slough came away; arsenical mucilage applied to the remaining portion of disease on Oct. 27th; complained of pain, and had bread-poultice again applied on Oct. 30th. On Nov. 21st, the whole of the slough had not quite separated, but was nearly coming away, and there was no remaining hardness around the seat of former disease. Slough separated on Nov. 23rd, leaving the parts beneath looking healthy. The healing of the wound progressed favourably, and by Jan. 4th, 1871, was quite well, with a healthy cicatrix. Oct., 1873, remains quite well.

Case No. 20.—Jonathan Young, admitted April 20th, 1868, suffering from superficial induration at the corner of the lower lip, which has existed as a small sore that would not heal for two years. Mr. Gay applied caustic without effect.

April 20th.—Arsenical mucilage applied.

April 30th.—Slough came away. Application repeated.

May 4th.—Cataplasma panis.

May 10th.—Slough separated.

May 13th.—Still some hardness remaining. Repeat mucilage.

May 15th.—Repeat mucilage. No effect from previous application.

May 17th.—Cat. lini.

May 21st.—Slough separated. Little hardness remaining. To use cold water.

June 4th.—Lip now quite well and natural.

May 28th, 1873.—Lip still continues well.

FORMULÆ.

The following formulæ will be found useful in the treatment of Cancer :—

No. 1.

℞ Tinct. Ferri Perchlor.,
Acid. Phosphor. dil., āā ♏ xv.
Aquæ ℥ ij. Misce.
To be taken twice or three times a day.

No. 2.

℞ Spiritus Chloroformi ♏ 40, vel 60.
Tinct. Cinchonæ Comp. ℥ j. Misce.
To be taken in a wineglass of water twice or three times a day.

No. 3.

℞ Acid. Hydrochlor. dil.,
Acid. Nitric. dil., āā ♏ 80.
Tinct. Cinchonæ Comp. ℥ j.
Aquæ ad ℥ viij. Misce.
Two tablespoonfuls to be taken twice or three times a day.

No. 4.

℞ Quinæ Sulph.,
Ferri Sulph., āā gr. ij.
Acid. Sulph. dil. ♏ v.
Aquæ ℥ j. Misce.
To be taken twice or three times a day.

The above are all good tonics in Cancer. The first and fourth are specially useful when there is much cachexia, and the second when it is desirable to combine a stimulant with a tonic.

No. 5.

℞ Acidi Citrici,
Potassæ Bicarb, āā ʒ ij.
Tinct. Aurantii ʒ vj.
Aquæ ad ʒ viij. Misce.

Two tablespoonfuls to be taken every three or four hours.
An excellent saline, and to allay sickness.

No. 6.

℞ Radicis Gentianæ incisæ ʒ iij.
Radicis Rhei contusæ gr. 40.
Zinziberis gr. 20.
Sodæ Bicarbonatis ℥ ss.
Aquæ ferventis 0j.

Macerate for four hours, and strain. Dose, two or three tablespoonfuls twice or thrice a day. An excellent stomachic.

No. 7.

℞ Pulv. Calumbæ ʒ ijss.
Pulv. Rhei gr. 45.
Sodæ Bicarb. ℥ ss.

Divide into 14 powders, one to be taken in a wineglass of water twice a day.

Stomachic. After either of the above have been taken for a week or ten days, a patient who could not previously bear tonics will often do so.

No. 8.

℞ Potassi Iodidi gr. ij. vel v.
Liq. Potassæ ♏ ij. vel v.
Infusi Cinchonæ ℥ j. Misce.

To be taken twice or three times a day.
Useful in Cancer and Lupus.

No. 9.

℞ Potassæ Nitratis ʒ iss.
Magnes. Sulph. ℥ iss.
Pulv. Rhei gr. xx. Misce.

Divide into 14 powders. One to be taken every morning,

or twice a day, in a wineglass of water. A gentle saline aperient. It acts more on the bowels if taken fasting early in the morning and in half a tumbler of warm water. If a stronger dose is required, it may be divided into seven powders only.

No. 10.

℞ Morphiæ Hydrochlor. gr. ij.
Confec. Rosæ q. s.

Divide into four or six pills—one to be taken at bedtime, or at any time when pain is severe.

No. 11.

℞ Boracis ʒ ss.
Glycerini ʒ ij.
Aquæ ad 0 jss. Misce.

Make into a lotion. Made also without the glycerine.

No. 12.

℞ Pulv. Potassæ Chlor. ʒ ss.
Aquæ Fervent. 0 jss. Misce.

Make into a lotion.

The above are excellent lotions; or gargles in Cancer of the Tongue, Fauces, or Throat.

No. 13.

℞ Acidi Carbolici ʒ j.
Aquæ ʒ viij. Misce.

Make a lotion or injection.

No. 14.

℞ Liq. Plumbi Subacet. ʒ j.
Aquæ distil. 0 jss.

Make a lotion or injection. Made also with ʒ j. of Tinct. Opii.

No. 15.

℞ Tinct. Ferri Perchlor. ʒ j. vel ij.
Aquæ 0 j.

Make a lotion or injection.

No. 16.

℞ Pulv. Potassæ Chlor. ʒ ss.
Acid. Hydrochlor. ♏ 40.
Aquæ 0 j.

The acid to be poured directly on the Chlorate of Potash, and the water added gradually.

To be used as a lotion or injection.

No. 17.

℞ Potassæ Permang. gr. 40.
Aquæ 0 j. Misce.

Make a lotion or injection.

The above lotions are all useful in cancerous ulceration of the breast or other part of the body, and as injections in cancerous ulceration of the uterus. Nos. 13, 16, and 17 check offensive smell. No. 14 arrests, and allays pain both before and after ulceration. No. 15 is useful when there is a tendency to hæmorrhage, and may be used of any strength; the pure tincture being applied when bleeding is actually taking place.

No. 18.

℞ Liquor Arsenicalis ʒ ss. vel ʒ j.
Aquæ ℥ j.

Make a lotion.

Useful in Lupus and some forms of Cancer.

No. 19.

℞ Liq. Plumbi Subacet.,
Olei Amygdalæ,
Aquæ distil., āā ℥ ij.

To be well mixed by shaking. If properly made, the ingredients will not separate on standing, but form a thick cream-like embrocation.

The above embrocation is of great value in unbroken cancers, and should be applied night and morning in the following manner:—A piece of lint sufficiently large, when folded double,

to cover the cancer, is to be well saturated with the embrocation and laid on the tumour, the whole being covered in with a piece of oiled silk.

No. 20.

℞ Empl. Plumbi,
Empl. Saponis,
Empl. Resinæ, partes æquales.
Spread on chamois leather.

Applied to cancerous, adenoid, and other tumours, and allowed to remain on till it drops off.

No. 21.

Iron Lint.

This is made by saturating lint in the tincture of the perchloride of iron and allowing it to dry. It is a convenient and very efficient way of applying this tincture as a styptic.

No. 22.

Zinc Lint.

Made by steeping lint in a saturated solution of chloride of zinc. A convenient way of applying this caustic. If kept in a bottle, the virtue of the zinc is retained for some time.

No. 23.

℞ Pulv. Carbonis ʒ ij.
Aquæ ℥ j.

This serves as a useful injection in cases of uterine cancer, especially when a disinfectant is required that shall have no chemical action on the parts.

No. 24.

℞ Ext. Hyoscyami gr. iv.
Ext. Conii gr. i.
Morphiæ Hydrochlor. gr. ¼.

Is an anodyne that yields relief equivalent to a larger dose of morphia, without the disagreeable results of the latter.

In the way of Disinfectants, it may be mentioned that considerable benefit will be derived in cases of open cancer from covering the dressings with a layer of Chloralum Wool or of McDougall's Carbolic Powder between the folds of lint.

The Absorbent Paper (introduced by Dr. Cumbie, and prepared by Messrs. Burgoyne, Burbidge, & Co.), medicated by any of the usual disinfectants, is useful as an absorbent of uterine discharges when introduced into the vagina.

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