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A DISSERTATION ON CANCER,

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“What are the diagnostic Marks of Cancer of the Breast ; and is this disease curable ?”

THE term *cancer*, derived from the Latin language, is synonymous with *carcinoma*, derived from the Greek, and originated in a fancied resemblance of certain tumors to the animal whose name they bear.

There is an evident propriety in specifying cancer of the breast in the question here proposed ; for the disease, in its ravages upon this organ, extends to almost every variety of structure which can modify its character, is accessible to inspection and local treatment, and occurs more frequently than elsewhere.

Whether all the diseases at present included under the term cancer should continue to receive that appellation, some might be inclined to doubt. They are so numerous and so different in aspect, that it is almost impossible to say any one thing that will apply to all without exception. They present tumors, ulcers, excavations, excrescences, indurations and *ramollimens*. The tumors vary from the hardness of cartilage to the consistence of jelly ; the ulcers furnish sometimes an abundant suppuration, varying in color and consistence—at other times they are dry, and some of them are covered with a hard grey crust, that reproduces itself as often as it is removed ; sometimes they are surrounded with varicose veins, that bleed frequently, at others they are wanting ; the excrescences present equally varied aspects, and the sufferings of the patient are of every grade.

But however varied cancerous affections are in the foregoing particulars, their progress and termination are nearly the same in all. They all tend to invade and destroy surrounding parts. Whatever be the nature of the texture in which they are located, they seem to feed upon it like a parasitic animal, growing and thriving upon another. This is so striking a characteristic of cancer, that in early times it was compared to a ferocious animal, which led some of the ancients to carry the idea so far as to attempt to feed it daily with fresh slices of viands, in hopes of thus satiating its voracious appetite. All the varieties of cancer, though they remain stationary for a time, will ultimately augment, every change in their state being invariably for the worse. Irritating substances, general or local, aggravate them alike, and if extirpated there is always

danger that they will reappear. Finally, they alike tend to produce constitutional derangements of a similar nature—a sort of cancerous cachexy, marked by emaciation, hectic fever, and a peculiar tint of the skin.

If we turn our attention from the exterior survey of cancerous affections to their interior structure, they will be found to present a variety of appearance and consistence. Multiplied dissections have, however, enabled pathologists to analyze and reduce cancerous substance to a certain number of diseased tissues, each having a structure peculiar to itself, and which always presents the same characters, in whatever part of the body they may be situated. These tissues are sometimes isolated, at others variously combined, two or three or even four of them being in the same tumor. Every cancer, with the exception of certain chancrous ulcers, which do not repose (in their early period at least) on a cancerous tissue, is constituted by the development and evolution of “two accidental tissues, that are different from any normal tissue,” viz. the scirrhus and encephaloid—names derived from *skirros* (hard) and *encephalon-eidos* (brain-like). One or the other of these, and sometimes both together, are always found in cancerous tumors. There are other morbid tissues occasionally met with in such tumors, as the fibrous, the melanose, the tubercular, the cartilaginous, and the fibro-cartilaginous, one or more of them. But these latter do not of themselves constitute cancer, one or all of them; they may therefore be termed incidental tissues, whilst the scirrhus and encephaloid kind, from the invariable presence of one or both of them, may be termed essential tissues of cancer. These, therefore, are deserving of more particular notice.

The *encephaloid* matter of cancer may exist in three different forms—in cysts, in masses without cysts, or infiltrated into the substance of the organ. These forms are more distinct and observable in the crude or early stage, but in a subsequent stage, or that of complete development, and before their *ramollissement*, they all assume a similar appearance. The encephaloid matter is then homogeneous, resembling the medullary substance of the brain, and presents here and there a slight rosy tint. Cut in thin slices, it is semi-transparent; but in masses, it is opaque. Its consistence is that of an infant brain a little softened.

The encephaloid matter is inclosed in cells, made up of a delicate tissue, resembling the pia mater—is, like it, very vascular; and the tunics of its vessels are so extremely tender, as to be easily ruptured, causing extravasation and accumulations of coagula. A new and curious fact stated by M. Bérard in the *Repertoire Generale des Sciences Medicales*, of February, 1834, is, that he has ascertained by experiment that these vessels are exclusively *arterial*. There are other and larger vessels surrounding the tumor, both arteries and veins, and the encephaloid matter often penetrates these veins and obstructs them.

But the encephaloid matter remains not long of the consistence now described—it tends constantly to mollify, until it finally resembles thick pus, but still retaining its color. In this stage, more than any other, the slender vessels are ruptured, and cause numerous extravasations of blood, which, instead of forming a coagulum, is blended with the puriform mat-

ter, giving it a reddish or brownish color, so that it resembles thick chocolate; excepting some portions of the tumor which remain exempt from bloody infiltration, and serve to show what was its former appearance.

The encephaloid tissue is more frequently met with in the uterus and testis, than in other organs; is also found in cancer of the liver and stomach. It appears also in cancer of the breast, particularly when the disease recurs after an operation.

The other essential tissue of cancer, viz. *scirrhus*, when fully developed, consists generally of a firm, hard, rugged, incompressible and knobbed mass, the limits of which are not well defined. It grates under the knife like the substance of the uterus, presents a bluish or greyish white color, and when cut in thin slices is semi-transparent. At first glance it might be easily mistaken for a fibro-cartilaginous tumor; but a closer examination shows that it is composed of two distinct substances, the one fibrous, hard and organized, the other soft and inorganized. The former composes the chief part of the diseased mass, and consists of septa, which are opaque, of a paler color than the soft part, varying in their volume and direction, and forming unequal cavities or cells, which contain the soft part. The latter is of a bluish color, and of the consistence of softened glue or even of cream. "The fibrous structure seems to be the cellular or proper tissue of the part, in a state of induration and hypertrophy," whilst the softer portion contained in its meshes or cells, appears to be merely a morbid secretion, poured out by the vessels nourishing the organized fibrous tissue. In this view of it, the organized part results from an altered state of nutrition in the tumor, and the soft or inorganized portion, or accidental tissue, as the French term it, is the result of a morbid secretion. In all cases, the fibrous mass is both most conspicuous and abundant, and is condensed in its centre into a hard nucleus, whence seem to radiate the numerous septa in every direction. In the centre of the nucleus there is often a little cyst containing a limpid fluid of very acrid nature. In some rare instances, portions of the scirrhus mass resemble cartilage, in parts of which osseous or calcareous depositions are occasionally found.

It is probable that several of the tumors, as the mammary and perhaps pancreatic, described by Mr. Abernethy, consist of varied proportions of the two essential tissues of cancer, modified by local irritation, temperament, &c. But such tumors, I may here remark, glide so insensibly into each other, and correspond so nearly in respect to their origin and progress, that little practical advantage results from his classification.

As the encephaloid tissue is more frequently met with in the uterus and other internal organs, so the scirrhus is most apt to predominate in external cancers, particularly in those of the breast—they are however often found united in cancerous tumors in all situations.

Cancerous tumors usually begin in a sound part, but in some rare instances, where a predisposition to the disease exists in the constitution, other tumors and ulcers degenerate into cancers. But more of this hereafter.

Thus far, the subject of cancer generally has been considered; but, as the female breast is its most frequent seat, many authors have taken can-

cer of this organ as a type for its general description, and the question proposed by Harvard requires that our future remarks be confined to this locality of the disease.

The age most subject to cancer of the breast is from the fortieth to the fiftieth year. It very rarely appears before the age of twenty, sometimes between twenty and thirty, many times between thirty and forty, and rarely after the age of sixty. A table, drawn up by M. Recamier, will be given at the end of this treatise, which in respect to age, accords with the observations of all surgeons.

Persons most subject to the disease are antiquated maids, next those mothers who have not suckled their children, and least so those who have borne children and nursed them with their own milk.

The disease may be divided into three stages. 1. *Indolent scirrhus*; 2. *Painful scirrhus*, sometimes called *occult cancer*; and 3. *Ulcerated or open cancer*. Indolent scirrhus, then, differing as it does in its whole aspect, from open cancer, is, nevertheless, the germ or first stage of that disease. Some have contended, however, that it is a more local disease, is more yielding to discutients, and instead of always progressing to cancer, has in some rare instances terminated in gangrene, and in many others has remained stationary through life. Now in respect to their ever being resolved, we are not able to speak with confidence, because we have not the best evidence of such cases being truly scirrhus, I mean examination with the knife. We can only judge from their external appearance. To ground such an opinion upon the vaunting reports of charlatans, would be to admit that "they are all resolvable when their own specifics are employed," and that failures are attributable to error on the part of the patient, or their delayed application. But the number of cases of resolution, cited by eminent surgeons, is so extremely small, as not to be entitled to consideration as exceptions to the principle, that they are not resolvable by any known remedy (pressure excepted), general or local—but more of this hereafter.

That scirrhus may remain stationary for life, is far more probable. Life may be short, the tumor may appear at a late period of it, when morbid action is feeble, and such tumors no doubt vary in their tendency to painful cancer from constitutional peculiarities; these therefore should not be received as exceptions to the general principle that scirrhus is incipient cancer.

Rise and progress of Cancer of the Breast.

A woman in touching her breast feels a small induration, which is not natural, but which causes not the slightest inconvenience. Perhaps her attention has been first drawn to it, by a small stain upon her dress, opposite the orifice of the lactiferous tubes, which leads her to feel of the part. She can neither tell when the tumor commenced, nor assign any certain cause, though she may suspect some mechanical injury, as a blow against a chair or door, or the pressure of her dress. She may also refer it to an obstruction of the milk when nursing her last child. It remains indolent and insensible to pressure, and makes no impression upon her general health. The induration gradually increases in volume, and from being round, circumscribed, and rolling under the finger, its surface pre-

sents nodes and depressions, followed by adhesions to the surrounding cellular membrane, and to the skin, giving to it the appearance of being quilted to the tumor. After a time of uncertain length, the patient begins to feel a twinging, pungent, or darting pain in the tumor, occurring more towards evening and in the night. Still, however, it gives no pain to handle the part and even press it. If the catamenia have not ceased, she will experience an aggravation of pain in the breast about the time of their recurrence; at this period also the tumor grows faster than at any other, and any external violence produces a sudden enlargement. Thus far the tumor is characterized by extreme hardness, by great weight compared with its volume, by a knobby feel, and by insensibility to the touch. These characterize the scirrhus state.

The pungent pain is the ushering in of the second or occult cancerous state, in which the progress of the disease is more rapid, the tumor increasing in volume from the size of a small nut, when first discovered, to from two to three inches in diameter, but it soon attains nearly its maximum size, and remains somewhat stationary, notwithstanding all other symptoms, and particularly pain, have augmented. Adhesions are formed to the subjacent parts—and the skin over it begins to pucker and to assume a violet tinge. The nipple, by the drawing of its tubes, gradually retreats within the surface of the breast. The darting pain, which added to the above-mentioned signs of scirrhus is one of the best pathognomonic symptoms, now interrupts sleep, and the patient's general health begins to suffer; with emaciation, loss of appetite, and dryness of the skin, which presents a pale yellow tinge. The axillary glands about this time become affected; but there is much uncertainty in respect to the time, for they often do not enlarge till after the second stage of cancer, and in some rare instances do not swell at all, although the cancer proves fatal. There is sometimes a solitary gland situated over the outer edge of the pectoral muscle, between the breast and axilla, and this, in such cases, is the first to enlarge. In a few instances, where the tumor is on the sternal side of the breast, the axillary glands escape and those about the clavicle suffer. Finally, the part of the skin most affected over the tumor gives way, forming a fissure, from which oozes a colored serum—and this completes the second or occult cancerous stage.

When the *third* stage or *open* cancer has begun, the borders of the fissure first opened are gradually thickened, indurated, and everted, and wear a pale bluish color. The surface of the ulcer is soon covered with pale-red vegetations, which furnish an ichorous or sanious suppuration, more or less abundant, and often very fetid. Its peculiar odor serves as a diagnostic symptom. The surface of the sore feels hard, like the original tumor, and, like that, is wanting in sensibility to pressure, as the patient can wipe it and handle it without experiencing the least pain. The lancinating pain, before spoken of, varies to an acute smarting, or burning, or insupportable itching, that nothing can calm. The hideous ulcer enlarges in every direction, consuming indiscriminately the adjacent substances, sparing neither veins nor arteries, and causing frequent hemorrhages, which, while they temporarily mitigate the patient's sufferings, hasten exhaustion of her strength. Whilst one part of the sore is

sloughing, another is projecting forth luxuriant vegetations, that stretch one after another over the borders of the ulcer, like the leaves of a double rose over its calyx.

The cancerous *cachexy* is now more strongly marked; the flesh is emaciated and flabby, and the arm swells; sometimes also the lower limb becomes œdematous. The patient is often tormented with a burning sensation behind the sternum, with severe cough and rheumatic pains; she loathes food; has obstinate costiveness alternated with colliquative diarrhœa, and finally sinks under hectic and torturing pains.

Such is the ordinary course of the disease when it proceeds unmolested to its natural termination, or is unsuccessfully treated. But the varieties it presents are innumerable, a few of which deserve notice. The scirrhus which precedes cancer is sometimes void of protuberances or inequalities, and presents a smooth surface like an encysted or fibrous tumor. Instead of being always single, it is in some cases composed of many tumors, united or separated. The adhesion to the skin and subjacent muscles alluded to, does not always take place until ulceration is about commencing. Its degree of hardness varies, and with this also the rapidity of its progress—the hardest kind being most indolent, and the first cancer is harder and slower in its progress, than one that returns after extirpation. Injuries and irritations, and disturbed menstruation, hasten its progress, but it sometimes takes a sudden start without any assignable cause. In aged people, however, they may continue nearly stationary for many years. Hemorrhage is a common occurrence, but in some cases cancers will run their whole course and destroy the patient without loss of blood. The blood may issue from an opened vessel, or be exhaled from the surface of the ulcer, or from the interior of the morbid structure.

Cancer is so constantly fatal, that to speak of its *prognosis* when left to itself or impotently treated, is to speak of the different manners in which death occurs, when no other disease sets in to abridge life. The exceptions are, a few rare cases which happen in very advanced life of scirrhus and even of ulcerated cancer, that advance so slowly as not to shorten the patient's days—or, what is more rare, gangrene may take place in a cancerous breast, as in other parts, and after the organ has sloughed out, the sore will cicatrize as if the organ had been extirpated with a knife. Here and there, too, we meet with detailed cases of the cicatrization of a cancerous ulcer, whilst the subjacent scirrhus mass remains undestroyed. If such cases are genuine cancer, they show that nature establishes no law in regard to disease, that she does not sometimes break. A multitude of accidents and complications may occur to hasten death, as pleurisy, hydrothorax, anasarca, or a putrid fever. Such being the case, a surgeon cannot be too circumspect in giving a prognosis.

Post-mortem appearances may be considered under the head of general and local. The former have already received some attention, under the head of pathology of cancerous diseases. At the termination of life, open cancer of the breast presents a mass of vegetations and excavations, covered with a fetid putrescence, in which scarcely a vestige of organi-

zation remains. This is therefore a less interesting period for examination, than when the cancer is extirpated in any of its stages during life.

Indolent scirrhus, when extirpated, is ordinarily round or ovoid—presents a knobby surface, and adheres more or less to the surrounding parts by cellular tissue. It may occupy the place of the mammary gland, or any other part of the breast. Cutting it into slices shows it to be formed in part, or entirely, of a greyish or bluish white substance, slightly translucent, and varying in consistence from that of lard to that of cartilage. This is the true scirrhus tissue. In the same tumor may be seen masses or minute portions of substance, softer than the preceding, whitish, opaque, divided into unequal lobules, and surrounded in every part by bloodvessels. This is the encephaloid tissue. To these two essential tissues are sometimes added others that are incidental, as cartilage, fibrocartilage and melanose. In the midst of all, may be seen portions of the mammary gland—sometimes sound, although surrounded by degenerations, at others partly transformed into the scirrhus or encephaloid tissues.

Painful scirrhus or occult cancer, when extirpated, presents the same essential tissues, but softer. The scirrhus will be here and there penetrated by a whey or cream like matter that may be pressed out in large drops, and the encephaloid may present some little effusions of blood. In some places it will be soft. It adheres to the skin, and perhaps to the subjacent muscle; and the surface is more knobbed than in the indolent state.

Cancerous ulcer, when extirpated, evolves a less fetid odor, previous to its becoming putrid, than it did before extirpation; which shows that the peculiar fetor of cancer is an exhalation from the living surface. Below the surface, to the depth of a line or two, is a stratum of flesh of the same color as the ulcer. Cutting deeper, we discover the essential tissues of cancer, but more compounded with others, and they would not be readily recognized by one who has not studied them in their former states. The cancerous mass is no longer circumscribed to the breast, but extends to bone and muscle and all other neighboring textures indiscriminately.

The *general* post-mortem appearances are, a yellow tinge of the skin, a soft and flabby state of the muscles, and a fragility of the bones. Some French writers, who have had great experience in this disease, contend that it produces no such effect upon the bones. Their opinions would however be corrected by a visit to Guy's Hospital, where bones are preserved, that were fractured by merely a turning of the patients in bed, and two or three similar cases have occurred within my own observation. The lung under the cancer is inflamed and adheres to the pleura-costalis, and some serum is found in the cavity of the chest, and small tubercles are discoverable in the pleura. The liver, especially if the cancer be on the right side, is tuberculous. The uterus almost always presents cancerous tubercles. The glands of the axilla, and sometimes those about the clavicle, are enlarged and scirrhus. Sometimes the arm of the affected side is much swollen, and at others the whole side is in like manner affected.

The *cause* of cancer not being required in this treatise, and if it were, our knowledge of it, and especially of the *proximate cause*, amounting as it does to little or nothing, are sufficient apology for saying but little about it. In respect to its *remote* and *exciting causes*, it may be stated, that the foundation of the disease is laid in a *cancerous diathesis*, that may evolve cancer spontaneously, though oftentimes its appearance is preceded by some slight injury or irritation of the part. This has induced some to pronounce it a local disease. But it is not probable that any local irritation can assume a cancerous character, where such a constitutional diathesis does not exist; and yet, it may serve as a nidus, in which the disease will appear sooner than it would spontaneously, or without any such point of attraction—and it is not improbable that the diathesis may exist in some persons through life, but in whom, from the absence of such local irritation, or because the diathesis is feeble, it may not be evolved. In this and some other respects it resembles *scrofula*—a disease known to be constitutional. It is said, in opposition to this, that extirpation of cancer oftentimes effects a permanent cure, and that therefore the disease must be local. The same may be said of the amputation of a *scrofulous limb*. Besides, let it be remembered that cancer of the breast is evolved, chiefly between the fortieth and fiftieth year of age;—in other words, about the period of menstrual cessation. Now the lapse of time necessary for the development of cancer in the breast after its first appearance, together with the time taken up in healing the wound made by extirpation, is, in many cases no doubt, sufficient to carry the patient through the most susceptible period; the system has had time to recover from the constitutional disturbance, and the breasts are no longer irritated by sympathy with the uterus. It is this cancerous diathesis that so frequently causes a return of the disease in the *cicatrix*, even after a second or third extirpation, or to evolve it in some other organ, and perhaps in diverse organs, remote from each other, simultaneously.

The connection between a disturbance of the uterus at the cessation of the menses and a cancerous breast is so strenuously maintained by Sir Charles Bell in a late lecture, that I feel justified in making an extract from it. “Nature has established a reciprocal action between the uterus and *mammæ*, and though widely apart, they are intimately united by sympathy. Every change in the ovarian circulation has an influence upon the *mammæ*, from the first period of puberty to the final period of change—menstruation, conception, quickening, delivery—all have this influence—they all communicate pain and turgescence of the *mammæ*. At the turn of life, the irregularity of menstruation produces a most decided influence on the *mammæ*. It is this which lays the foundation of cancer.”

“As there is a coincidence in time, so is there a considerable resemblance in the nature of the disease which fixes upon the ovaria and *mammæ*; the difference is chiefly in their position as internal or external parts. This is a very interesting inquiry, because it embraces an extensive view of practice. The *scirrhus*, I say, and *hydatid tumors* which infest the *mammæ*, and are the forerunners of so many distressing cases

of ulcer and ill-conditioned sores, if they were seated in the ovaria, being internal, would smolder, and partake of a chronic state, that would hardly interfere with the term of life."

The cancerous diathesis is no doubt oftentimes hereditary, as appears from the great many instances where it has prevailed in particular families. This fact is now so generally understood, as to induce eminent surgeons to advise families, in which a case of cancerous breast appears, to guard the general health of females at the cancerous period of life.

Climate has some influence upon predisposition to cancer. Cold latitudes present cases more frequently, and of a more indomitable character, than tropical climates. The island of Madeira very rarely exhibits a case of it. [Johnson on cancer.]

It is to be regretted that a cancerous *diathesis* is not, like that of scrofula, manifested by some external signs. The disease occurs in every variety of constitution and temperament, and a tendency to it is not even suspected, till the scirrhus tumor appears. But it is not so when the disease has existed long enough to impair the constitution, and establish a cancerous *cachexy*. Here there is an evident depravation of the whole constitution, manifested by dejection of spirits, debility, emaciation, or yellowness, dryness, and waxen appearance, of the skin, and more or less general fever.

Depression of spirits and other debilitating causes are supposed to have some influence in predisposing the system to cancer, but this is rather a matter of conjecture.

Contagion was formerly supposed by some to exist in cancer, and was referred to as a cause of it. But the experiments of Bielt, Alibert, Dupuytren, Nooth and Nesbit upon animals, and by inoculation upon themselves, with the matter discharged from cancer, have decided that it is not contagious.

Has the virus or matter of cancer any specific quality or power of circulating itself in the same individual from one organ to another? Facts seem to support the negative. True, the axillary and clavicular glands sometimes become cancerous after the breast. I say sometimes, for it is generally admitted that such glands are often enlarged by sympathy, without being cancerous. But it is not necessary to suppose that even those which are really cancerous, are made so by any absorption of matter. It is a well-known law of vital action, that irritation and inflammation, either simple or specific, existing in any tissue, are propagated along that tissue, even to a distance, rather than to others, although nearer, that have a different vital endowment and different functions to perform. Witness inflammations in the urethra extending to the bladder and testes by the mucous membrane. In cancer, as in this case, it is not necessary to suppose the transmission of virus as a cause of the secondary affection. Moreover, in cancerous breast, the absorbent vessels themselves seem to become obstructed by the disease, and to appear like cords, which probably accounts for the difficulty, I might say impossibility, of lessening the absolute size of a truly scirrhus tumor by means of discutients; and it also accounts for the exuberant granulations of cancerous ulcer, the balance between the arteries and lymphatics being destroyed. That it is

not matter transmitted to the axillary glands, seems probable from the fact that in a kindred disease, the medullary sarcoma, absorbent glands are affected in an opposite direction to that of their current of circulation. Another fact in point is, that matter of cancer inserted under the cuticle, will not produce cancer in the glands to which absorbents of the part lead. From these considerations it is much more likely that the axillary glands are affected by continuous sympathy with the breast, and that having once enlarged and become irritated, they afford a suitable nidus or point of attraction, in which the cancerous diathesis of the system is kindled into disease, as it had previously been in the breast.

What are the diagnostic Marks of Cancer of the Breast?

This is a question of the first moment, as a decision of it involves the propriety of a painful operation, upon the performance of which the preservation of life may depend.

The diagnostic marks of cancer may be divided into three classes—those relating, 1st, to the scirrhus stage; 2d, to the occult cancerous stage; and 3d, the open cancerous stage. The two first are of chief importance, since an open cancer, besides its obvious and unequivocal signs, is also distinguishable from other ulcers by its previous history; the only exceptions being a few rare cases where other ulcers assume the cancerous character. The two first stages of cancer are therefore chiefly entitled to consideration, and presenting as they do the form of tumors, it is other tumors only with which they can be confounded, and from which it is our object to distinguish them. Those tumors which simulate cancer are—

1. *Hard tumors of a cartilaginous, a fibrous, and fibro-cartilaginous structure.* These are noticed first, not from the frequency of their occurrence, especially in the breast, for they are very rare—but because they approach nearest in aspect to indolent scirrhus, so much so as to puzzle the most eminent surgeons to distinguish them. They are alike hard, indolent, and sometimes knobbed upon their surface, whilst to increase the difficulty, this last mark, though characteristic of true scirrhus, is not always present in it. Among the uncertain marks are the fact that this tumor is not peculiar to the cancerous period of life, and that it is less adherent to the mammary gland than scirrhus. But the knife is the only sure test to which they can be subjected, and it affords some satisfaction to be able to assure the patient after they have been unnecessarily extirpated, that she is in no danger of a relapse.

2. *Hydatid or Encysted Tumor.*—“This begins in a swelling which is unattended with pain, and which has the character rather of a chronic inflammation in a part of the breast, than as bearing a resemblance to a scirrhus; for it has neither its mobility, its hardness, nor its general circumscribed or distinct limits, but incorporates itself with the surrounding parts of the breast. The general health is unaltered even when the swelling becomes of the most formidable magnitude.

“As it increases, a change in the nature of the swelling is produced; at first it was uniformly solid, but is afterwards distinctly divided into a solid and fluid part; the latter fluctuating so as at once to inform the

surgeon of the existence of a fluid. If this part be punctured, a liquid having the usual appearance of serum, is discharged; the cyst sinks, but soon becomes distended, and the swelling continues to grow. At length the tumor acquires an enormous magnitude, and some of the largest swellings of this organ are of the hydatid kind. The absorbent glands, in the most aggravated form of this disease, are unaffected. It is more frequent in advanced age than in youth. When removed by operation it does not return."

"This disease wants the following marks of scirrhus, viz. excessive hardness, mobility, its circumscribed limits, and its small and stationary size, and it is not peculiar to the cancerous period of life. If mistaken in its early stage, for scirrhus, and extirpated, there is no reason for regret, since it does not yield to discutients, and tends to grow to such a size as ultimately to require removal."

3. *Simple induration*.—This is of more frequent occurrence than all others beside. The most common kind is produced by disturbed menstruation. Sir Charles Bell says that the number of young women, from the age of sixteen to thirty-five, who have presented themselves in the hospital with lumps in the breast, is fully equal to those who have presented themselves at a later period of life with carcinoma; and he adds, "we have to trace an influence of the same kind in both, namely, irregular uterine action." This form of disease is described in Sir Astley Cooper's lectures under the name of "irritable tumor of the breast."

It is distinguishable from scirrho-cancer by its occurring early in life. The same tumor occurs however at the cessation of the menses, and then age is no test of its character. But it is distinguishable also from scirrhus by pain and sensibility to the touch, its redder color, its retaining more of its original structure, and being less indurated, also by the surrounding part being slightly inflamed—and lastly, by its yielding to depletion, general and local, to sedative applications, and to correction of the uterine derangement.

Under this class may also be included indurations from external violence, either sudden, as from a blow, or slight and often repeated, as pressure of the breast, and too often handling the organ. Also, indurations resulting from a suppurating acute inflammation.

4. *Herpetic Tumor*.—This arises from an irritation communicated to the centre of the breast, by an herpetic eruption upon the skin, around the nipple. It is apt to give an itching pungent sensation, which might possibly be mistaken for that of incipient occult cancer. The tumor is however sufficiently distinguishable by its evident cause and by its transitory nature.

5. *Scrofulous swellings* sometimes, though very rarely, appear in early life, or before the thirtieth year. They are attended by general marks of scrofula, and they yield to anti-scrofulous treatment.

6. *Rheumatic and gouty* constitutions are sometimes affected with tumors of the breast—but they are tender to the touch and painful, and exhibit other marks of acute inflammation.

Pancreatic tumor of Mr. Abernethy, the simple chronic tumor of Sir Astley Cooper. "This disease is not of a malignant nature, nor does it

produce any dangerous consequences. It attacks the young and apparently healthy, seldom beginning after the age of thirty years, and usually appearing from the age of puberty to that period. It is very superficial, growing rather upon the surface of the breast than its interior. At first it feels like one of the mammary lobes enlarged; and then, as if several were combined in one swelling. As it increases, it becomes in some degree lost in the substance of the breast. It has not the hardness of the scirrhus tumor, and is not accompanied with the loss of health of fungoid tumor," next to be mentioned. "It is an extremely moveable tumor. It is generally unaccompanied with pain, either in the part, or shoulder, or arm. It grows very gradually and slowly." It is therefore distinguishable from scirrhus-cancer by the youth of the patient, by its softness, its slow and gradual growth, its being more superficial, and wanting tubercles, &c. &c.

Fungoid or medullary tumor—or *Fungus hæmatodes*.—This disease has been also called soft cancer, and being equally fatal in its tendency, and requiring the same treatment as scirrhus-cancer, it may be asked why it is here separated and classed among those tumors that we wish to distinguish from cancer of the breast. The answer is, because it differs in its early stage so much from scirrhus-cancer, that its admission among that class of tumors would throw our best diagnostic symptoms of scirrhus-cancer into confusion, and embarrass the young surgeon unnecessarily. For this reason I have given it a separate place.

"It occurs at all ages—is not so hard as the true scirrhus, but has more the feeling of chronic inflammation at its early stages; and as it increases, it becomes softer, yields to the impression of the finger, but immediately again fills, as the pressure is removed. After a few months, the skin becomes livid, and a distinct fluctuation may be felt that is contained in a cyst. The veins of the surrounding skin become extremely enlarged and varicose, and the surface assumes an inflammatory appearance, of a darker color than common inflammation." The cyst next ulcerates and discharges a fluid resembling bile, which is extremely nauseous to the smell.

It may therefore be distinguished from scirrhus-cancer by occurring at all ages, by being softer, by its gradual growth, by the enlarged veins surrounding it, by wanting the darting pains, puckering of the skin, retraction of the nipple, knobby feel, and enlarged absorbent glands, and lastly, by impaired health from the first attack.

The foregoing tumors include about all that can be mistaken for scirrhus-cancer. I have purposely omitted milk tumors, and wens, and also hypertrophy of the breast, wishing to simplify, by reducing the number as much as possible, and believing the latter tumors cannot be mistaken for cancer.

I will now recapitulate the diagnostic marks of scirrhus-cancer in connection with those of the foregoing tumors, in such a manner as will enable the surgeon to distinguish the one from the others.

1. *Hardness*.—This will serve to distinguish scirrhus-cancer from all of the other tumors, excepting the fibrous and cartilaginous, including the

osseous, to which the last is sometimes converted, and excepting also some chronic indurations.

2. *Insensibility to pressure.*—This will serve to distinguish scirrhus from simple induration, and from herpetic, rheumatic, and arthritic tumors. The frequent appearance of simple induration, compared with that of all others excepting scirrhus, makes its diagnostic symptoms more interesting to the practitioner than those of any other kind.

3. *Weight, in proportion to its size.*—This mark will exclude all other tumors excepting the fibrous and cartilaginous kind.

4. *Knobbed surface.*—This in a few cases of scirrhus in their first appearance is wanting, whilst on the other hand it is sometimes present in fibrous and cartilaginous tumors, and yet it is one of the best marks of scirrhus-cancer.

5. *Circumscribed and stationary size.*—This will exclude all, excepting the fibrous and cartilaginous kind, and some rare cases of simple induration and scrofula, especially if it has existed more than a year.

6. *Unyielding nature to discutients and to antiphlogistic treatment, local or general.*—This will exclude all chronic indurations and most other tumors excepting the fibrous and cartilaginous, and the fungoid and pancreatic tumors. It is a valuable diagnostic, because it is brought to bear upon forty-nine fiftieths of the tumors that are not scirrhus-cancerous.

7. *Darting or lancinating pains.*—These announce the approach of occult cancer, and exclude all other tumors, excepting perhaps the herpetic kind. It is a decisive diagnostic in almost all cases.

8. *Puckering of the skin* is equally decisive with the last mentioned.

9. *Drawing in of the nipple*, equally decisive of scirrhus-cancer.

10. *Adhesions to surrounding parts*, to the skin, and to the muscles, whilst still void of sensibility to the touch. This excludes all the tumors simulating cancer, excepting the fungoid and pancreatic kinds, and perhaps the fibro-cartilaginous kind.

11. *Violet or bluish tint of the skin*, is decisive of cancer in all cases excepting the fungoid tumor.

12. *Swelling of the axillary or clavicular glands.*—This excludes all, excepting some rare cases of simple induration—but it does not always occur in cancer.

13. *Period of life.*—Cancer of the breast rarely appearing before the thirtieth or thirty-fifth year, mostly between the fortieth and fiftieth, and rarely after the sixtieth.

14. *Past history*, as respects exposure to the cause of other diseases that simulate cancer, and their effect at the time.

15. *Hereditary tendency* to the diseases that simulate cancer, or to cancer itself.

By thus comparing any suspicious tumor with others that simulate scirrhus-cancer, the surgeon may, by the process of exclusion, decide its character with some degree of certainty, if it be a scirrhus, and with absolute certainty if the symptoms of occult cancer are present.

For example, although no one nor two marks of scirrhus-cancer of the breast are sufficient to decide its character in the indolent state, yet several of them united, as hardness, knobbed surface, insensibility to pres-

sure and of more than a year's standing, will prove it to be a scirrhus in ninety-nine cases out of a hundred. And if in addition to the above it has resisted the known remedies for the other species of tumor—has darting lancinating pains, and the skin over it is puckered and nipple drawn in, there can be no mistake in calling it a cancer.

Tumors and ulcers that are only simulative of cancer, may, as before stated, assume its real character, in constitutions that possess a diathesis or predisposition. The local disease seems to be a more combustible portion of the system, in which the cancerous flame is ignited sooner than elsewhere, and before it has arrived at that degree of intensity which would cause it to break out spontaneously in a sound part. Dr. Monroe was so impressed with this idea, and with his unsuccessful operations, that he at last advised extirpation in cases only where cancer was evolved by some local disease, believing that these were the only cases in which the operation would succeed.

Cancerous ulcer may be distinguished from others by its hard and luxuriant vegetations, its suppurative matter, which is never that of healthy pus, and always evolves a peculiar odor—by its sloughings and excavations—by the eversion of its edges—by its affecting the absorbent glands—by its incurable nature—and by its past history. Among those that simulate it, are fistulous sores with hardened edges, and some phagedenic ulcers, that by appropriate local treatment, and improvement of the constitution, may be made to cicatrize.

Is Cancer of the Breast curable?

I begin this part of the dissertation by stating distinctly that no medicine has been hitherto discovered, either of general or local application, or both combined, that can disperse a scirrho-cancerous tumor, even in the incipient or scirrhus state, or that can correct and cure the cancerous habit, on which such tumor depends.

If this be true in respect to indolent scirrhus, as I shall make it appear, when considering the reputed antidotes and specifics that have been hitherto offered, the position is still more maintainable with respect to painful or occult cancer; for, besides the obstacles belonging to the previous state, there are the additional ones of augmented size, deeper rooted cancerous diathesis, and accelerated progress. So true is this, that it has become a maxim with all good surgeons, that the longer extirpation is delayed, other things being equal, the greater is the liability to a return of the disease. I know it has been said by the distinguished Mr. Pearson, seemingly in opposition to this, that “if the removal of the morbid part were equally complete in two patients, one of whom had been afflicted seven months and the other seven years, he should esteem the latter patient in less danger of a relapse than the former.” By this, however, he meant to imply, that the two cases show a difference in constitution and virulence of disease, by which its progress is more rapid and sure to a fatal termination in one than in the other, whether extirpated or not; and not, as some have inferred from his remarks, that delaying the operation in either case was advisable, as affording any security against a recurrence of the disease—for, seven years' delay would place almost

any cancer beyond the reach of any surgeon's knife. But to return from this digression, not only those who regard the disease as depending on a cancerous diathesis, that tends to increase up to a certain period of life, consider delay in the use of the knife dangerous, but those also who regard the disease as local, for Sir Everard Home, who is a localist, states that the longer the operation is delayed the more it contaminates the neighboring parts, and thereby defeats the operation, by lessening the chance of extirpating all that is affected. Be the disease, then, general or local, the tumor is unyielding both in its indolent and painful state, to any known medicine, topical or constitutional. It is however proper that I should notice some of the most extolled remedies, with the view of showing their utter inefficacy:—and first, of external remedies.

Arsenical preparations.—These may be regarded as operating, not by dispersing, but by destroying, in a manner somewhat analogous to the knife, and more properly belong under the head of extirpation or ablation. Under this class may be included all medicines that act in like manner, as caustics and actual cautery.

Ferruginous preparations.—Mr. Carmichael, of Dublin, held out encouragement to the profession that great benefit would result from their use; but the cases he detailed were probably not cancer; at any rate, there is no longer any value attached to them as anti-cancerous remedies, and they are used for cancer of the breast as sedative applications only, to palliate some of the painful symptoms of cancerous ulcer.

Mercurial preparations, particularly corrosive sublimate, were recommended by Andrew Wilson for cutaneous cancer, but his cases cited in proof of their efficacy were probably of a syphilitic character. All mercurial preparations to the surface of true scirrhus or cancer, are now considered injurious.

Alkaline and acid substances have been extolled at different periods, but their use is now rejected.

Vegetable and animal substances of various kinds have from time to time enjoyed a reputation as being anti-cancerous. Opium, cicuta, belladonna, digitalis, aconite, and other narcotics, have been serviceable as sedatives and palliatives in the painful state of cancer, but it is useless to add that neither these, nor gastric juice, bullock's blood, nor slices of flesh, which have at times been considered as sure remedies, are as such entitled to any confidence.

Iodine, from its known effect upon some chronic glandular engorgements, was looked to with sanguine hopes of benefit, the more so as its discutient power when long applied had caused atrophy of the testis and mammary gland itself. Mr. Ullman, a German physician, tried it in 1823, as he thought with decided benefit. M. Magendie it is said has used it with some success; but a great many others who have tried it report differently. It is easy to conceive, however, of its exciting fallacious hopes; for, as a powerful discutient, it might affect the inflamed cellular substance surrounding a cancerous tumor, and even the gland itself, and by reducing these, appear to lessen the whole tumor. It may also have entirely dispersed some tumors that simulated cancer; but diligent inquiry

and some observation of its effects, have satisfied me that it has no influence upon a real scirrhus.

In respect to internal medicines, many of the above-mentioned topical ones have been administered without benefit, excepting as palliatives. Among these *cicuta* has enjoyed some reputation. Stork pronounced it an antidote to the disease. But De Haën assures us that of a hundred and twenty patients who tried it, according to the directions of Stork, not one was cured. Alibert reports a similar result upon nearly an equal number under his care, and this accords with the reported experience of most others. It appears useful in facilitating the dispersion of some other tumors, and may render cancer less painful, perhaps less rapid in its progress; but never cures it. The same may be said of *belladonna*, of *aconite*, of *lauro cerassus*, and some other vegetables of a similar character.

Acetate of copper, white arsenic, arsenious acid, preparations of iron, muriate of barytes, have each by turns risen and fallen in reputation. But no one pretends, at the present day, that either of them is anti-cancerous.

Distilled water, as a sole article of subsistence for many days, under the impression that it would starve out a cancer, was tried and recommended by Poteau of Lyons, and Lambe of London.

Repeated small bleedings, recommended by Valsalva and Fearon, was brought into notice probably by a trial of them in some indolent tumors that simulated cancer. At any rate, they are no longer in repute.*

I have purposely omitted a long list of specifics, as they have been termed, because they are unworthy of notice. As if no absurdity could be too gross in the selection of remedies, I will observe that green lizards, swallowed fresh, have enjoyed high reputation for the cure of cancer. They were proclaimed as sure remedies, first, by a learned professor in Guatamala, and subsequently in Spain, Sicily and Germany, and have called forth treatises of high commendation, in each of those countries. The direction is, to cut off the head and tail, tear away the skin and entrails, and swallow them while palpitating. Strange as it may seem, two of the best treatises upon cancer that are to be found in the French language, were written by men who were so far influenced by the foregoing accounts as to try them upon patients. M. Bayle caused one patient to swallow four hundred of them in the space of two months. [Dic. des Sciences Medicales, Vol. 3d, p. 667.] The other gentleman, M. Cayol, whose treatise was published in 1832, saw one patient swallow fifty in fifteen days. Their reports state that they saw no good effect, "physiological or therapeutic."

But it is useless to pursue this subject further. The high authority upon which the foregoing remedies were recommended, is the only apology for selecting them from a long catalogue of absurd prescriptions that have enjoyed reputation. We could wish, for the honor of the profession, that so many deceptions practiced upon suffering humanity could all be referred to an honest mistake in the diagnosis of cancer. But

* For an account of the trial of some of the foregoing remedies, I am indebted to Dic. des Scien. Med. Vol. 3.

alas ! every one must be constrained to believe, that “ independently of this cause, the illusions of self love, the desire of renown ” or the promptings of avarice, “ which speculate upon the dearest interests of humanity ” — a detestable unfairness that trifles with the credulity of the afflicted, and withholds from the public a true statement of failures, are the cause of the impostures that have been practiced, and which are the more reprehensible because they defer a resort to the only remedy that is entitled to confidence, until it is unavailable, and the patient’s fate is sealed.

The foregoing facts justify the conclusion that no medicine yet discovered possesses the power of resolving or otherwise curing cancerous tumor, or of correcting the cancerous diathesis. Here be it understood, that I do not include those medicines or other articles that kill the affected part, and which are often substituted for the knife ; nor do I include mechanical pressure, which may produce atrophy or gangrene.

Are we to infer from past failure of success that the disease will always remain incurable by medicine ? By no means. Syphilis was at one time as little known in its nature, and as incurable, as cancer, yet its varied forms “ now yield to a medicine that was introduced in a manner purely empirical or accidental.” Iodine, if not a specific for scrofulous tumors, has conferred great benefit on those who are affected with them. Who knows but some medicine may yet be found equally efficient for correcting a cancerous diathesis, and which in concurrence with some new topical application, may resolve scirrhus-cancerous tumors as effectually as we are now able to resolve venereal tumors of the periosteum, of equal or even greater hardness. The chief obstacle to experiments, and it is, I admit, one of magnitude, is the danger of consuming time, in which the only remedy at present known must be tried in order for its success. The only medicine that engages public attention at this time in Europe is creosote, which on account of its efficacy in some cases of cancerous uterus is now undergoing experiments in France and England upon other cancers.

Extirpation, then, with the knife, or the destruction of its living powers, and consequent separation of it from the subjacent sound and living parts, is the chief if not the only measure that promises to effect a cure. Strangulating the tumor with ligatures drawn through or round its base and tied, has been recommended, but this presents too many objections to entitle it to further notice. To the use of actual cautery, objections are equally strong. Arsenical escharotics, the only ones now used, are justly entitled to more confidence. Yet if we reflect duly upon the danger and uncertainty that attend their operation, they must in almost all cases give place to the knife ; for who can determine the exact limits to which the caustic when applied may extend, or whether it may not leave some portion of the cancer untouched, or destroy the patient as a poison ? An important direction in the use of the knife is, to examine the tumor after extirpation, in order to ascertain if some indurated portion may not have been left ; but escharotics afford no such means of knowing whether we have made clean work. Another important direction in the use of the knife is, to heal the part immediately ; if possible, by the first intention, in order to prevent its being a long protracted point of irritation, that will

be likely to assume the cancerous action. The constant failure of Mr. Monroe and many others of his day, to prevent a return of cancer, is justly attributable to a neglect of this rule. And surely the same evil must ensue, where escharotics leave a large open ulcer.

On the knife, then, surgeons have been taught by experience to rely, as their chief hope of success in the treatment of cancer of the breast. Fortunately the operation is not dangerous nor difficult, and the wound appears to heal kindly. It is probable that not one in five hundred die of the operation, and it is most usual for the wound to wear a healthy appearance for some time after. But alas! our fondly cherished hopes are often cut off by the recurrence of cancer, "either in the cicatrix, or in some other part of the body;" and it is commonly more rapid in its progress, than it was in the first instance. The cancerous vice seems to have acquired a new degree of virulence, to diffuse its influence throughout the system, suddenly evolving all the marks of an established *cancerous cachexy*.

To the patient, then, and to himself, the surgeon must hold up the following propositions.

1. That the extirpation of a scirrhus tumor, whether indolent or painful, large or small, recent or of long standing, is no positive security against its re-appearance, and that the same is true in respect to cancerous degenerations of other tumors and ulcers.

2. That the danger of a return is greatly increased when the disease has been of long standing, or of rapid progress in its development, or if ulcerated, and especially if it has affected the axillary glands, or adheres to the subjacent muscles.

3. That there is but little hope of preventing a return, by operating after the constitution exhibits marks of cancerous cachexy.

It may be further remarked that a cancer which has broken out a second or even a third time, may yet be a fit subject for an operation. Some French surgeons have operated upon the same breast four times, and one of them a fifth time.

Relapses.—One cannot but feel surprized in reading the difference in the reports given by surgeons of the first eminence, in respect to the proportion of relapses that have occurred in their own practice. The elder Monroe said that of sixty persons operated upon for cancer, four only had not relapsed after two years. Scarpa had only seen three cases where the extirpation of cancer was not followed by a relapse. According to Boyer, four or five only out of one hundred were permanently cured by extirpation. Mr. Home describes seventeen cases of extirpated cancerous breast, five only of which proved successful. On the other hand, Mr. Hill, a surgeon of Dumfries, in Scotland, reports eighty-eight cases of extirpated cancer, six out of seven of which proved successful. Mr. Nooth says that not more than one in thirty of his patients experienced a relapse. Mr. Fearon's experience is nearly as favorable. Sir Astley Cooper estimates the failures of entire cure at three-fourths.

In this country, so far as my inquiries have extended, the proportion of relapses is a little short of one half.

Satisfied as we are that the above-named gentlemen in Europe are

entitled to the highest respect as operators, it seems difficult to account for such various results. In respect to Dr. Monroe, however, it is stated in the Edinburgh Essays, Vol. 5, by a writer who had perused Dr. Monroe's MS. lectures, that "he recommended the operation too indiscriminately, and without prescribing the necessary limitations." It is well known, too, that in Dr. Monroe's day it was customary to heal the wound of an operation by the slow process of granulation. The same remark is no doubt applicable to the patients of Scarpa in the early part of his professional career, and Boyer continued to stuff with lint the wounds made by the operation until the latter years of his life; whilst the British surgeons, very soon after the days of Monroe, changed their mode of dressing, by endeavoring to heal the wound as much as possible by the first intention. To this it should be added, that in Dr. Monroe's time it was erroneously supposed that by keeping up a discharge from the breast, the return of the disease would be prevented, and with this view it was directed that when the sore was reduced to the size of the palm of the hand, it should be kept open for the remainder of life, and to apply occasionally common caustic and black soap, in the form of an ointment, for the purpose of promoting a discharge. Now the doctrine we have maintained that local irritation is apt to evolve cancer in those who are strongly affected with cancerous diathesis (and who can be more so than those who have had cancer extirpated?), would lead to the conclusion that these different modes of treatment must be followed by results somewhat various.

Another circumstance of equal importance to the success of modern surgery, is, the practice of removing every portion of the cancer and something more—of examining the extirpated tumor to see that sound and healthy looking flesh appears throughout its cut surface, and for removing any suspicious portion that remains in the wound, which can assume the cancerous character. Nearly all modern authors counsel our making the incisions in an apparently healthy part, beyond the limits of the tumor—a direction less insisted upon formerly.

Can a relapse be prevented by any treatment, local or general?—We have already shown that no known specific against cancer exists, in the *Materia Medica*, and the profession is therefore confined to the course of merely combatting such diseases and derangements of the constitution as are supposed to favor a development of the cancerous vice. The foremost of these appears to be derangement of the uterine function, at or near the period of the cessation of the menses. The views before given of Sir Charles Bell, show its great importance, and the necessity of correcting every deviation from health, by the means ordinarily recommended in such cases.

From an impression that peccant matter exists in the circulation, in cancerous constitutions, which might be drained off, issues have been prescribed from time immemorial; but the experiments of MM. Deschamps and Gurnier upon an extensive scale, show satisfactorily that they can have no effect upon a cancerous diathesis, and that applied to the part affected, they are worse than useless. As a general direction we are to avoid every cause of constitutional irritation and derangement, to pre-

serve a cheerful state of mind—in one word, to conform to the strict rules of hygiene.

In respect to local treatment, for the prevention of a relapse, it is now generally recommended to abstain from every application that can irritate the skin, to treat the cicatrix with the utmost tenderness, and to keep it constantly preserved from sudden changes of temperature, by some soft covering of the nature of down, "or a swan's skin." Sir Charles Bell in accordance with this, and with his view of the intimate relation subsisting between diseased uterus and mammae, directs that a cancerous breast should, as far as possible, be made an internal part, by such dressings "as will protect it from changes of temperature, give it a gentle support, and soothe the skin." This he prescribes for cancerous tumor, and it is equally applicable to the cicatrix, after its removal.

Finally, the foregoing pages authorize the conclusion that our acquisitions on cancer within the last half century, amount only to a more exact notion of the tissues of cancer, obtained by a closer attention to pathological anatomy—to a more exact analysis, which has excluded tumors of another nature—to the rejection of unfounded hypotheses, and to a more certain diagnosis in some cases—but that very little has been added to the treatment.

Treatment of Cancer by Compression.

I will now notice a mode of treating cancer, which, although not essentially new, has recently obtained such favor in Paris, as to deserve attention—it is pressure of the tumor, with the view of producing atrophy. In 1829, M. Recamier published two volumes entitled "*Recherches sur le Traitement de Cancer par la Compression.*" The first volume presents a history of sixty-two cases of cancer of the breast, a summary of which is given in the following tables.

Table 1st.—Of 62 cases of cancer of the breast,

5	"	were not treated.
11	"	palliatives only.
45	"	treated with hope of success.

Table 2d.—Of 45 cases treated with hope of success,

30	"	were treated by compression alone.
4	"	compression and cauterization.
5	"	compression and extirpation.

Table 3d.—Of 30 cases treated by compression,

10	"	cured.
4	"	almost cured.
4	"	less advanced in treatment.
6	"	have less favorable chances.
4	"	have obtained slight advantages.
2	"	not any benefit.

Table 4th.—Of 4 cases treated by compression and cautery,

2	"	cured.
1	"	nearly cured.
1	"	received temporary benefit.

Table 5th.—Of 5 cases treated by compression and extirpation,

3 “ cured.
1 “ relapsed.
1 “ dead.

Table 6th.—Of 6 cases treated by compression, cautery and extirpation,

5 “ cured.
1 “ dead of another disease during treatment.

General summary.—45—curative treatment.

20—cured.

15—under treatment.

10—treatment failed. (Two of these ten died of other affections.

Cause.—16 Blows.

39 No local violence.

5 { Other cancerous per-
sons in same family.

2 { Blows, and suspected
hereditary causes.

Age.—Less than 12 years, 1.

Between 20 and 30, 3.

“ 30 and 40, 15.

“ 40 and 50, 22.

“ 50 and 60, 16.

“ 60 and 70, 4.

“ 70 and 80, 1.

Side affected.—25 Right side.

35 Left side.

2 Both sides.

Relapses after extirpation, 11.

“ after Recamier's treat-

ment, 1.

Complication of secondary engorgements.—In axillary region, 21.

Sub-clavicular, 4.

Super-clavicular, 3.

The treatment by compression was adopted by Sir Charles Bell at the Middlesex Hospital in London, probably in consequence of the statements of M. Recamier; but Sir Charles reported to the Medical Committee that it was not entitled to confidence. M. Recamier stated in reply that if compression was unsuccessful at the Middlesex Hospital, it was because it was not properly exercised nor modified, according to the stage of the disease. I have been at some pains to ascertain from Paris the manner that M. Recamier would prescribe, a summary of which is as follows. He employs layers or disks of agaric cut smoothly, and placed over the scirrhus tumor. These he retains on the part by bandages of flannel, without seams or selvages, rather more than two inches wide, and eight or nine yards long. He places a disk of agaric on each breast, and then several additional ones on the one affected with scirrhus, placing them so that the centre of pressure may fall on the most prominent part of the tumor. When this last is very prominent, the disk of agaric must be thick, and vice versa. The pressure of the bandage cannot be borne by some patients, unless it be very skilfully applied, perfectly equal over the whole surface. “ Elle doit être égale, douce, constante, generale, modifiée à mesure que l'affection locale se résout, et continuée après la résolution de l'engorgement—une compression inégale devient promptement douloureuse; l'appareil se relachant ou blessant après un certain temps, il est nécessaire qu'il soit renouvelé souvent, tous les jours s'il n'y a pas d'ulcération, et deux fois par jour s'il y en a.”

M. Cayol, who was a professor in the Faculty of Medicine in Paris,

in 1829, published a learned treatise on cancer in 1832, in one volume. To this is added an Appendix entitled "Progress of Science with regard to Cancerous Diseases, &c." Here the author gives an account of Recamier's method of compression, and he declares it to be a conquest in therapeutics which should be placed by the side of lithotrity and the preparation of the sulphate of quinine.

Such are the opinions of M. Recamier's method of treating cancer, but respecting which the foregoing dissertation suggests to the reader's mind two difficulties.

1. That its slow operation consumes the precious time in which extirpation offers its best chance of success.

2. That however skilfully applied to the patient, even by M. Recamier himself, bandages will never press a cancerous diathesis out of her system.

SPINAL IRRITATION—MASTURBATION—CHOLERA INFANTUM.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—I have often desired and sometimes designed to make an attempt to communicate something to the members of our profession through the medium of the Journal, but perhaps an ideal lack of time, and probably real want of ability, has hitherto prevented; and nothing but a sense of paramount obligation, urges me to make this communication. In the statement of the following case, a desire of information as to the efficient treatment is my sole object; and I must be permitted to indulge a strong hope, that any members of the profession who feel themselves qualified, will, on reading it, delay not to reply, that the editor may publish what he shall deem most likely to subserve the interest of the inquirer and his patient.

The subject of this communication, when an infant, had a discharge from the ear for some time, but was ultimately relieved, and continued free for a number of years, until a very hard snowball was thrown against the ear, which produced inflammation, followed by suppuration, and succeeded by ulceration, which has occasionally troubled him ever since. During infancy and childhood he was occasionally afflicted with painful, but free micturition, which followed him through adolescence and puberty—has given him great anxiety lest the disease should terminate in stone, as he believed it to be gravel.

At the age of about nine, he commenced a labor that required some lifting of burdens, thought to be too heavy for his strength, and was supposed to sprain his back, which rendered it difficult to rise from stooping, especially with any considerable weight. During all this time, however, he enjoyed very tolerable health, with the above exceptions. When about seventeen, he entered an attorney's office as clerk, and remained, I should think, about one year, when he left some six months to attend to other business, and then returned and read a few months, but found it again necessary to leave by reason of a spinal irritation. Medical treatment restored him so far that in about four months he thought proper