

"Body much emaciated. Numerous small ecchymoses over abdomen and lower extremities, skin dry, dull grayish-yellow color. Abdomen distended with six or eight quarts of bloody serum. Peritoneum, visceral, and parietal, was studded over with small, firm, whitish nodules. Omentum and mesentery greatly retracted; the intestines, stomach and pancreas were united in a firm mass by adhesions. The stomach appeared like a firm tube, dilated to the capacity of two ounces at the cardiac extremity, both orifices free from disease. Its inner aspect showed an extensive villous growth on a hard base, this being most marked in the middle third of the organ. Liver contained numerous nodules of secondary cancer. Spleen, kidneys, and lungs normal."

The diagnosis of cancerous disease within the abdomen was obvious from the pain in that region and the progressive and rapid failure of strength and flesh. It was also supposed that the stomach was implicated from the occasional vomiting, and the occurrence of hematemesis, twice, although in very small amount; but as there was no tumor in the epigastrium, and as the vomiting did not appear to be caused by the presence of food, it was concluded that the orifices were free from disease, as the autopsy proved. There was no evidence of peritonitic or hepatic disease, the abdomen being soft, free from tenderness, and containing no tumor, and there was no jaundice.

CASE IV. *Cancer of Intestine, Uterus, and Ovaries.* June 23, 1885, I saw at Lawrence, with Dr. C. W. Chamberlain, a widow, fifty-eight years old, who had never borne children. Previously healthy, her present sickness began early last winter with pain in the right hypochondrium, vomiting after eating, constipation and flatulence. These symptoms increased moderately until February, after which they became more severe. The vomiting occurred only at intervals of several days, was usually violent, but could be somewhat controlled by careful diet. The pain was generally caused by food, especially sweet things, and never by hot food, and it was always relieved by vomiting. The constipation was not urgent, and yielded to laxatives. There was no hæmorrhage from the stomach or bowels. She never had any symptoms referable to the uterus or ovaries. There was progressive emaciation and failure of strength. She was able to drive out almost daily until June 16th, when she was taken with vomiting, and went to bed, which she never left. She continued to fail, became delirious and lethargic, and died July 18th. Nothing special was elicited by examination of abdomen.

At the autopsy the stomach was found somewhat dilated, the walls extremely thin, the muscular tissue apparently gone, the mucous membrane in places quite reddened; but there was no structural disease. There was a thickening of the bowel three feet below the pylorus, with stricture admitting a blow-pipe a quarter of an inch in diameter, forming a small tumor three-quarters of an inch in length, and less than an inch in diameter, too small to be felt by external palpation. Both ovaries were enlarged to the size of small mandarin oranges, containing cancerous deposits, and cysts out of which a molasses-like fluid came by puncture. There were also cancerous masses in the uterus, the organ not being enlarged, but in a state of senile atrophy.

In this case, also, the diagnosis of malignant disease in the abdomen was inferred on account of the progressive failure of flesh and strength, although no in-

formation was afforded by physical examination, and the rational symptoms furnished no definite indications of local disease. The stricture of the intestine, probably malignant, gave rise to thickening of the walls of the bowel, but the tumor was too small to be detected by palpation. Even the enlarged ovaries were not felt, although it is possible that a vaginal or rectal examination might have revealed the existence of disease in the pelvis, had there been anything in the symptoms to direct attention towards it.

### SOME POINTS IN THE TREATMENT OF SYPHILIS.<sup>1</sup>

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It is nearly twenty years since Sigmund (Wiener Med. Wochenschrift, Nos. 43, 44, 46, 53, 1867) demonstrated the fact that cauterization of the point of inoculation of syphilis, if done within three days from the time of inoculation, was competent in many cases to prevent the development of the malady. A step further in this direction is the prophylactic destruction or excision of the initial lesion itself, and although sporadic attempts of this kind had been previously made, it was not until ten years afterward that marked attention was drawn to the subject, by Auspitz's publication of thirty-three cases<sup>2</sup> in which the initial lesion of syphilis had been excised, in the hope of thereby preventing any further manifestation of the disease. The interest in the subject awakened by this communication of Auspitz has not since been suffered to expire, the question having been under discussion at the last International Medical Congress, and apart from its theoretical interest, it is possessed of practical importance sufficient to render it worthy of careful consideration.

Many of the younger German writers, convinced that the primary lesion of syphilis is entirely local in its nature and merely the nidus, so to speak, from which further infection of the system takes place, insist upon the possibility of arresting the progress of such infection, by early and thorough excision of the initial lesion before the development of inguinal buboes, and as evidence in favor of this view, they give the details of cases in which such excision has been performed with the desired result. Not a few are also of the opinion that in those cases where the removal of the primary lesion fails of preventing the progress of the disease, and such cases are in the very great majority, its further manifestations are of milder and more evanescent character than usual.

Several of the older men among the Germans and all of the French syphilographers, on the other hand, with the single exception of Jullien, believing as they do that the initial lesion is to be regarded as the first symptom of syphilis and that by the time of its development the whole organism is already affected by the disease, deny that its excision is possessed of any prophylactic virtue whatever and produce as evidence many instances in which the earliest possible removal of the initial lesion, under apparently the most favorable conditions, has nevertheless, been followed in due time, by the development of syphilis. They assert that

<sup>1</sup> Read before the Boston Society for Medical Improvement, Dec. 14, 1885.

<sup>2</sup> Vierteljahresschrift für Derm. und Syph., p. 107, 1877.

the apparent success in this direction is explained by the facts, that error in diagnosis gives rise to the excision of lesions not syphilitic in nature, and that incompleteness of subsequent observation affords opportunity for the further manifestations of the disease to escape detection.

Such is the statement of the case. The evidence as to facts is conflicting, the theoretical discussion of the problem, involving as it does, speculation with regard to the nature of the syphilitic virus and the manner of its diffusion through the system, is without definite results and the question is to be regarded as yet unsettled. The only practical outcome of the discussion, thus far, has been to show that excision of the initial lesion is not followed by any bad consequences, when thoroughly done, and with strict attention to antiseptic details. The wound usually heals by first intention and the operation is advisable in suitable cases, substituting as it does, a slight incision which unites in a few days for a pathological lesion, which sometimes lasting for weeks, is a source of annoyance to the patient and of danger to others.

The so-called second period of incubation, of from six to twelve weeks, between the appearance of the primary lesion and the first development of general symptoms, should not as is usually the case, be a period of inaction, but the opportunity should be utilized which it affords, of rendering the patient by suitable hygienic and tonic measures, better able to resist the coming disease. The care of the mouth should receive special attention. The teeth should be put in as good order as possible, by the removal of tartar, the extraction of stumps, and the smoothing down of sharp corners, and the mouth kept in good condition by frequent brushing of the teeth and the use of an astringent and antiseptic wash, since a clean mouth and a sound mucous membrane are the best safeguards against the development of salivation and the formation of mucous patches.

As to whether general specific treatment should be employed during the second period of incubation, there is difference of opinion.

Among others, Professor Neisser<sup>3</sup> of Breslau, discoverer of the "gonococcus," a firm believer in the bacterial nature of the virus of syphilis and in the local character of its initial lesion, is an ardent advocate of the early employment of general specific treatment, on the ground that the sooner the microorganisms in question are subjected to the bactericidal influence of mercury, the better for the patient. The usual custom and I think the proper one, is to wait until the appearance of general symptoms before the employment of general specific treatment. The reasons given by Kaposi for thus waiting are, *first*, that the diagnosis is never established beyond a doubt, before the development of the so-called secondary symptoms; *second*, that general specific treatment, although it delays does not prevent their development, and *third*, that when these symptoms develop under such conditions they are apt to be of a deeper seated and graver nature than is otherwise the case.

There may exist, however, exceptional conditions which render it advisable to depart from the usual custom, and this is the case when the initial lesion is in such a position and of such a character as to threaten the impairment of function or serious disfigurement. It was shown in Sigmund's clinic that the

initial lesion, and in fact, any specific lesion will yield more quickly to a combination of local and general treatment than to either of them alone, and therefore, in cases where it is necessary to arrest as much as possible its development, general as well as local treatment may be employed.

Experience has taught, and experiment<sup>4</sup> demonstrated the fact that irritation of the skin and mucous membrane in persons affected with syphilis, more especially in the active stages of the disease, is competent to favor the development and promote the growth of specific lesions. Want of cleanliness is one source of irritation, and the lack of care which will cause balanitis in a healthy person, may in one suffering from active syphilis give rise to the development of mucous patches. The necessity, therefore, of strict and continuous attention to the cleanliness of the various accessible cavities and outlets of the body and to the integrity of cutaneous surfaces which are in contact with one another, should always be impressed upon the patient.

The importance of hygiene and tonic remedies in the treatment of syphilis can hardly be overstated. With their aid alone, a patient possessed of a good constitution may recover from the disease; without them, the most energetic specific treatment may be of no avail, a fact occasionally demonstrated by some wretched syphilitic, who saturated with mercurials and iodide of potassium derives no benefit therefrom, but is a living reproach to his physician and burden to himself, simply from want of pure air, nourishment, and tonics. Besides paying careful attention to the nutrition and habits of the patient, it is always well to give iron in combination with mercury in the active stages of the disease. Of the other so-called tonic remedies quinine and cod liver oil are the most useful, to be given as indications for their employment may arise, debility and malnutrition being very common developments during the course of syphilis.

With regard to the employment of specific remedies, it is not uninteresting to remark how short a time it was after the general spread and recognition of syphilis during the last two years of the fifteenth century, that mercury was used in its treatment. In a treatise upon "le mal Français" by de Vigo, published in the year 1514, there occurs the following devout recognition of the merits of this drug: "Of all the remedies for syphilis, mercury is the best, and be it well understood that I refer only to those remedies which have been employed up to the present time. For perhaps the future reserves discoveries which we cannot now foresee, some genius may arise, and happily inspired for the good of suffering humanity, may reveal to us a remedy alone more potent than all others, and this by the grace of Almighty God, who alone heals our miseries and of His infinite mercy, bestows upon us health of body and soul," and in a book entitled "Nouveau carême de pénitence" published in the year 1527, there is an entertaining dialogue between Mercury and Guaiacum, representing a discussion between them as to their respective merits in the treatment of syphilis, in which the palm of victory is awarded to mercury.

As to the administration of mercury, to which drug the remarks of de Vigo are as applicable to-day as they were three hundred and seventy years ago, the

<sup>3</sup> Deutsch. Med. Wochenschrift, Nos. 1 and 2, 1884.

<sup>4</sup> Tarnowsky Reizung and Syphilis, Vierteljahresschrift, f. Derm. und Syph., s. 19, 1877.

opinion of those most competent to judge, is that the cutaneous inunction of the drug contained in an ointment is the most efficient method and I think that any one who has seen much of its use in this way, will be of the same opinion. The daily inunction of mercurial ointment is the most troublesome, dirty, public, effectual and trustworthy method in which it is possible to administer mercury in the treatment of syphilis. Besides efficiency, it possesses the merit of sparing the stomach the infliction of being dosed with the drug, which is nevertheless, introduced into the system to the best advantage, inasmuch as it is brought into direct contact with the cutaneous manifestations of the disease. The immediate application of mercury to syphilitic lesions is much more rapid and thorough in curative action, than if the drug is obliged to meander through the circulatory apparatus in order to reach its destination. The inunction of mercurial ointment, however, sometimes irritates the skin to such an extent as to give rise to the development of so-called mercurial eczema, which is not eczema at all, but pustular folliculitis, and in certain cases, this irritant action renders its employment impossible. Of late years the oleate of mercury has been extensively recommended as a substitute for mercurial ointment, but with regard to this preparation, I can only say that I have repeatedly used it, both for purposes of general inunction and local application, always to find it decidedly inferior in efficiency to mercurial ointment, so much so that I have abandoned its use altogether in the treatment of syphilis.

Notwithstanding the fact that in ordinary cases the employment of mercurial inunction is for various reasons often impracticable, and indeed not necessary, it is well to remember that where energetic and radical action is wanted, it is the most potent remedy which we can employ.

For the internal administration of mercury, the pill form is the most convenient, and I know of no better preparation for use in this way than blue mass combined in a pill with sulphate of iron or quinine, as recommended by Bumstead. It is efficient, and may be given for a long time without causing irritation of the alimentary canal, being much less likely to do so than other preparations of the drug, such as the bichloride or protiodide. It is needless to say that salivation should always be avoided during the administration of mercury for the treatment of syphilis.

The other specific remedy which we have at our command, namely iodide of potassium, possesses the most astonishing power to relieve cerebral and osteoscopic symptoms in the early stages of syphilis, and a more curative and not less striking action in the advanced periods of the disease, but the point I wish to convey with regard to it, is that however wonderful and rapid its action, it is not curative in the same sense as that of mercury. One does not cure syphilis with iodide of potassium alone, and by cure I mean, to prevent return of the disease as well as to relieve its symptoms. If a patient is in need of iodide of potassium he is also in need of mercury, and the enormous doses of the former drug which are sometimes required to relieve symptoms, would not I think, be necessary, if mercury were always administered at the same time. In the grave cases of cerebral syphilis, occurring in the early stages of the disease as well as in older syphilis, where iodide of potassium is of such value, mercury should not only always be combined

with it but continued after the symptoms have disappeared and the iodide of potassium discontinued.

As has already been said, not only do these specific remedies act upon the lesions of syphilis when introduced into the circulation but their action is very much more rapid and effectual when placed in contact with such lesions, and wherever it is possible, it is also advisable to do this in addition to general treatment.

The initial lesion, mucous patches, which deprived as they are of protective epidermis are the most contagious of specific lesions, so-called psoriasis palmaris, and all localized cutaneous manifestations, are particularly suited to local treatment and should in all cases, receive it. The initial lesion itself, which should be treated until all traces of induration completely disappear, and localized cutaneous lesions, as a rule, are best treated by the application of mercurial plaster, which is composed of equal parts of soap plaster and mercurial ointment thoroughly mixed and spread upon cloth. This plaster possesses enough adhesive power to retain it in place, is thoroughly efficient and easy of application. Mucous patches on the tongue and mucous membrane of the mouth should be touched daily with the stick of nitrate of silver, tincture of iodine, or a five per cent. solution of chromic acid in water, which latter I have found to be entirely trustworthy in its action. An excellent application to mucous patches in other parts of the body, is iodoform dissolved in ether, in the form of spray, the iodoform being in this way most intimately applied and in an extremely fine state of subdivision. It goes without saying that before the local application of remedies, any crusts or secretion which may cover the lesions to be so treated, should always be removed. The lesions of so-called psoriasis palmaris sometimes persist with extraordinary tenacity, and it is a good plan, in their local treatment, to thin down the thick epidermis which covers them, by the use of salicylic acid plaster before the application of mercurial plaster. This matter of the local treatment of all accessible specific lesions is worthy of more detailed attention than is usually paid to it.

The last point which demands consideration is with regard to the continuation of specific treatment after the disappearance of symptoms. The assumption of its necessity, which forms the basis of the well-known method of intermittent but long continued administration of small doses of mercury, so strongly advocated by Fournier, has received striking confirmation by some recent investigations of Neumann<sup>5</sup> upon the histological changes which occur in the cutaneous manifestations of syphilis. He finds that "with the disappearance of the macroscopic or clinical symptoms of the disease, in no sense do its pathological products also disappear, but that even eight months afterwards there still remain in the skin and its appendages, pathological products in the shape of specific exudation cells, which are to be detected only by the use of the microscope." Commenting upon this fact, he says, "Fournier and others are not so far wrong in retaining patients in observation and under treatment for more than a year's time."

There is good reason for adopting this view of the question, and it is unfortunate that we have no means of telling how long such subsequent treatment is necessary in any given case. The rule of two years after the disappearance of all symptoms, adopted by Fournier, is entirely arbitrary and based upon the results of his great experience. Syphilis, when properly treated

<sup>5</sup> Vierteljahresschrift für Derm. und Syph., 2 Heft., s. 209, 1885.

can be cured, and the word is used advisedly, in the great majority of cases. Cleanliness, hygiene, tonics, and specific treatment, local as well as general, are the cardinal points of such treatment, in the carrying out of which it is well to bear in mind that, as Dr. Wigglesworth well remarks, "It is rarely sufficient to lay down general rules, in the foolish hope that the average patient may possess by instinct, the knowledge which the physician has been years in acquiring. Minute details are to be taught and to be enforced by frequent supervision."

### A NEW SURGICAL DRESSING FOR WOUNDS.

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REPAIR of injuries takes place most rapidly and completely where the process of nutrition is interfered with the least. Inflammation is always a destructive process and always to be avoided, and never to be invoked in parts where we desire repair to take place. Excess of blood beyond what the nutritive process can utilize, interferes with normal repair. Excess of any portion of the blood acts in the same manner. Consequently effusions of serum in the wound or beneath the united surfaces must necessarily prevent the nutritive process from being completed in the shortest possible time. The germ theory has, in my opinion, no place as applicable to vital tissues. It is only when morbid products, or products capable of becoming so, are allowed to remain in or around such tissues that the influence of "germs" are appreciably noticed. Hence, wounds that have been thoroughly cleansed and are kept so by absolutely thorough drainage, cannot and do not take on unhealthy, suppurative action. By thorough drainage I mean not only deep (underdrains) but superficial drainage. In all cases there must be a certain amount of vascular tension due to needle wounds and strain upon the tissues by tying or twisting sutures, and for a period (varying in time in different cases) a certain amount of effusion of serum in the parts in immediate contact, and whatever will best accomplish drainage from this portion of the wound tends to prevent decomposition in the superficial wound itself.

Mr. Samson Gamgee, in a recent address on wound treatment before the Birmingham Medical Institute, said:—

"Clinical observation and histological research concur in proving that repair is an extension and adaptation of the physiological process of nutrition, against which nothing militates more powerfully than does any cause producing vascular excitement or stasis.

"That the essential fact in Chassaignee's system was the employment of drainage in evacuating purulent collections, but the method has been gradually and most beneficially extended to the *prevention of suppuration*<sup>1</sup> by carrying off serous effusions. These, if retained, are liable to decomposition, and by mechanical tension and nerve irritation are potent causes of *inflammation*, which is *opposed to healthy nutrition and repair*, and is the prime factor in the chain of pathological events leading to blood poisoning and death."

Experience has demonstrated that, however carefully we may apply our drainage tubes to the deep portions

<sup>1</sup> Italics mine.

of the wound (underdrainage), we find often times, more or less swelling of the edges of the wound, and, if sutures are retained more than two or three days, inflammation and suppuration take place, with failure of primary union, or at least some suppuration at the suture holes. The stasis and tension, due to strangulation of the tissues by the sutures, produces an amount of effusion sufficient to become a focus for decomposition and inflammation. In short, while we have provided for underdrainage, we have omitted to properly provide for *surface drainage*.

Within the past year it occurred to me that if glycerine could be properly applied, we had the desired factor for the production of surface drainage. The well known property it possesses for draining and depleting tissues is demonstrated by every gynecologist who is daily using it for vaginal packs. Its strong affinity for water causes the rapid exosmosis of serum from the vessels with which it comes in contact, and at once relieves them of any excess which may exist. Recognizing this property I made the following trials, with the results given below:—

CASE I. W. G. J., age about fifty-five. Operation for extensive varicose veins, cutting down upon vein, ligating with catgut and closing wound. I made at least seven incisions, involving the leg from ankle to six inches above the knee, incisions averaged an inch in length. After sponging the wounds thoroughly with water, as hot as could be borne by the hands, I squeezed out pads of absorbent cotton from the same water, and then saturated them with glycerine and applied them to each cut; over this dry cotton, and bandage over all; no redressing for four days, when all sutures were removed and each cut was entirely healed without even a blush around the suture holes, or a drop of pus. From each pad a large amount of water ran for two days, saturating the bandages even. There was no further trouble from any one of the wounds, so that within a week we were able to put on an elastic stocking.

CASE II. Amputation of the hand on a man seventy-one years of age; caries of bones of wrist; point of amputation four inches above wrist joint. The same course was followed during amputation, and the same dressing applied. At the end of four days, in presence of Dr. John Buzzell, who assisted at the amputation, it was dressed for the first time, and much to our gratification we found the most perfect primary union, without a tinge of redness or drop of any kind of discharge.

CASE III. Amputation of breast in a lady sixty-four years of age. The patient was a very large, fat woman, requiring an extensive wound for removal of the entire gland, at least twelve inches in length. Dressing remained four days, and, on removal, all the sutures were removed, leaving the wound, as each of the others had been, entirely dry, and closed throughout. Not the slightest elevation of temperature occurred or signs of redness about any portion of the wound.

The next cases were three cases of Tait's operation for removal of the uterine appendages, all made within two weeks. Through my own neglect to inform my assistant just how to prepare the pack in one case, it was not dipped in the hot water, but the dry cotton was saturated with the glycerine and consequently it was not so readily taken up by the cotton, and an excess of glycerine remained on the surface. This, by its absorbent power on the skin, with which it came in