

from utter destruction the ganglionic territory within the sphere of the Sylvian artery, however it may fare with the convolutions and the cortex. Not that I should refer the rapidity of the softening process to this cause alone. Large allowance must be made for collateral agencies, for the fever of septicæmia, and for the general depravity of the blood and tissues. Even in our case the constitutional symptoms and the nature of the lesion must be taken into account. The mere site of the mischief in a particular region of the brain is only one item in the reckoning, and in the majority of cases it is only a subordinate item. Lastly, let me ask, will regional diagnosis avail you much in the matter of treatment? I fear not. It availed me nothing, or next to nothing, in my own case. It was there addressed chiefly to the pyrexia and the prostration. What in the world could I do with the embolus? As for the meningitis, I knew nothing of it before death, and, if I had known of its existence during life, no measure of mine would have made the slightest impression upon it.

ON THE TREATMENT OF CANCER OF THE FEMALE GENERATIVE ORGANS BY A NEW METHOD.

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IN the following observations I intend to confine myself to the consideration of the treatment of carcinomatous affections of the generative organs, by a new method which I believe to possess great advantages, though as the experience of this particular treatment extends over a period of only twelve months, sufficient time perhaps has not elapsed, in some of the cases, to enable me to state positively that a permanent cure has been effected. It will be obvious, however, on reading the clinical facts here submitted, that if this ultimatum has not been attained, an amount of relief has been secured to the patients which has not been afforded by any other plan of treatment.

The researches of modern pathologists have done much to elucidate the nature of cancer, and have at least reduced to their anatomical elements changes of structure so singular and complicated that they seemed at one time to defy description. To define the histology and morbid anatomy of cancer does not come within the scope of this communication. There are certain facts of cancer which are obvious and indisputable—namely, that it is a definite morbid growth, possessing, among other qualities, rapidity of development, never retrogressive, but having an almost certain tendency to invade, step by step, each surrounding texture, without any distinction, extremely prone to recur on removal by operation or caustic agencies; very liable to attack distant organs, and invariably culminating in a fatal issue. This general description applies notably to cancer of the female generative organs, perhaps the most painful and frequent of all the forms of this disease which affect the human system. The patient's sufferings are aggravated by the knowledge that her disorder is pronounced by the medical adviser to be incurable; she lingers under the double torment of excruciating physical agony and mental depression, and the utmost that can be done by the medical attendant is to afford her the tenderest sympathy while deadening the anguish of the patient by the judicious use of sedative remedies. Divergence of opinion has existed as regards the curability of true cancer, probably ever since medicine has been studied as a science. On the one hand, those who deem cancer to be incurable urge that the infecting character of the disease, its multiple manifestations, its recurrence, and the cachexia which it induces afford incontestable proof of its incurable nature. The advocates of the theory of the curability of the disease deny the absolute fact of primary cancerous infection, and in support of their view quote cases which, after treatment, have not suffered relapse. Opinion, while deserving serious examination, does not carry conviction, but facts plainly and truthfully narrated, and corroborated by independent testimony, will always be received by the profession without prejudiced scepticism,

and with an earnest determination to test their validity. Impressed with these views, fortified with a consciousness of the importance of the clinical investigation which I have made during a long period as to the curability of cancer, I venture to submit to the profession my most recent experiments, in the hope that suffering humanity may at least be benefited by their publication.

As the result of an extended trial of a large number of remedies, both general and local, in the endeavour to cure cancer, the conviction forced itself upon my mind that a remedy for this disease must be one to be administered internally, and that it must be of such a nature as not to interfere with the functions of the special organs, or otherwise to injuriously affect the nutrition of the body, and that it must also be capable of being administered for a length of time sufficient to effect the removal of the disorder. A large number of remedies for the cure of cancer mentioned by various ancient and modern authorities, as well as some hitherto untried, which suggested themselves to me, were employed empirically, but they failed to produce an appreciable effect in curing or arresting the disease. At length, after a careful study of the pathology of cancer, and the effects of certain carbo-hydrates administered internally, it appeared probable that a remedy for cancer might be found amongst them. A list of those apparently most eligible was made, but, after studying their therapeutic properties, it became obvious that most of them were unsuitable for the purpose as possessing commonly known specific properties, as well as exciting a special action on certain structures and organs of the body. Besides, their administration could not be expected to be sustained for a sufficient length of time, even if they were likely to act on the morbid growth. Circumstances, however, led me to think differently of the Chian turpentine, and I determined to try it on the first opportunity. This soon occurred. A woman came to the hospital as an out-patient, aged fifty-two. She was suffering from scirrhus cancer of the cervix and body of the uterus. Hæmorrhage was excessive, pain of the back and abdomen agonising, and cancerous cachexia well marked. The patient evidently had not a long time to live. The uterus was so extensively destroyed by the cancerous ulceration that its cavity readily admitted three fingers. In such a case it appeared to be justifiable to attempt to relieve the sufferings of the patient, even if the remedy should produce unfavourable symptoms, or should prove of no avail. I therefore prescribed Chian turpentine, six grains; flowers of sulphur, four grains; to be made into two pills, to be taken every four hours. No opiates were prescribed or lotion used. No change was to be made in her diet or occupation. On the fourth day after taking the medicine the patient reported herself greatly relieved from pain, and was in better spirits, but she complained of a large amount of discharge. It was feared that she referred to a discharge of a sanguineous nature. On examination, however, the vagina was found to be filled with a dirty-white secretion, so tenacious as to be capable of being pulled out rope-like, and this although she had syringed herself three hours previously. The os was quite contracted and would now scarcely admit the finger, and the surrounding swelling or cancerous infiltration of the cervix was much reduced. On the twelfth day the thick tenacious secretion had almost disappeared, and was succeeded by a somewhat copious serous fluid. The os was not so firmly contracted, but would only admit the finger. The patient's general health was improved and the medicine well tolerated. Sixth week: I ordered her a quinine mixture, in conjunction with the turpentine, but sickness supervened, which ceased on omitting the quinine. Twelfth week: My notes are—the parts feel ragged and uneven, and do not bleed on roughly touching them. The speculum shows several cicatricial spots. The turpentine has been taken regularly during the day for twelve weeks every four hours, during which time she has been almost free from pain and has had no hæmorrhage; no glandular enlargement; general health improved. Walks easily to the hospital, being about a mile distant. As the patient did not come again to the hospital her address was obtained, and it was ascertained that she had left her residence. Being a widow she could not afford to keep her home, and she went to reside with her married daughter in a northern town; but left no address. The case showed that the medicine was one of great power in cancer of the uterus, and it is to be regretted that an opportunity was not offered for fully carrying out the treatment.

Another patient, aged thirty-one, suffering from cancer of

the os and cervix uteri, was treated concurrently with the one just mentioned. These parts were enlarged from carcinoma to the size of a hen's egg. The os was dilated, and the cavity of the cervix was filled with epithelial growths, which bled freely on examination. Sacral pain was very severe, and hæmorrhage had been continuous for the previous six weeks. The Chian turpentine and sulphur were given as in the previous case. The patient again attended at the hospital on the seventh day after taking the medicine. She was in excellent spirits, and expressed her gratitude for the relief afforded her. The medicine entirely relieved her pain. She had increased white discharge. On examination the os and cervix were found to be nearly of the normal size. The os was patulous, and its surface was studded with flabby shot-like eminences, which did not bleed on roughly rubbing them. I said to her, "You are better; you must continue the medicine." She answered, "I should think I must, for I could not do without the pills; they have eased me so very much." She continued to improve, and on the fourth week she expressed herself as quite well. I impressed upon her the necessity of continuing the medicine, and told her to see me occasionally. She did not come to the hospital again for four months, when she brought another patient to consult me, believing that she was suffering from cancer. I reproved her for leaving off attendance at the hospital. She answered that she thought it unnecessary, as she had continued quite well. On this visit she submitted to an examination. The os was rough and irregular, but was of nearly the normal size; no signs of cancerous infiltration; the periods were regular, and not profuse, and were unattended with pain; there was slight leucorrhœa. This case was a most remarkable one. The turpentine acted upon the growth with great vigour, literally melting it away in the brief period of four or five weeks.

The third case was one of epithelial cancer of the os, cervix, and body of the uterus, in a woman, aged fifty-two years. The vagina was not involved. The mass was larger than a cricket-ball, almost filling the vagina. The border of the os was three-quarters of an inch in thickness, forming a ring of two and a half inches in diameter, through which protruded an epithelial growth, principally proceeding from the anterior wall of the uterus, and projecting about two and a half inches into the vagina. The case was sent to the hospital for my opinion by my son, Mr. Langford Clay, who had attended the patient but a short time. The journey to the hospital fatigued her very much, and she declared that she could not come again, and that she did not wish to remain as an in-patient, believing that she could not live many days. She had repeated hæmorrhages, had much pain, and had the cancerous cachexia well pronounced. My son volunteered to attend her at home, and I agreed to see her occasionally with him. I thought it advisable as an experiment to vary the treatment somewhat, and ordered to be added to the pills one-sixth of a grain of the ammoniated copper, as from the large mass to be acted upon I thought that an astringent should be superadded to the turpentine. The dirty-white tenacious discharge appeared and continued for the first five weeks, but there was no hæmorrhage after the first examination. The swollen os uteri and the cervix beyond were the first to show signs of diminution; this was noted on the fourteenth day. The tumour, however, was rough and shrunken, and did not project so much. Sixth week: The surface of the tumour was at the level of the os uteri, and seemed to consist of a mass of bloodvessels which bled moderately after examination. This condition occasioned me some surprise, as three weeks previously the patient was ordered a lotion made with perchloride of iron, with a view to arrest hæmorrhage, since from her anæmic condition it was feared that the loss of a moderate amount of blood would be followed by serious consequences. I asked her what kind of syringe she used with the lotion. She replied, "I thought the lotion was merely to bathe the external parts." This, as it happened, was very satisfactory information, as it showed that the lotion had no share in the reduction of the mass, which now was scarcely half the original size. She was supplied with a syringe for the purpose of applying the lotion, and after using it three days the mass of vessels had considerably shrunken, and no longer bled on manipulation; but the surface of the growth had the touch and appearance of a gangrenous mass, but there was scarcely any fetor. The patient now complained of gastrodynia, with colicky pains in the bowels, but she had no diarrhœa or vomiting. I believed this to be due to the copper, and it was consequently

discontinued. It also occurred to me that the turpentine might not be efficiently digested in the solid form, and that it would be better if the remedy were administered in a state of minute subdivision, as in the form of an emulsion. An ethereal solution of Chian turpentine was prepared by dissolving one ounce of the turpentine in two ounces of pure sulphuric ether (anæsthetic). The ether dissolved the turpentine instantly. This solution was given to our skilful dispenser, Mr. Whinfield, with a request that he would prepare a pleasant mixture or emulsion from it, and after a few trials he prepared one which is not unpleasant to take, according to the following formula:—Solution of Chian turpentine, half an ounce; solution of tragacanth, four ounces; syrup, one ounce; flowers of sulphur, forty grains; water to sixteen ounces: one ounce three times daily. This form of mixture was given to the patient, and was much liked. She has now taken the turpentine for thirteen weeks uninterruptedly. The os uteri is a little more than one inch in diameter, and feels like a ring of cartilage about a quarter of an inch in thickness. The tumour has nearly disappeared, and the finger can be introduced posteriorly into the uterus for more than an inch. The general health has much improved, and she is quite free from pain and looks cheerful, and is becoming stouter. No sedative whatever has been given during the treatment. Fourteenth week: She complained of severe "cramp-like pains" in the back and lower part of the abdomen, which she attributed to the mixture, and in consequence it was discontinued for a few days, and an opiate given, by which she was greatly relieved. The turpentine was again resumed. Nineteenth week: She is now fairly convalescent. The growth has almost disappeared, and the parts beyond the os uteri are somewhat hypertrophied, yet are almost normal to the touch.

The fourth case was that of a patient aged thirty-two years, who came to the hospital after having been discharged as incurable from the Women's Hospital. She was greatly depressed, and was most desirous to be cured, for the sake of her family of young children. She has had repeated floodings, and suffered greatly from pain during the past five months. Constipation very troublesome, which probably arose from the opiates she had been in the habit of taking. On examination, she was found to be suffering from epithelial cancer of the os and cervix uteri, but not involving the vagina. There was a cancerous mass of the posterior parts of the os and cervix, of the size of a goose-egg. This growth pushed the os uteri towards the pubis, almost preventing that part from being felt. The turpentine mixture was given her three times daily, and from this period a very rapid diminution of the growth took place, so that by the sixteenth day it had almost entirely disappeared. The os uteri was now *in situ*, admitting the finger readily, and there was the same condition of the vessels as that observed in the preceding case. The lotion with the perchloride of iron was used daily for a few days with excellent effect. In the ninth week the patient suffered from spasmodic pains in the back and abdomen, and as this was attributed to the medicine it was discontinued, and iodide of calcium, in five-grain doses, three times daily, was administered. This was taken for about a fortnight, but, not feeling so well, the patient was admitted into the hospital. The condition of the internal organs was now much the same as before. The iodide of calcium was given, but there was some thickening about the cervix, which was fixed to the vagina. The rectum was excessively loaded, and required several days to effectually relieve it. The Chian turpentine was administered simply; but a lotion was prescribed, containing six grains of white arsenic to one pint of water, to be used daily. Under this treatment the woman very rapidly improved, the pains entirely ceased, and the parts became much reduced in size and more movable. The patient was now anxious to leave the hospital for her home, as she felt quite well; but it was deemed advisable to send her to the Sanatorium instead. She is very active, cheerful, and happy, and may be pronounced convalescent.

Other cases are under treatment, both in the hospital and privately, all showing similar effects. The remedy is now being tried in cancer of other organs, and apparently with good results. One of the most interesting, perhaps, is a case of scirrhus of the breast, which has been under observation for some weeks. Among the other cases are cancer of the vulva, stomach, and abdomen, in which very remarkable benefit has been already produced.

From the results obtained by the use of Chian turpentine,

it may be confidently said that the remedy does exert a powerful action on cancer of the female generative organs in particular, and it will be of advantage to point out some of the conclusions at which I have arrived respecting the efficacy of the drug and the manner in which it should be employed. The oil of turpentine, if it produces any effect on cancer, is inadmissible on account of the speedy production of its specific effects even when administered in small doses. The same remark applies with less force to the Venice and Strasbourg turpentines; in my hands they have not produced the same beneficial effects on cancerous growths as the Chian turpentine has done. The maximum dose of the last-named drug which can be safely and continuously given is twenty-five grains daily. It is advisable to discontinue the remedy for a few days after ten or twelve weeks' constant administration, and then to resume it as before. The combination with sulphur was given at first, and has been continued. It is doubtful whether much benefit is derived from the combination, but the effects have been so uniformly good with it, that it was thought advisable to continue its use. There is every reason to believe, from the trials made with other substances in combination with the turpentine, such as carbonate of lime, iodide of calcium, ammoniated copper, quinine, bebeerine, hydrastin, &c., that the turpentine is best administered simply, as the most marked and rapid effects have always been manifested when it has been given alone.

The turpentine appears to act upon the periphery of the growth with great vigour, causing the speedy disappearance of what is usually termed the cancerous infiltration, and thereby arresting the further development of the tumour. It produces equally efficient results on the whole mass, seemingly destroying its vitality, but more slowly. It appears to dissolve all the cancer cells, leaving the vessels to become subsequently atrophied, and the firmer structures to gradually gain a comparatively normal condition.

It is a most efficient anodyne, causing an entire cessation of pain in a few days, and far more effectually than any sedative that I have ever given. In the cases I have described no sedative was employed in any instance, although in some cases where great pain had existed previously to commencing the treatment, large doses had been given. Whether this arrest of pain arises from the death of the tumour, or, as my son suggests, is due to there being no longer irritation of the sentient nerves (in consequence of tension being withdrawn by the removal of the cells), the fact is the same.

If, after the use of the remedy for some weeks, one of these cases were examined by a stranger for the first time, he would probably conclude that it was one of commencing malignant disease, by reason of the irregularities of its surface. The effect of the remedy being first to remove the cellular structures, any loss of tissue produced by the invasion of the disease cannot be restored, and hence the irregular touch and appearance even after cicatrisation. The arrest of the hæmorrhagic discharge and the remarkable freedom from glandular affections, after a lengthened use of the turpentine, are specially important factors in materially aiding the removal of the cachexia and of improving the general condition of the patient.

Without being in a position to affirm that the Chian turpentine is a positive cure for advanced cancer of the female generative organs, yet however the facts here adduced may be interpreted in this respect, two circumstances are indisputable—one, that all the patients after several months' treatment are living, and that the disease has not advanced as is usually the case, but has retrogressed—in fact, has all but disappeared; and it may at least be safely asserted that when the remedy is steadily used for some time it arrests the progress of the disease, and relieves the pain incidental to the morbid growth in a manner which cannot be said of any other remedy. It is probable that on an extended experience of its use and by variations of the mode of administration, it may prove an effectual cure for this intractable disorder. Patience and perseverance on the part of patient and medical adviser are absolutely required. We know that in some diseases, as bronchocele and syphilis, a long continuance of well-known remedies is often necessary to effect a cure of the particular disorder, and that the administration of the remedies has to be varied from time to time, according to the therapeutic effects produced by the drugs. In cancer, as far as experience has at present indicated, the same alternating method may perhaps have to be employed. Whatever may be the ultimate results there

can be no doubt that Chian turpentine in these disorders is a most valuable medicine. Judging by my experience it is no figurative expression to say that it acts as a direct poison upon the growth, probably causing its ultimate death. In advanced cancer the process of reparation is slow, but if the surrounding structures are not too much involved in the process of destruction, it will seem that a cure may be reasonably expected. It is not that the remedy has failed against the cancer, but that the vital organs are so much destroyed that their complete reconstruction and adjustment of functions are not possible, and life fails in consequence of their mutilated condition. Even under these circumstances, if the cancer does not recur, the efficacy of the medicine is obvious. In the early stages of cancer it may be affirmed that an undoubted cure may take place speedily, and as the contiguous structures are not extensively involved, but little deformity ensues; and experience justifies the expectation that under such circumstances a recurrence of the disease will not follow.

The history of the local treatment of cancer of the uterus is one of singular interest, and is highly instructive to the practical physician. The contrast between the general and local treatment is the more notable, as nothing can be more injurious to the welfare of the patient than an attempt to destroy the cancer by external agencies. The disease is not to be averted by this means, as the symptoms assume a more intense and threatening character, until the patient rapidly sinks. It may be observed that the internal treatment here recommended when used for a considerable period is borne by the patient with remarkable tolerance. As I have mentioned, in some of my experiments I determined, in order most thoroughly to test the medicine, to rely upon this alone. Recently the arsenical lotion has been superadded, and, with no injurious consequences—it appears to act as a disinfectant, and it may produce some benefit by promoting the cicatrisation of the tissues. Several suggestions offer themselves for inquiry as to aiding locally the detachment of the growth, after its vitality has been destroyed; but this is not of much importance, as there seems to be no fear of the blood becoming affected by the absorption of the decaying tissues, the turpentine probably preventing any such calamitous occurrence.

If the practice now described should prove by future experience to be justified, then it will be incumbent upon the medical adviser to treat cancer of the generative organs at an early stage of its development, and it is reasonable to conclude that this dreaded and most fatal disease will no longer be the scourge it has hitherto proved, and that another benefit will have been conferred upon suffering humanity by the resources of therapeutic art.

Birmingham.

ON ANÆMIA AS A CAUSE OF HEART DISEASE.¹

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I SHALL base the remarks that I have to make upon this subject on the following four cases:—

CASE 1. *Hæmorrhage from the Uterus after Miscarriage; Fatty Heart.*—Emma S—, aged twenty-three, was admitted to Guy's under my care on April 26th, 1878. She had always been strong and healthy till her present illness. Three months before her admission she had a miscarriage, and lost a large quantity of blood, and ever since that time she had, at intervals of five or six days, been subject to repeated hæmorrhage, the last on April 20th. She was much wasted and completely blanched. The blood contained some 200 white corpuscles in every field, and the red corpuscles were much diminished in quantity. The viscera were normal except the heart, the action of which was very violent, and the beat diffused and cantering. There was a rough double sound at the base, with a systolic bruit to the left of the sternum. She died very soon after her admission, and at the inspection the heart was found thus:—The peri-

¹ Read before the Harveian Society, January 15th, 1880.