

brawny condition of the skin which I described as indicating a very bad form of the disease. There was a conversion of the glands into scirrhus structure, not a distinct tumour of the breast. She had also signs of disease of the liver and a discharge from the uterus. The woman died, and on examining the breast there was a well-marked scirrhus tumour; in the liver there was an equally well-marked tumour of fungus hæmatodes or medullary disease; and in the uterus that peculiar excrescence to which the late Dr. John Clarke gave the name of cauliflower excrescence of the uterus, and which he describes as a malignant disease. These three diseases, all of which are malignant, and to which different names have been given by pathologists, were associated in the same individual, and the preparations are now in the museum. But I have seen the same disease occur in succession, and I will mention a case in point. When I was a young man I went with Sir Everard Home to perform a private operation. A lady from the country had a hard tumour, apparently in the abdominal muscles, which he removed, and when we came home and examined it, we found that a portion of the peritoneum adhered to it, and that it was a well-marked case of scirrhus tumour. The wound healed very well, but some time afterwards another tumour formed in the cicatrix, and began to enlarge. She came to London again, and put herself under Sir Everard Home. The tumour was now larger than the first he removed. He operated a second time, but this tumour had none of the characteristic structure of scirrhus. I can only describe it by saying it was like the fibrin of the blood, without colour; laminated something like the buffy surface of a coagulum of blood drawn during inflammation and very slightly organized. The wound healed, but after a time another tumour formed in the cicatrix, and she again came to London. It was not thought worth while to remove this, it increased in size, occupied a great part of the belly, and she died. It devolved on me to examine the body, and the tumour now was entirely different in appearance from either of those which had been removed. It was a regular brain-like mass, a medullary tumour, or a tumour of fungus hæmatodes. In the one case three different kinds of tumour existed in the same individual at the same time; in the other three different kinds of tumour showed themselves in succession. So you will sometimes remove a tumour from the breast in various parts of which you have a different structure.

There is a circumstance that ought to have been mentioned in an earlier part of the lecture, but which I accidentally omitted, and which is always to be taken into account whenever you have any doubt as to the expediency of performing an operation. It is very true that a scirrhus malignant tumour of the breast will, if left to itself, generally terminate the patient's life in three or four years, but very often it lasts much longer. I remember a lady of fashion who had a scirrhus tumour of the breast; she mingled in society, and nobody knew any thing about it for several years; I believe ten or fifteen. I remember another lady who had a scirrhus tumour of the breast for twenty-five years, and she died at last, not from dis-

ease of the breast, but from effusion into the cavity of the chest. If you are in doubt about the expediency of an operation, and the disease be in an indolent state, the recollection of such cases as I have just mentioned should be sufficient to incline you to reject the operation. The chances of a patient living long with such a disease are not sufficient to make you throw away the chance of an operation where it is likely to be attended with advantage; but it is sufficient to make you decline an operation when other circumstances would lead you to doubt its propriety.

Care should be taken to distinguish scirrhus and other malignant tumours of the breast from those of a non-malignant character. I consider it unnecessary to call your attention to the diagnosis of different tumours, but I am anxious to impress upon your minds that you must be careful to learn this for yourselves from other lectures. When a practitioner tells me that he has been particularly successful in the operation for scirrhus tumours of the breast, I am always satisfied that there has been a want of accuracy in the diagnosis. I remember a gentleman stating that he had performed this operation ten times, and that the disease had not returned in a single instance. No very experienced surgeon would have made that statement, but I subsequently saw a tumour which this gentleman was going to remove, and it was nothing more than a common chronic abscess of the breast which he had denominated scirrhus.

LECTURE XXVI.

ON THE ADMINISTRATION OF MERCURY IN SYPHILIS.

I SHALL now call your attention to the administration of mercury in cases of syphilis. I shall not enter into detail either as to the mode of its exhibition or the cases in which recourse should be had to it; but I purpose to make some general observations, which, at this time, when so much difference of opinion prevails as to the use of mercury, and there is so much random practice in its employment, may be serviceable to you in the beginning of your profession.

Mercury was used in cases of syphilis very soon after the disease was first recognized in Europe. I believe that from within three or four years after the siege of Naples, where it was supposed that it first broke out, through good report and through evil report, in spite of the too strong prejudices of some in its favour, and of others against its use, mercury has maintained its general reputation in the profession up to this day. At different periods, however, other remedies have been proposed for the cure of venereal disease. The late Sir Wm. Fordyce wrote a pamphlet for the purpose of proving that it was to be cured by sarsaparilla. An army surgeon, Mr. Grant, wrote a pamphlet in favour of opium; another practitioner has cured

it by ammonia, and others have spoken highly of nitro-muriatic acid. Many other remedies have been proposed as a substitute for mercury, which it is not necessary for me to enumerate. In hot climates—Spain, Portugal, the West Indies, and the islands of the Pacific Ocean, syphilis was said to be cured without the aid of a particle of this remedy. But in opposition to what I have just mentioned there was, in the beginning of this century, a prevailing notion that mercury was a specific for syphilis, and that it was never cured without it. The late Mr. Abernethy, in his work on what he terms pseudo-syphilis, lays it down as a rule that syphilis is uniformly progressive if mercury be not administered, and he said of every disease that came before him in which the symptoms improved without the aid of mercury, “this cannot be syphilis.” He gave no reason for this extraordinary assumption—it was a complete *petitio principii*—a begging of the question, and this illogical conclusion, at which he had arrived, was sufficient to destroy the value of this part of his works. Not long after this opinion had been published by him, and was maintained generally throughout the profession, a friend of mine, the late Mr. Rose, who subsequently became surgeon to this hospital, instituted a series of experiments on the subject of the treatment of this disease. He had ample opportunities for carrying these on; for he was surgeon to one of the regiments of Guards, and soldiers associating with the lower orders of prostitutes, I need hardly say are very liable to become affected with syphilis. For one or two years he treated every soldier that came into the regimental hospital, suffering under any form of syphilis, without mercury. I saw these cases, and every now and then watched their progress with him. Every sore upon the organs of generation was cured under his management without the employment of this agent. It is true that many of these sores were not venereal, but many of them were of that character; and the hardness which was left behind disappeared without resort to mercury. Many of these patients never had secondary symptoms which may be attributed to the sores not having been venereal; but in some cases, where secondary symptoms appeared, they were slight, and others severe, exhibiting nearly the usual character, but whatever they were they yielded without this agent. In two or three cases where there was inflammation of the iris, and mercury was necessary in order to save the eye, he employed it. Mr. Rose, therefore, came to the conclusion, which these cases seemed to justify, that the disease was one which would get well even if mercury were not used. Other army surgeons repeated these experiments, and arrived at the same result, and I believe that the disease is now treated in the army to a considerable extent in this manner.

Now, these observations led a certain part of our profession to a view of the subject entirely different from that which they before entertained; and some began to contend that mercury did a great deal of harm, and was in itself a worse disease than the one it was intended to cure. With respect, however, to recovery from syphilis without the aid of mercury, I do not believe that you can apply a rule, drawn from the observation of what occurs in soldiers, to society

at large. We find that the effects of disease in all cases depend very much on the kind of constitution that has to sustain it. Students from the country, on coming here, have frequently expressed their astonishment at the difference in recovery from compound fracture in the hospital and in those places in the country where they have seen it. But here the occurrence takes place in one kind of constitution, and there in another. When the cholera visited London it destroyed 3000 out of more than 1,500,000 inhabitants; in Sunderland it carried off a large proportion of the population; and in Paris I think the mortality was about one in thirty. Here the cholera did not destroy the affluent classes, but those who were ill-fed, ill-clothed, and were breathing a poisonous atmosphere, and they sank under it with great rapidity. So I apprehend it to be with syphilis. Soldiers are men with strong constitutions, and are in good health, otherwise they would not be received in the army. They are not much advanced in life; they are sent to the regimental hospital, and are there kept constantly under the eye of the surgeon, dieted as he pleases, and their general health is attended to in every respect. They are not allowed to be exposed to atmospheric changes of the weather, and, in short, from their constitution and the situation in which they are placed, they may be supposed to have the power of throwing off morbid poisons which would not be thrown off by others. Experience and practice will, I think, fully confirm these observations. I know that in this hospital I have tried to treat syphilitic patients without mercury with very little success indeed, and that in private practice the attempt would prove altogether a failure. Sir Wm. Wimpess, who was surgeon-major to the Coldstream Guards, but who has now retired from service, saw a great deal of syphilitic practice, and he told me that he could manage the cases of privates in this manner, but not of officers. When Mr. Rose entered into private practice he thought that he could apply the same rule there which he had carried out among the soldiers, but he found that he could not, and he was compelled, like other surgeons, to give mercury. In cases where he endeavoured to avoid its exhibition he found that he was continually beset with difficulties.

With regard to the other point I mentioned,—the opinion that mercury very often tends to aggravate the disease instead of doing good,—I know that its injudicious use will do harm, but I am satisfied that that is not the result when it is wisely administered. It has been said that there is no disease of the bones where mercury is not given. I know that in patients who are treated by mercury there is a greater chance of disease of the bones than there was in Mr. Rose's patients, to whom it was not exhibited; and I know that when given for liver complaints and for diseased testicle it may produce nodes. But, admitting this to be true, I am quite sure that syphilis will run on till it produces nodes, by which I mean disease of the bones, even where no mercury has ever been given. I will state a case in point. A gentleman had a chancre which no one doubted to be venereal; he took no mercury and it healed up. I do not remember exactly what symptoms followed, but when I saw him, in consultation with Mr. Rose, a couple

of years afterwards, he had extensive disease of the bones of the nose, which was still advancing; we agreed that the best thing we could do was to put him under the influence of mercury, of which he had never taken a grain, and try whether or not it would stop the disease. He was to be furnished with lodgings in London, for the purpose of going through a mercurial course, but he had a fit of epilepsy, and then another, and that was followed by a third, after which he became maniacal and died. I do not know that there was any post-mortem examination, but neither Mr. Rose nor myself doubted that the disease had crept up the ethmoid cells, attacked the ethmoid bone, and affected the brain and its membranes. I saw another case treated without mercury. A patient had a primary sore, of which he got well, but a few months afterwards there was pain of the limbs, which were considered neuralgic, and by and by there was a node on the skin and another on the elbow. He had never had any disease prior to the chancre, and we could not but suppose that the virus had entered the system, and the secondary symptoms being passed over, had gone at once to the bones. The conclusion of the case was very remarkable; the patient got entirely well with sarsaparilla, no mercury being given.

I am sure that experience proves to me, and it will to you, that we find no remedy having the same power to extinguish venereal disease as mercury, but then it must be not only judiciously administered at the time, but care must be taken that it is only employed in proper cases; it may do great harm if it be improperly used. There is nothing remarkable in this fact. With the exception of sarsaparilla, I do not know of any medicine that will do great good that may not act as a poison. I saw a gentleman very nearly killed by an over-dose of quinine; the same circumstance has occurred from iodide of potassium, and many persons have been destroyed by arsenic. You are not to suppose that you are to administer mercury at random in all cases, but the general rule is that in cases of syphilis it is to be exhibited, and I shall endeavour to point out briefly, not the cases in which you may give it, but the exceptions to the rule.

First of all, there are persons of a certain delicate constitution, of a scrofulous disposition, and who are disposed to phthisis. You would not give mercury to a man of this kind until you were quite sure that it was absolutely essential; nevertheless there are persons of a scrofulous tendency who are best treated by this means. If mercury be an evil, syphilis is a still greater one. In scrofulous persons local diseases are especially developed after the system has been affected by a morbid poison. If they are disposed to phthisis they will have tubercles in the lungs after scarlatina, measles and small-pox; and it is just the same after syphilis. You find enlargement of the glands of the neck take place whenever the system is disturbed by syphilitic virus, and here mercury is not to be exhibited unless you are sure that it is wanted. But if there be syphilis it is better to give it than let that disease take its course; it must, however, be administered with great caution, in moderate doses, and the patient must be carefully watched all the time.

Persons who appear to be in strong and vigorous health are not always good subjects for mercury. Many persons of this description have been living irregularly, drinking a great quantity of wine, and mercury is very likely to disagree with them and produce great mischief. True it is that the poison of syphilis will do the same; it will often produce frightful symptoms and the most intractable diseases; but it is better to put off the use of mercury for some time until you can improve the constitution. If mercury be exhibited under such circumstances you have two evils to encounter, but by withholding it you have only one. If you wait, put the patient on a better system of diet, make him live a more regular life, and attend to the general health in all respects; you may then administer mercury with advantage, and probably cure the case.

There are some persons in whom, for reasons we cannot explain, mercury always acts as a poison. They certainly are few in number, but you cannot tell beforehand who they are, and therefore every person should be carefully watched to whom you administer mercury. Where there is a great deal of inflammation in the neighbourhood of a primary sore it is scarcely ever right to have recourse to mercury in the first instance; for the probability is that it will produce sloughing. You must combat the disease by bleeding, purging, and other means; and it is better to patch up the sore as well as you can, and let the disease go on until it has produced secondary symptoms, than to give mercury to a patient under these circumstances. In cases of phagedenic and sloughing chancre, where the condition of the chancre depends on the patient's constitution, mercury, if given in the first instance, will aggravate the disease, and make it spread more rapidly than it would otherwise do. But there are cases in which the phagedena depends on the intense action of the venereal poison, as I shall hereafter explain, and in that case mercury may be exhibited.

You will sometimes find that in the case of secondary symptoms mercury, instead of acting upon them and curing them, disturbs the general health; the symptoms increase, and the more you give the worse they become. This arises from the patient being in a bad state of constitution, which state of the constitution may depend on causes neither under your control nor that of the patient, but on the patient having taken mercury in an injudicious manner. Under these circumstances you must not continue this agent, but leave it off and he may then recover; nevertheless you may require to revert to it at last. In order to illustrate this observation I will mention a case. A man was brought into this hospital with sore throat, and a phagedenic eruption, having the character of syphilitic eruption, in different parts of the body, in a state of painful ulceration. He looked exceedingly ill, and I found that he had been taking mercury in large quantities, under a private practitioner, for five months. His gums were extremely sore when he came here, and the more mercury was pushed the worse he became; I therefore left it off, and gave sarsaparilla, and in a few months, the eruption disappearing, he left the hospital. But after the lapse of a few months

he came in again with sore throat and ulceration, having taken no mercury in the interval. I gave sarsaparilla a second time, and with the same beneficial effects, but the eruption did not disappear so rapidly as in the first instance. In the course of three or four months he again came in, and the ulceration was again spreading, accompanied with sore throat. I resorted to sarsaparilla a third time, and the symptoms went away, but more slowly than on either of the previous occasions. Towards the conclusion of the time that he was in the hospital he laboured under inflammation of the iris, for which I gave him oxymuriate of mercury, and he got well. Three or four months after this the disease again broke out, the ulceration reappeared and spread, and the sore throat returned. He now went into the Lock Hospital, under the care of Mr. Blair. This was fourteen months after he first came to St. George's; he had taken no mercury during that time, except for the iritis, and Mr. Blair now very properly put him under a course of mercurial inunction, and I believe he was permanently cured. If I had done this when he first came here I should probably have killed him. I might mention a great many other cases to illustrate these observations.

Now, I have said that in the great majority of cases mercury is the best remedy you can employ for the cure of syphilis, but then care must be taken that it is properly and judiciously administered. There are different ways of exhibiting mercury; it may be given internally by pills; it may be used in the form of ointment, or by fumigation. The mercurial preparations that may be given internally are various,—blue-pill, mercury with chalk, calomel combined with opium, Plummer's-pill, iodide of mercury, bichloride of mercury, and some other forms.

I have often given mercury internally in the shape of pills. When you want to affect the system rapidly, as in iritis, pills are preferable, because the mercury affects the system sooner. A patient labouring under iritis is in danger of going blind, and you must remove it as soon as you can. You effect this much sooner by giving calomel and opium than by using mercurial inunction, and in slight cases the disease may be cured by mercury administered internally. There are a good many patients so circumstanced that they cannot take it in any other manner; at other times you are indifferent about the mode of administration; and in some cases you are compelled to give it internally against your inclination. Thus, upon the whole, there are a good many cases in which mercury will be exhibited internally.

But if you inquire which is the best way of giving mercury in cases of syphilis where the symptoms are not of the very mildest character, I must say that mercurial inunction is infinitely to be preferred to mercury taken by the mouth. Mercurial inunction, however, is dirty, laborious, and troublesome, and it makes the case public to the family in which the man lives. For these reasons it will be objectionable to the patient; but it has this advantage, it is much less liable to gripe and purge, and it cures the disease a great deal better. It does not damage the constitution half so much as mercury taken by the mouth; nay, I will go so far as to say that,

except in the very slightest cases, you really cannot depend upon any other means than inunction. You may very often patch up the disease by giving mercury internally, but it will return again and again, and you may cure it at last by a good course of mercurial ointment. But especial care must be taken that this is properly applied. If it be left to a patient he will rub it in for five minutes or so, whereas it requires to be rubbed in before the fire for three-quarters of an hour ere it enters; but by and by the friction may be continued for a shorter period. Where the symptoms are not of the mildest character it is desirable that the patient should, if possible, be confined to the house. Mr. Pearson observed, long since, that going into the fresh air would undo the effect of mercury, and I never will be responsible for thoroughly eradicating the disease where the patient is at all exposed to cold, and where he does not lead a most careful and regular life.

In all cases where you employ mercury you have two objects in view,—first, to cure the present symptoms, and secondly, to prevent their return. It appears to me that at the present day a great number of practitioners keep the first object only in view, and lose sight of the second. I have repeatedly seen persons who have taken mercury for chancre; it has healed in a fortnight, but a hard base has been left, and then in nine cases out of ten there have been secondary symptoms. If it be taken for a primary sore the patient should never leave it off until the hard cicatrix has disappeared. You must exhibit it until the sore has healed, and for some time afterwards; and the same plan must be pursued with reference to the secondary symptoms, or they will return. When the eruption has disappeared from the body it must be used as a prophylactic, to prevent the return of the disease, for probably another month.

I should say that if a patient be confined to the house, or only allowed to go out a little once or twice a day, and if he be made to rub in mercury, and continues it for some time after the symptoms have subsided, the case being carefully watched, you will, in most instances, make a real and permanent cure of the disease. This is not the way in which it is administered by many practitioners now, but it is the mode in which it was done formerly. You must not suppose that we have made an advance in all departments of surgery; on the contrary, I am sure that in some we have gone back. I am satisfied that the mercurial treatment of syphilis as employed by the late Mr. Pearson during a great part of his life, was as nearly perfect as possible, and it was much more successful than the less careful treatment of modern practitioners. Mr. Pearson was surgeon to the Lock Hospital, and having no general hospital to which to attend, the powers of his mind were very much devoted to this disease and to its treatment; and the practice which I have now recommended was that which he adopted. I had an opportunity of meeting him a great deal when I was first entering into practice, and I am satisfied that his mode of treatment was eminently successful. In his work on "Materia Medica," there is an article on syphilis, in which there are many excellent observations on mercury, treating