

The same thing will sometimes happen with an internal pile. The patient has an internal pile, inflammation takes place in it, an abscess forms and bursts externally, and you can pass a probe into the abscess in the inside of the pile. Here, also, the best way is, if the pile be small, to snip it off with a pair of scissors, or if it be not small to tie it with a silk thread round the base, and destroy it by ligature. I may here mention an error into which you will be liable to fall if you be not on your guard against it. When you introduce a probe into an abscess formed in an internal pile it very easily breaks down the slender wall of the abscess, and runs into the cellular substance under the mucous membrane. The cellular tissue offers so little resistance to the probe that it may pass in any number of inches between the mucous membrane and the muscular tunic without your being aware of the circumstance. I remember a case many years ago where a surgeon of great eminence in this town laid open what he thought was a sinus of two or three inches in length into the rectum. I am satisfied, from what I remember of the case and have since seen, that it was an abscess formed in an internal pile, and that what he supposed to be a sinus was neither more nor less than a space he had made himself by running the probe into the loose cellular texture.

It is necessary, in the very great majority of cases, to lay the kind of sinuses to which I have alluded completely open into the rectum; and I presume that it is from the analogy to fistula here that some surgeons have been led to think that this operation was necessary for all kinds of fistulous sinuses. I remember some very good surgeons in this town who used to think it was requisite to open what is termed a fistula in perineo in this manner. There can be no greater error. A fistula in perineo is the same as a fistula in ano, except that it communicates with the urethra behind a stricture, whereas a fistula in ano communicates with the rectum above the sphincter muscle. The fistula in perineo is the result of some of the urine passing in from the urethra, and to lay it open will do no good, for it will not prevent the escape of urine going on. But this may be accomplished by dilating the stricture, and, in nineteen cases out of twenty, all that you have to do is, to dilate the stricture. Generally, by the time the stricture is dilated, the urine, finding a readier passage forward than it does through the ulcerated opening, it will not pass into the latter, and the fistula is usually healed by the time the stricture is dilated. If it be not completely healed by that time you have only to keep the stricture dilated for a considerable period by the introduction of an instrument every day, or every other day, and the fistula in perineo will at last heal. If it be a large opening it will take some months to heal, but still it heals spontaneously. There is only one kind of case in which it is necessary to lay open a fistula in perineo, and that is, where there is a sinus in the perineum into which the urine escapes, but which is so situated that neither the urine nor the matter secreted in the sinus can find egress. If there be a fistula in perineo under these circumstances it may require to be opened.

There are some fistulous sinuses that exist in the groin in connec-

tion with disease in the glands of the groin. Surgeons formerly supposed that these required to be laid open like a fistula in ano. They do require to be opened where matter lodges in them and cannot escape, or, at any rate, a counter-opening will be necessary; for there is no disposition to heal unless the matter escapes as fast as it is secreted; but the mere laying open of the fistula will not cause it to heal, it will only prevent it extending. What hinders the fistula in the groin from healing? The diseased gland at the bottom of it. If you wish the fistula to heal you must destroy the diseased gland, or bring it into a healthy condition. Sometimes it may be necessary to dissect out the gland or to destroy it by a powerful escharotic; but in the greater number of cases, if you attend to the general health, the diseased gland recovers itself; and so soon, and no sooner, will the sinus in the groin heal.

The same observation applies to fistulæ that are connected with dead bone. A fistulous sinus leading down to dead bone does not heal because there is dead bone in the bottom; but if the dead bone comes away then the fistula will heal. It is needless to lay open the fistula to inject stimulating liquors into it, or to do any thing till the dead bone has been removed. All that it is worth while to do is, if matter lodges in it to make a counter-opening by which it may escape.

LECTURE XXIII.

ON FATTY OR STEATOMATOUS TUMOURS.

THERE are different kinds of fatty tumours, but the most common is the following:—The fat resembles ordinary fat, except that it is rather of a more delicate and of a looser texture, and of lighter colour. It is composed of lobules with very thin membranes between them; and externally there is a thin membranous bag in which the whole mass is contained. This bag has a very loose adhesion to the parts in which it is imbedded, but the adeps which it embraces adheres pretty firmly to it.

These tumours, for the most part, form under the integuments in some part where there is naturally adipose structure. You never find them where there is no adeps originally; as, for instance, in the scrotum, the eyelids, or the internal organs. But wherever natural adipose structure exists there this unnatural morbid growth of adipose substance may take place. The tumour is very often not detected when it is of small size. In some instances it remains stationary, but for the most part, being once formed, it gradually increases in size. It generally begins, the patient knows not why or wherefore; but it occasionally seems to originate in some slight injury of the parts in which it is formed. For example, a gentleman was straining to raise

his arm as high as he could, and he felt a sort of snap in the shoulder, and soon after that a fatty tumour appeared over the deltoid muscle. A lady was making an effort with her arm; something snapped, as she thought, in a part of the shoulder; soon afterwards she consulted me, and I discovered a small adipose tumour.

The diagnosis of a fatty tumour under the skin is generally sufficiently simple. There is a peculiar sensation communicated by the tumour to the fingers, which it is difficult to describe in words, but which, when once felt, you will readily recognize afterwards. Sometimes the tumour is elastic, so that you might almost be led to suspect that it contained fluid, but a little practice will, for the most part, enable you to distinguish better. The tumour is generally pretty well defined, it is not productive of pain, it is not at all tender, and gives the patient no inconvenience, except when it attains a large size, and then it is merely troublesome from its bulk. Sometimes, however, the tumour is not situated in the fat immediately under the skin, but is in some more deep-seated situation. This renders the diagnosis more difficult. I remember a lady who had a tumour at the posterior part of the shoulder, and there were various opinions respecting its nature. No one seemed to be quite positive on the subject. On performing the operation for its removal, the trapezius muscle was found lying over it, some fibres of which being divided, out started a fatty tumour. A lady had a tumour of the breast (I am now speaking of what happened when I was almost a student); she was the wife of a medical man, and she had the opinions of four or five of the leading surgeons of that day. One thought that it was fungus hæmatodes, another believed it to be something else, and another could not say what it was. At last it was decided to cut down on the tumour, and then it was found to be a great mass of fat. It was situated under the gland of the breast, which, being of large size, concealed the tumour completely, and being, as it were, lifted up by it, was made to appear a great deal larger than it was.

When a fatty tumour has a deep-seated origin it will sometimes make its way out from under the muscle, a small portion presenting itself externally, while the rest remains concealed. You are led to think there is a very small tumour, but when you cut down upon it you find it to be a large one. This happened to me last week. A patient consulted me concerning a tumour below the axilla. It seemed to be a small fatty tumour, about the size of half an orange, but I could not get my fingers behind it. It was evident that I could not trace its origin, and when I cut down upon it I found it an enormous tumour proceeding from the axilla. It extended far back, apparently into the space between the scapula and the ribs. In fact it was impossible to dissect out the whole of it, and I was forced to tie a ligature in the middle, and cut off the greater part, leaving the rest.

As a fatty tumour increases in size the skin becomes dilated in proportion. When it is of large size a sort of thick fascia is formed over it—such a fascia as is situated over a large old hydrocèle or hernia. In different parts of the fascia there are circular spaces, into which the finger will sink as if it were into the substance of the

tumour. The skin over a fatty tumour very rarely inflames and ulcerates. One might suppose that the pressure of the tumour would produce this effect, but it is not so. I have, however, known inflammation to take place in the substance of the tumour, and an abscess to form in its centre. A very remarkable example of this occurred to me in this hospital. An elderly man was brought in with an enormous fatty tumour on the back weighing many pounds. It had existed a number of years, and hung like a wallet behind. A year or two before he came in inflammation had taken place in the tumour, and an abscess had formed and burst externally. The abscess never healed, but continued to discharge profusely both matter and a sort of oil floating in it. It is worth while for me to mention what happened afterwards in this case. I dissected off the tumour, which was easily done, for it had not a very broad origin, and it was a very slight operation. The wound healed very readily, but when it was nearly closed the patient became very ill. I forget the exact symptoms, but I know that we had none of us any doubt that they arose from the sudden cessation of the profuse discharge of matter and grease from the interior of the tumour. These symptoms, however, subsided, and the patient recovered.

We know of no internal medicine, nor of any local application, that will disperse these tumours, and the only thing to be done is to remove them by the knife. This may be done when the tumour is quite small. I do not, however, generally recommend the operation at this period, first, because the tumour may never increase, and as long as it is small it is of no consequence; and, secondly, because the operation is really more easy when the tumour has attained a certain size. Still, it is better not to let the tumour go to any *very* large size; and for this reason, lest the pressure of the skin should cause it to contract adhesions to the neighbouring parts. Where such adhesions have taken place, the operation is rendered difficult, and you cannot be certain that you do not leave some small portion of it, which may be the nucleus of a future growth. As soon, then, as the tumour becomes large enough to be troublesome from its bulk, then you may dissect it out, and this is a simple operation if you know how to do it, and very difficult otherwise. Make a free incision of the skin, not upon the tumour but into it, cutting fairly into its substance. Do not spare the incision through the skin, but let it extend from one end to the other. Then lay aside your knife, and you will find that with your fingers you can easily separate the cyst that contains the adipose matter from the neighbouring textures, pulling out one lobe after another till at last the tumour remains attached only at one corner, that is at the point at which the vessels run in and out. You have no bleeding in any other part of the operation, but in this last part of it you will generally find one or two arteries which you must secure by ligature. When the tumour is situated under a muscle, the operation is to be performed in the same way, with this exception—that besides laying open the skin, you must freely divide the muscle, cutting across the fibres.

There is another kind of fatty tumour which occurs not very unfre-

quently, but which, so far as I know, is not described in books. It is a deposit of fat, the tumour not being well defined, and there being no distinct boundary to it, so that you cannot say where the natural adipose structure ends, and where the morbid growth begins. I will mention to you one of several cases which I have seen, and which will explain sufficiently what I know of the matter. A man came to this hospital some seventeen or eighteen years ago, with a very odd appearance—an enormous double chin, hanging nearly down to the sternum, and an immense swelling at the back part of the neck—two great tumours as big as oranges sticking out, one behind each ear. The patient stated that these tumours had begun to form three or four years before, and had been gradually increasing in size. They gave him no pain, but they made him miserable, and in fact had ruined him. The poor fellow was a gentleman's servant, and having such a strange grotesque appearance nobody would hire him. I gave him half a drachm of liquor potassæ three times a day, and gradually increased the dose to a drachm. This was taken in small beer. About a month after he began to take it the tumours were sensibly diminished in size. He went on taking the alkali a considerable time, and the tumours continued decreasing. It was just then that iodine began to have a sort of reputation, much beyond what it deserved, for the cure of morbid growths, and I gave him the tincture of iodine. It was curious that while he took the tincture of iodine he lost flesh generally, but the tumours began to grow again. Finding this to be the case, I left off the iodine, and gave him the liquor potassæ a second time. He took an immense quantity altogether, and left the hospital very much improved, being directed to take the medicine for some time longer, off and on. I had lost sight of him for some time, when I happened to be requested to visit a patient in Mortimer-street. I did not observe the servant that opened the door, but as I came down he stopped me in the hall, and said that he wished to thank me for what I had done for him. To my surprise it was this very man. He had gone on taking the caustic alkali for a considerable time, and you may suppose how much he was improved by his being able to get a situation as footman. There were some remains still of the tumours, but nothing that any one would have observed. I have seen some other cases of the same kind, and where I have had the opportunity of giving liquor potassæ it seemed to be of great service. But I have not tried it in every case, and I have been informed that in some other cases it has been tried to a great extent without the same good result.

These tumours feel like fat, but there is no distinct boundary, and they are not so soft and elastic as common fatty tumours. This deposit of fat may take place in any part of the body, but I have seen it more frequently in the neck than elsewhere.

There is another kind of fatty tumour, which also, so far as I know, is not described by writers. A patient comes to you having tumours in different parts of the body, as if there were absorbent glands under the skin. You will find several in the arm, several in the trunk, and perhaps a great number of them altogether. They generally give no

pain, they grow to a certain point, and these do not get larger, but others form somewhere else. They occur in persons apparently healthy in other respects, and are not connected, so far as I have seen, with any other disease. I used to doubt very much what was the nature of these tumours, till at last there being one rather larger than usual in a patient who had several of them, I dissected it out, and it proved to be a fatty tumour; but the fat was of more solid consistence than that belonging to the ordinary fatty tumours, which causes them to give a different feeling to the fingers. They are equally well-defined on the margin. Any one of these tumours that grows to an unusual size may be dissected out without any harm, but there being a great number of them, it would be absurd to think of dissecting them all out. Can any thing be done in the way of medicine? I have given these patients the liquor potassæ in large doses, and certainly in two or three cases with very great benefit. The tumours in one case nearly or quite disappeared under this remedy. I suppose that in those, as well as in the other cases of which I have just spoken, the liquor potassæ acts in this manner; the greasy part of the tumour combines with the alkali, is taken into the circulation, and is thus carried off. It was upon this hypothesis, at any rate, that I was led to give this alkali. Whether it be, or be not, the right explanation, I will not say, but of this I am certain, that the remedy is often a very efficient one. But may the liquor potassæ be taken with safety in such large doses? Indeed it may, if you dilute it sufficiently. You cannot take even half a drachm in two ounces of liquid without its being inconvenient to the stomach, but you may take a drachm and a half in a large quantity of liquid two or three times daily without any harm. The best liquid in which to take liquor potassæ on this and on many other occasions, is fresh small beer. It seems to me to act better in small beer than when it is given in other ways, and the beer does not disagree with the stomach, because the alkali combines with and neutralizes the vinegar which it contains. It is the latter that disagrees with weak stomachs. The alkali and the vinegar together make a diuretic salt, and I suspect that this is advantageous; besides that the alkali is less ungrateful to the taste when taken in small beer than in any other way. However, there are some persons who really cannot take small beer, even with the alkali; and others, with whom small beer generally disagrees, can hardly be persuaded that an alkali alters its quality. If there be any reason for not giving it in beer, it may be given in milk and water, or clove-tea, or ginger-tea; but then it should be exhibited in smaller doses, because none of the alkali will be neutralized as it is by the acid of the beer. To do real good the alkali must be taken in large doses, and for a long time together—not for weeks, but for months. A patient may take it on and off for a great length of time without any mischievous effects.

There is a very remarkable kind of fatty tumour that sometimes occurs, though it is a very rare disease indeed. It is of rather firmer consistency than an ordinary fatty tumour, and perhaps there are two or three or more in different parts of the body. When you cut

down on it, you find that it is composed of pretty solid fat, and that it is covered with a reflected membrane just as perfect as the peritoneum or the pleura, or any of the reflected membranes of original formation. There is one layer of membrane covering the tumour itself, and then another which forms a loose bag round it; and there is a space between the two membranes filled with a halitus, so that they do not adhere. These tumours are troublesome to remove, because you must remove not merely the tumour itself, but the reflected membrane. How you are to distinguish these cases from other tumours I cannot tell; you can only make out the nature of the case when you have cut down on the tumour.

There is a tumour that occurs in the female breast, which Sir Astley Cooper has called the chronic mammary tumour. It is not a very good name, but no other has been given to it. This tumour is of a peculiar structure, in general lobulated; and when you examine one lobule, you find it is made up of smaller lobules, adhering to each other by loose cellular texture. What is the peculiar appearance which it presents under the microscope I do not know, but by the naked eye it is easily distinguished from malignant and other tumours of the breast. It occurs for the most part in young women, and there is reason to believe that sometimes it disappears spontaneously. I was called to see a young lady some years ago, who had a tumour on one side of the breast; and I thought that the disease was of this description. I recommended her, as it was of some size, to have it removed by an operation. I cut down upon the tumour, and dissected it out, or rather extracted it, which was done very easily in the way which I will mention presently. At the time of the operation it seemed to be not exactly the common chronic mammary tumour, though very like it; but when I examined it afterwards, I found it chiefly composed of fatty substance, but lobulated like a chronic mammary tumour. The wound healed, and there was never any return of the disease. This called my attention to the subject, and since then I have seen other cases, that satisfied me that this chronic mammary tumour has some actual relationship to the fatty tumour, the structure being probably modified by the particular organization of the part in which it is imbedded.

In the case which I have just mentioned, the character of the fatty tumour predominated; but, from the structure of other tumours, it appears as if the two diseases run into one another; and even where the characters of the two tumours are most distinctly marked, there is this point of resemblance between them—the adhesion of them to the neighbouring parts is just of the same kind, and they must be removed in the same manner, namely, by dividing the skin, and turning them out with the fingers, there being generally only one point of the tumour at which there is much adhesion, and that is, where the vessels pass in and out. Then I met with this case, which affords a further proof of the relationship between these two classes of tumours. There was a lady who had an enormous tumour of the breast. I could not say that it felt different from the natural breast, but it seemed as if the breast were grown to a monstrous size. I

called in Sir Astley Cooper, it being a doubtful case, and the patient being a person of considerable consequence; and he agreed with me in thinking that it was more like hypertrophy of the breast than any thing else (for there is such a disease as hypertrophy, that is, an increase of the natural structure of the breast, without any actual change of structure). There was no hurry about it, and we tried pressure and some other remedies without any benefit. The tumour, however, continued to grow, the patient became tired of carrying about the load, and we recommended her to have the breast removed. Sir Astley Cooper was with me at the operation, and we set about it, believing that I should remove the whole breast. But when I came to cut down upon it, I found that the breast itself lay perfectly sound in front, while the tumour lay at the posterior part, between the breast and the pectoral muscle. I dissected out one portion of the tumour, and it had just the appearance of a chronic mammary tumour. Then, as I went on, I came to a mass of fat, which I drew out in the same manner; and then I came to another mass of chronic mammary tumour, but the whole connected together. The entire mass weighed probably two or three pounds. The breast itself was left perfectly sound. When we examined the tumour we found it made up of both structures; at one part there was common fatty tumour, and at another chronic mammary tumour, the one being blended with the other, so that they could not be separated. The patient did perfectly well.

I have said that the skin over a fatty tumour does not readily ulcerate, but that matter may form in the tumour, and then that the skin may become ulcerated secondarily. But Sir Astley Cooper used to say, that he had no doubt a fatty tumour would sometimes alter its structure, take on malignant action, and become a malignant tumour. Whether he had any dissections to prove that I do not know; but I have no doubt that he had seen instances in the living person which sufficiently justified the opinion; and I think the case I am about to mention proves that he was correct. A farmer from the country came to me with what appeared a fatty tumour on the back. It was as big as your two fists put together, and it had existed for a great length of time. There seemed to be no doubt that it was a fatty tumour, yet it was a little more firm in consistence, than fatty tumours usually are. I dissected out the greater part of the tumour; and on examining it afterwards, I found that it was composed of a fatty substance, rather more condensed than usual, but that here and there throughout its substance there was a morbid growth, apparently belonging to the class of medullary or fungoid disease. It is reasonable to suppose that if the tumour had been allowed to remain, it would have ulcerated and run the course of other malignant tumours.

I have thought it worth while to bring this subject of adipose tumours before you, because I think a good many of the facts which I have mentioned, though of course known to practical surgeons, are not to be found in books, and that it will be useful for you to be taught them, and not to be left to find them out altogether for yourselves.