

bougies for stricture of the rectum, except where the stricture is within reach of the finger. If there be any exceptions to this rule, they are very rare indeed.

### LECTURE XXXVII.

#### ON AN UNUSUAL FORM OF STRICTURE OF THE RECTUM. MALIGNANT DISEASES OF THE RECTUM. ON RECTO-VAGINAL COMMUNICATION.

THERE is a disease of the rectum in which there is generally, but not always, a contraction of the gut, which is not a malignant affection, and which, although frequently confounded with ordinary stricture, ought, as I conceive, to be distinguished from it.

This disease, so far as I know, is not distinctly noticed in books. I have observed it chiefly in women, and especially in those who have borne children. In the great majority of cases it has shown itself sometimes after a difficult labour. The patient complains of pain referred to the rectum, pain in the lower part of the back, a discharge of mucus from the anus, and some difficulty in passing the evacuations. These symptoms at first are trifling, but they gradually increase in severity as the disease advances. The patient then complains of exceeding difficulty in passing the evacuations, of constant pain—which, however, is greatly aggravated after the feces have been voided. There is a copious discharge of mucus; sometimes of blood, or of mucus tinged with blood. If you examine the bowel at this period of the disease with the finger, you find the inner surface of the mucous membrane irregular, as if it were lined with a multitude of small flat excrescences; or as if your finger came in contact with a surface covered with warts. There are generally, at the same time, some small flattened excrescences to be observed at the margin of the anus; something like shrunk or collapsed external piles, but smaller. Besides this, it seems, in some instances, as if the mucous membrane in the interstices between the excrescences was here and there in a state of ulceration. The examination with the finger, which is necessary for the ascertaining all these points, gives the patient extreme pain. Generally about an inch and a half, or two inches above the anus, you find a circular contraction, or stricture; but at other times there is no contraction whatever in this situation, while there is a very contracted state of the anus itself. In some instances there is the diseased state of the mucous membrane which I have described, without contraction anywhere; so that the contraction is an accidental, and not a necessary accompaniment of the disease.

When the disease goes on still farther, inflammation takes place in the cellular membrane in the neighbourhood of the gut, and an abscess forms, which bursts externally, near the anus, or on the nates,

or in the perineum. Other abscesses form which burst in other situations, one after another, in the same manner as after common stricture of the rectum. Sometimes an abscess forms in front of the rectum and bursts into the vagina, making a communication between the two organs. These abscesses continue to form for an indefinite time, so that ultimately there are a great number of orifices, all of which remain pervious. The abscesses seem, in fact, to have no disposition to heal; but sometimes they get into a quiet or tranquil state, there being but little inflammation, but little discharge of matter; and then, all at once, inflammation takes place again in one or more of them; there is a fresh accumulation of pus, and a fresh burst of it externally. It seems not improbable that these attacks of inflammation may, in many instances, at least, depend on small portions of feces getting into the abscesses from the cavity of the gut.

The disease which I have just described is very formidable, and it is one which, if left to itself, always proves ultimately fatal. Many years, however, may elapse before it has run its course; the patient all the time suffering miserably. At last she has shiverings, nocturnal perspirations, and a rapid pulse; she becomes emaciated, and dies worn out by hectic fever.

*Treatment.*—In the very advanced stage of the affection you can do but little for the patient; whereas, in the earlier stage, you may do much. I do not know that this disease can be actually cured except you are called in nearly at the period of its commencement; but, nevertheless, you may, in many instances, do a great deal of good in the way of palliating the symptoms and prolonging life. It is only every now and then that you are able to keep a particular case in view for a great number of years. I was, however, called to a patient labouring under this disease so long ago as the year 1812 or 1813, and I know that she was alive four or five years since, and rather better at that time, with respect to the condition of the rectum, than when I was first consulted; so that she must have lived seventeen or eighteen years after I was first consulted. I believe she has since died of a disease in the chest.

When you are called to a case of this kind, you have first to examine the state of the rectum—whether there be or be not stricture, whether the parts are in such a state that they will not bear local treatment. If the introduction of the finger does not occasion much pain, and if you find a stricture in any part of the bowel within reach of the finger, you may proceed to the dilatation of it with a bougie. In the first instance, introduce a common bougie into the orifice of the stricture; let it remain there for a few minutes daily, gradually increasing its diameter; and after a time you may arm the bougie with lint, well smeared with mercurial ointment. This is a good application to the excrescences with which the surface of the bowel is lined. You may pursue this treatment daily, or every other day, until you have dilated the stricture to a tolerable diameter, observing that if at any time there should take place an attack of inflammation of the gut, or in its neighbourhood, you are to lay aside the use of the bougie for a while, resuming it afterwards. If

the patient, however, be suffering a great deal of irritation, and the parts are exceedingly tender, so that they will not bear the contact of the finger, you may presume that they will not bear the contact of the bougie; and, under these circumstances, an opiate suppository may be introduced into the rectum every night; the bowels being at the same time kept gently open by means of lenitive electuary and sulphur, or small doses of castor oil, or some other simple aperient. By these means you may lessen the irritability of the diseased bowel, and, after a time, be able to employ a bougie, though you could not use it in the first instance.

The abscesses which form in the neighbourhood are to be distinguished from those which I shall describe hereafter under the name of *fistulæ in ano*. You will understand the difference when I come to explain the latter disease. They are not to be laid open like *fistulæ in ano*; they correspond to the abscesses that form in common stricture of the rectum; and the more you do to them, the worse they are, except it be when matter is collected which does not readily escape, and where a puncture with a lancet will give it a free discharge. These abscesses very seldom heal; but if the stricture be well dilated, and the mucous membrane of the bowel restored to a more healthy state, they will remain indolent, giving the patient but little inconvenience, and that only occasionally.

You may relieve the patient also by internal remedies, one of which I have already mentioned, viz.: a gentle aperient. Costive bowels are bad for the patient, for the hard motions will not pass through the contracted gut, or if they do pass, they are very injurious to the diseased membrane below. But purging is injurious also, and therefore very active purgatives are inadmissible. The balsam of copaiva, combined with caustic alkali, (the liq. potassæ,) for which I gave you the prescription in the last lecture, or the decoction of *achillea millefolium*, may also be given with advantage. I have seen some of these cases in the advanced stage of the disease, where the patient has derived much benefit from the internal use of arsenic; four or five minims of *liq. arsenicalis* being given three times a-day. The effect of the arsenic was to lessen the quantity of discharge from the bowel, and to diminish its irritability, at the same time improving the general health, and sometimes putting an end to the rigors to which the patient was liable. This last effect was especially observed where, as often happens, the rigors had assumed a periodical character.

You may easily recognize the disease which I have just described, by an examination of the inside of the rectum; but you may often detect it, when it comes before you, even before this examination is made. A woman complains of pain in passing her stools, and discharge of mucus; and these symptoms have come on after a difficult labour. On inspecting the anus, you discover some little flattened excrescences surrounding the orifice; and you may be quite sure, where there is this combination of symptoms, that if you introduce the finger into the rectum, you will find the diseased condition of it which I have now described.

## MALIGNANT DISEASES OF THE RECTUM.

Malignant diseases of the rectum are often confounded with simple stricture, and with that peculiar disease of which I have just spoken. The diagnosis is, however, of great consequence; for the treatment which is right in simple stricture would in general be wrong in these more formidable affections.

Malignant diseases of the rectum generally occur after the middle period of life; and patients affected with them have for the most part a sallow, unhealthy aspect, and very frequently labour at the same time under hepatic or some other visceral affection. Here, as in the case of malignant disease in other organs, the symptoms come on insidiously and slowly. The patient has a little uneasiness about the rectum; he thinks little of it. Then he finds some difficulty in passing his evacuations; but even this at first scarcely attracts his notice. Then the difficulty increases; the uneasiness becomes converted into pain; the stomach gets out of order, and the general health begins to fail. In the advanced stage of the disease, there is for the most part a great deal of difficulty in passing the evacuations, though that varies in different cases; and sometimes there is no difficulty at all, accordingly as the disease does or does not cause an obstruction of the bowel. By and by there is a constant discharge of bloody mucus, and constant pain, which is, however, aggravated after each evacuation of the bowels. The pain is especially referred to the lower part of the back, but there is also pain down the thighs, and in the nates and hips. If, at this period of the disease, you institute an examination of the rectum, you find the morbid growth a little way up the bowel, within reach of the finger. But, as you may suppose *a priori*, it varies in size, in figure and in position, in different cases. Sometimes there is a hard, solid tumour, occupying only a portion of the circumference of the rectum, and usually situated at the back part, with elevated edges, and, as it were, excavated in the middle, the bowel not being contracted in size, but as capacious as ever. At other times the morbid growth occupies the entire circumference of the bowel, which takes a winding course through its substance. Then, if you introduce your finger into the rectum, you meet with a large solid mass, and with some difficulty discover the orifice of the intestine in its centre. Sometimes the diseased structure extends down quite as low as the anus; more frequently it begins about two inches above it, the intestine below being in a healthy state. There is great variety also as to the extent of the disease upwards. It may be that the whole of it is within reach of the finger, so that the healthy portion of the intestine may be perceived above; and it may be, also, that it extends so high up that you can in no way trace its upper border. In some instances the disease is complicated with the addition of several pendulous excrescences, which come down through the anus when the patient passes his evacuations, and this very much aggravates his sufferings.

In the advanced stage of the disease, there is sometimes, but not

frequently, a large hemorrhage from the bowel. Abscesses form in the neighbourhood, and burst externally. In females, they burst into the vagina, and the opening is increased by ulceration, so that a large quantity of feces may be passed by that canal. In the male sex, ulceration will frequently make a communication between the rectum and bladder, or the rectum and urethra, and then the patient voids not only wind but feces with his urine. The urinary organs are liable to be affected in another manner: spasm is induced in the urethra, and the patient is liable to a retention of urine. This occurs especially in the cases of which we are now treating, but it will occur also in other affections of the rectum.

The patient goes on suffering in this miserable manner, his distress gradually increasing from the beginning to the end of the complaint; and at last he dies worn out, as he would be by malignant disease in any other organ, except that his sufferings are greater here than when it is situated on the surface of the body, and for an obvious reason—namely, that the ulcer in the surface of the tumour is constantly irritated by the passage of the feces. In some cases the morbid growth completely obstructs the passage of the feces, which become accumulated above it. The patient then has symptoms somewhat resembling those of strangulated hernia, and dies nearly as he might have died of this last-mentioned disease; or the bowel ulcerates immediately above the obstruction, and the feces escape into the general cavity of the peritoneum, and then he dies of peritoneal inflammation.

The general rule in this complaint is, that the patient suffers miserably, especially when it has arrived at its latter stage; but this rule has its exceptions, and I was lately called to this remarkable case:—The servant of an old lady, who was nearly helpless from age, took it into her head that her mistress passed her feces from the vagina. She mentioned it to the old lady's usual medical attendant, who questioned the patient, and found she was not aware of it; that she had no pain, and complained of no other symptom of disease, either of the vagina or rectum. By and by the servant repeated her assertion that the feces passed by the vagina, upon which the physician requested that I should be consulted. When I examined the rectum, as far as I could reach it was completely obstructed by a mass of solid substance, manifestly a malignant disease.—It appeared that ulceration had taken place in the rectum above the tumour, and to such an extent that the whole of the feces were passed by the vagina. This, it is true, was no trifling inconvenience, but it saved the patient from the dreadful pain of the feces passing over the surface of the diseased rectum.

The morbid growth in these cases is sometimes hard, seeming to partake of the nature of *scirrhus*; sometimes of a softer texture, and more resembling *fungus hematodes*. Here, too, as in other organs, the two diseases may be blended together in the same morbid growth; and there are many cases in which, although the disease is undoubtedly malignant, you scarcely know, from examining its structure, under what name it should be described.

*Treatment.*—All that is worthy of being said respecting the treatment of these unfortunate cases, may be comprised in a few words.

It has been proposed that the disease should be extirpated by an operation; and there is no doubt that if it were merely your object to excise the parts in which the morbid growth was completely established, so as to be distinctly perceptible to the finger, such an operation would in some instances be sufficiently practicable. But let me ask, what security would you have that the seeds of the disease did not exist in the mucous glands, or other textures above the tumour, and that your operation would soon prove of no avail? More than this: if you consider in what manner a malignant disease spreads, when once established in a particular organ, and the general ill success which attends the operation for its removal, even when performed under the most favourable circumstances, and where the whole organ can be taken away, can you reasonably expect that it will succeed under such circumstances as these, where you cannot take away the whole organ, and where it must be always doubtful whether you have been able to make a complete and satisfactory examination of the diseased part previously? Then consider, if much of the rectum were to be removed, what a frightful operation it would be, and in how miserable a plight the patient would be left afterwards? If ever such an operation be justifiable, it must be surely only under some very peculiar circumstances, where the disease was very low down in the gut, and quite in its earliest stage. In ordinary cases it ought to be entirely out of the question, as one which no conscientious surgeon can advise his patient to submit to.

Opiate injections into the rectum, and injections of linseed oil, either in its pure state or combined with lime-water, are sometimes useful in allaying the irritation of the rectum; and alkalies may be given internally, either with balsam of copaiva, or otherwise combined. In the advanced stage of the disease you must give the patient opium; you cannot help doing so; and, indeed, he must be kept very much under its influence to make life at all supportable. Yet there are great objections to the use of opium here, as in most other cases. You seldom meet with a patient on whom opium confers a benefit, without a corresponding evil. Opium, it is true, relieves the pain for a time, but it makes the bowels costive, so that it is very difficult to manage them. It stops the secretion of the liver, disorders the stomach, and injures the general health, making the patient at the same time nervous and irritable. Therefore I advise you not to give opium till you are driven to it. In the advanced stage of the disease all that can be said is, that you must have recourse to it as the least of two great evils.

I have mentioned, in treating of the different diseases of the rectum, that a communication sometimes forms between the rectum and vagina. This is sometimes subsequent upon a difficult labour, just

as a communication is sometimes formed between the vagina and urethra, or bladder, from the same cause.

The communication between the vagina and rectum used to be one of the opprobriums of our art, the patient's life being rendered miserable, with little or no hopes of recovery. Of late, however, a simple and scientific method of relieving the patient in these cases has been contrived by Mr. Copeland, who has succeeded in curing several patients labouring under it, simply by dividing the sphincter muscle of the anus. The sphincter muscle being divided, the feces are not retained in the rectum; they run out as fast as they enter it, so that the bowel is kept empty and contracted, and altogether in a passive state, and the communication between the rectum and vagina is thus enabled to cicatrize. I do not know whether this would answer if the communication were of large size, but I am told that it has answered very well in the cases in which Mr. Copeland has hitherto employed it. I cannot but regard the application of this operation to these cases as one of the principal improvements of modern surgery; and the simplicity of the practice forms one of its principal recommendations. Of course it can be recommended in those cases only in which, independently of the opening into the vagina, the parts are in a healthy state.

### LECTURE XXXVIII.

#### ON DISEASES OF THE MAXILLARY ANTRUM.

I SHALL draw your attention to-day to a case in one of the upper wards, that of Samuel Tovey, admitted on the 1st of this month.

Eight years ago he fell down as he was walking on the slippery pavement, by which his nose, and the whole left side of his face, were bruised. Ever since he has had pain of these parts. The left side of the face became swollen; the pain increased, and matter was discharged through the nostril. Matter also occasionally made its way through one of the alveoli of the superior maxillary bone; and he continued in this state at the time of his admission into the hospital.

On the 7th November I made an incision which separated the upper lip, or rather the cheek, from the jaw; and a probe having been introduced, it appeared to me that the extremity of it came in contact with a portion of dead bone, in the situation of the antrum maxillare. I then introduced a pair of strong sharp-pointed scissors, using them in their closed state as a chisel, to break down the thin plate of bone above the grinding teeth, so as to expose the cavity of the antrum, in which I could then feel small fragments of dead bone, some of which were extracted. On the following day some other small portions of dead bone passed through the nose. There were now

swelling and pain on the left side of the face, with a good deal of headache, and a frequent pulse. The patient was ordered to be purged. On the 9th, two days after the operation, he had shivering, and was delirious in the night. On the 10th, however, he was much improved, able to get up; and to-day, the report is, that the pulse is slower, easily compressed; the tongue clean; the bowels open.

Here was a patient who had met with a severe blow on the head and face eight years ago, who had been suffering ever since; and now I have made an opening into the antrum, and extracted fragments of dead bone which were lying in its cavity. No doubt there are other fragments there; and I expect that they will come away through the opening that has been made. There can be no question that, at the time of the injury, some mischief was inflicted on the bones, which caused portions of them to die, some of these afterwards coming away by themselves, while others could not be removed without this operation.

The occurrence of this case affords me the opportunity of speaking to you concerning diseases of the maxillary antrum generally. I am glad to draw your attention to this subject, because it is one of great interest, and also one of which I do not think there is in general any very clear account given by surgical writers. I may add another reason, namely, that cases of disease of the antrum are not sufficiently common occurrences for many of you to become masters of the subject by what you see during one or two years' attendance on hospital practice.

#### INFLAMMATION OF THE MAXILLARY ANTRUM, INDEPENDENT OF LOCAL CAUSES.

I have seen cases, and to these I shall first call your attention, in which there appeared to be inflammation of the maxillary antrum, independent of a local cause, arising out of something in the state of the constitution, and approaching in its character a good deal to that of severe rheumatic inflammation. I do not know that I can make you acquainted with the history of the disease of which I am now speaking, better than by describing to you the circumstances belonging to a particular case, of which I happen to have preserved notes. I was consulted with Mr. Clough, of Norton Street, respecting a young man who complained of excessive and constant pain referred to the situation of the maxillary antrum of the left side. There was some degree, but not much, of tumefaction of that side of the face; tenderness in the situation of the antrum everywhere; the very severe and constant pain which the patient endured being aggravated by pressure. In addition to these local symptoms, there was a good deal of febrile excitement of the general system. The disease had existed for two or three weeks, gradually increasing up to the time of my being consulted. Believing this, then, to be a case of inflammation of the maxillary antrum, and thinking it not improbable, from the time that the inflammation had lasted, that suppuration might have