OBSERVATIONS ON CASES OF SOME SURGICAL AFFECTIONS IN THE ISCHIO-RECTAL FOSSA.

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To one engaged in general practice occupied each day in attending to the most diverse class of cases, those diseases are likely to claim his special attention and interest which come most frequently under his observation. My attention was directed to the kindred subjects of ischio-rectal abscess and fistula in ano by having to deal with a succession of cases of that kind few, no doubt, in number, but relatively large in proportion to the other diseases falling under my notice. The fact also that previous to my seeing them several of them had been overlooked by other surgeons owing to want of care in diagnosis tended perhaps to magnify their importance in my mind and to cause me to give them more attention than I should otherwise have done. The subject is not indeed in itself an attractive one, more especially as those diseases are almost exclusively met with in weak and debilitated patients and so are from that cause and also from their anatomical situation very apt to give unsatisfactory results. They demand also such an amount of care and regular attention in their after treatment that when they occur in patients within easy reach of hospitals and with no objection to being treated there medical men in general practice are tempted to fight shy of them and to recommend their removal to the hospital wards. The subjects under consideration are so closely associated clinically and merge into each other so frequently that they can hardly be viewed apart from one another. Indeed, every case of Fistula in Ano is accompanied by the formation of purulent matter in the ischio-rectal fossa. As will be shewn, however, cases of abscess in this region are met with, which, when dealt with early by operation interference, run their whole course, and finally cicatrize without involving the mucous membrane of the rectum.

It is beyond the scope of this paper to describe, in detail, all the different varieties of these diseases and their different methods of treatment as they are given in special treatises on Diseases of the Rectum. My purpose is rather to describe and comment on the significance of a few cases which have come under my own observation in private practice, concluding with a brief description

In his "Lectures on Diseases of the Rectum" page 132 Dr. W. H. Van Buren discusses as follows the causation of Abscess and Fistula in Ano.

"They are generally the result of violence, as of direct contusion from without, or from over-distension of the rectal pouch and sometimes from actual perforation of its wall by fish-bones or other bony fragments or hard substances swallowed with the food, and they also seem to take place spontaneously in many cases as a consequence of vitiated blood and a depressed condition of the vital powers. In individuals who habitually deprive themselves of the amount of muscular exercise in the open air necessary for health and who gratify their appetites at the same time to the full extent

of the anatomical parts involved and a few general remarks on the subject as it has presented itself to my mind.

Case I. Alex^{r}.Macleod, aged 38, employed in india-rubber works, living in Maryhill, came to me in Feby, 1886, complaining of loss of flesh, constipation, profuse sweating when in bed at night slight cough accompanied by a little spitting of blood. He is a native of Mull, and his family history is exceptionally good, as he was one of a family of eleven, one of whom only is dead,-a sister, the youngest of the family, She died at the age of 33 of typhus fever. The patient was a man of temperate habits and asserted that he had never been otherwise. He had always been very healthy until within 3 years previously, when he began gradually to lose flesh, and although always able to attend to his work yet he enjoyed only indifferent health, and was frequently troubled with constipation, the bowels sometimes not being moved for a week or even longer. From time to time also he was troubled with a cough and occasionally a little spitting of blood but never more than a few streaks in the sputum, Latterly also profuse nocturnal sweats had come on and he felt so much out of sorts that he rarely went out except to his work. On examining him I discovered the presence of moist râles and a little dulness at the base of the left lung at the back. When questioning him about the constipation he mentioned that he felt a little moisture occasionally at a little distance from his anus, and that sometimes he noticed a stain of "Matter" on his shirt. I made him expose the parts and I found an opening in the skin about an inch and a half from his anus and directly external to it, and so small as barely to admit the point of a probe. A thin sero-purulent discharge was oozing from it and more came out on pressing the surrounding parts with the finger. I observed that this discharge was not more offensive than that from an ordinary sinus and that it had not the faeculent odour usually noticed in such cases. When the probe was admitted through the narrow external orifice it entered a fairly capacious cavity of an angular shape, the bend of the angle

that nature permits, the blood becomes loaded with material destined for the nutrition of the muscular system which forms so large a proportion of our bodies. This material not worked off by muscular exercise in accordance with natures intention renders the blood unfit for the healthy nutrition of the other organs of the body and clogs the emunctories in vain endeavours to get rid of it. We see it in the excess of matter with which the urine is often loaded and in the perverted character of other secretions. An organism thus encumbered and oppressed in its normal functions, although otherwise healthy, is liable to become a prey to disease on slight provocation; to explode with a carbuncle, an erysipelas, or an abscess in the loose tissues

being at the external orifice. One arm of this cavity extended into the ischo-rectal fossa to a depth of nearly 2 inches terminating in a cul-de-sac, and on introducing the forefinger of the left hand into the anus the point of the probe could be felt most easily between the two sphincters, but I could find no aperture into the rectum although I searched very carefully. The other arm of the cavity was a sinus extending directly forwards for about an inch undermining the skin of the perinaeum, and was of very narrow calibre.

I advised him to have it opened, and on the 14th Feby I went to his house accompanied by an assistant. An ounce of castor oil was given the night before and in the morning the rectum was washed out with an enema of soap and water. Having put him well under the influence of chloroform we got him into the lithotomy position. The index finger of the left hand after dipping it in Carbolic Oil (1-20) was then introduced into the auus.. I then inserted a director through the external opening and pushed it up to the very end of the sinus when I directed its point inwards towards the rectum and gradually pushed it through until its point was felt by the finger. I then slid a probe-pointed bistoury along it into the rectum, withdrew the director, and hooking the finger over the point of the knife drew it steadily down through the sphincters and other intervening tissues. I then slit up the anterior sinus by means of a director and probe-pointed bistoury.

A solution of Chloride of zinc (40 grs to ℥i) was then used to wash out the cavity which was then syringed out with weak Condy's fluid and packed with boracic lint and aT-bandage applied. After he recovered from the chloroform he got 25 drops of Liq. Opii Sedativ. in water, and a similar draught was left for him in case he should have much pain or uneasiness. On the morning of the 17th he took a warm hip-bath and the dressings came away easily. In the forenoon I dressed it again in the same way washing it out with weak Condy's fluid as before. The same evening he took an ounce of castor oil and the dressings came away when the bowels moved. The rectum was washed out with warm water in the morning and the wound was dressed daily by me for about 3 weeks, when he was able to walk about a little and could apply the dressings himself as by that time the wound

around the lower end of the rectum. This is what I mean by "vitiated blood and consequent depression of the vital powers." In a faulty constitution, of course, the liability to disease from trivial causes is greater; but otherwise than in this way, I am not aware that a person of tubercular diathesis or one predisposed to consumption is more liable to abscess of this kind than another. Women, in my experience, are less frequently the subjects of abscess in this region than men, as they are also of carbuncle and some other affections of this class, such as phlegmonous erysipelas."

Also in the same work page 135.

"In persons of weak constitution, as in tuberculous subjects where the fatty cushions of the ischio-rectal spaces are absorbed through emaciation,

was healing nicely. It was about 10 weeks after the operation before it could be said to be entirely closed, and for some time afterwards he was troubled with an occasional involuntary escape of flatus and mucus along the site of the cicatrix. I sent him away to Mull for a few weeks, and while there he improved very quickly and gained flesh. Since then he has been able to attend regularly to his work, but he has from time to time put up sputa tinged with blood, and has been much troubled with constipation. The fistula has given him no trouble since. At the end of last year (1888) I advised him to use enemata of ½ an ounce of Glycerine when the bowels were constipated. He has had great relief from this and has found it of much more service than cascara sagrada or any of the other aperient remedies he has used. Since about the beginning of the present year (1889) there has been an entire absence of cough and spitting of blood. I made an examination of his chest in May and could find no evidences of dulness or other signs pointing to consolidation. This was a very fair example of the Bluid external variety of Incomplete Fistula. It was markedly chronic in its nature - the fact of there being no pain and comparatively little uneasiness in the vicinity of the anus lulling any anxiety in the patients mind to a great extent. He was more concerned about his loss of flesh constipation and bloody sputa and it was only casually in course of questioning him regarding the sluggishness of his bowels that he dropped a hint of symptoms pointing to fistula. After I examined him he seemed quite surprised when I told him that there was such an extensive cavity in the ischio-rectal fossa.

All the signs of an incipient pulmonary phthisis were present - cough, haemoptysis, loss of flesh, night sweats together with the local physical signs. I think that here the main factors in causing the fistula were the obstinately costive condition of the bowels and the weak state of the patient, and those two causes would of course act and react upon one another. The operation seemed to be attended ~~by~~ ~~almost~~ by almost immediate improvement in his general condition, and this again was greatly aided by rest and the change to the fine air of Mull. The cessation of the cough and spitting of blood and the disappearance of the dulness etc in the lung were peculiarly gratifying

their unsupported bloodvessels are liable to rupture from the frequently recurring concussions that attend a severe cough; and in many cases originating in this way that power of repair is often seriously wanting, so that the fistulae which result are more extensive and less hopeful as to ultimate cure".

Again, in page 150, he says

"Why should abscesses near the anus after they have floated out the foreign or dead matter which provoked their formation, so commonly hesitate to heal? Abscesses elsewhere, as a rule, get well after discharging their contents ..... I would answer that the ceaseless motion kept up by the restless sphincter muscles and the constantly varying volume of the rectum necessitated by its function are the most obvious impediments to its healing. The bad influence of this want of

features in this case.

The presence of the Anterior Sinus complicated this case considerably and necessitated a larger incision being made than if the fistula had been simple. This, no doubt, was why granulation took place so slowly. Those secondary sinuses occur very frequently in cases of fistula and it is absolutely necessary to lay them open; otherwise they remain as a constant source of irritation and prevent the healing of the wound.

There was very little haemorrhage during the operation. It is remarkable what differences we find in this respect in such cases. My friend Dr Sinclair of the Parish of Lochs in the Island of Lewis informs me that in the only case of the kind that he ever operated on there was a tremendous amount of secondary haemorrhage,- and that when he was called to see his patient on the day after the operation he found that the blood had soaked right through the mattress on to the floor. I remember also my friend the late Dr Robert Moffatt telling me, apropos of a case of the kind in Dr Macleod's wards in the Western Infirmary, that he had seen it necessary to ligature spouting vessels - probably the inferior haemorrhoidal, which branches off from the pudic artery and runs across the ischio-rectal fossa to supply the lower end of the bowel.

rest is proved by the frequency with which abscess is followed by sinuses in the groin, axilla and behind the female breast — wherever, in short, there is much mobility of parts and much loose connective tissue."

Case II. Thos. Ross, Fencer in Public Parks, aged 56, residing in Mount St. was seen by me first in March 1888, when he complained of a swelling to the left of his anus of about 2 months duration. He attributed it to a chill which he got on Glasgow Green on Jubilee day. The record of his family history so far as it could be ascertained was very good, - his father and mother having both attained the age of over 80 years, and his paternal grandfather, a centenarian, dying at the age of 102. The patient himself had in his younger days been a very robust man, but of late years he had acquired very irregular and intemperate habits which had broken him down considerably. There was no evidence of any organic disease in his chest. He was a man of large frame, but presented an appearance of greater age than his years warranted.

He stated to me that about 10months previous to my seeing him he began to have an uneasy feeling about his anus especially when he was at stool. This gradually intensified until it became very painful - the pain being of a burning character, and afterwards the swelling gradually developed, and he had occassional discharges of pus when at stool. He was naturally somewhat constipated.

On examining him I found a cold, fluctuant swelling to the left of his anus, but on introducing the finger into the bowel no opening could be felt in the wall of the gut. On the following day, after having the bowels cleared, he was put under chloroform, the abscess was opened freely, and a good quantity of foetid pus escaped. A probe was then passed through the sinus and I then found that there was a small opening just above the internal sphincters through which the point of the probe could enter the bowel. A director was pushed through this, and the sphincters divided with a probe-pointed bistoury. The wound was then washed out with a solution of chloride of Zinc (40 grs. to 1oz) and was then well filled with wood-wool sprinkled over with iodoform and a T bandage applied.

Granulations were built up very slowly in this case. I dressed it daily after the 3rd day for over four weeks. Afterwards he dressed it himself. He was still occasionally having drinking bouts, I heard from a friend of his that it was not healed

Referring to the class of cases in which he deems it inexpedient to operate Dr J. H. Van Buren in the same series of Lectures, page 176, says

"No judicious surgeon would operate with a view to a radical cure upon a patient with advanced cardiac disease, cirrhosis of the liver, Bright's disease, or cancer; but in the conflict of evidence as regards pulmonary disease the tendency of opinion is clearly growing more favourable to well-considered operative interference. On the following points I do not hesitate to speak positively; there is no reliable evidence that the suppression of a habitual discharge can do harm in these cases; on the contrary, it is pretty certainly a positive advantage to arrest it; and I would advise the attempt to cure a fistula in a patient with physical signs of phthisis, provided there were

in May of the present year and that he was breaking down rapidly owing to intemperate habits.

This man was an extremely unsatisfactory patient to deal with, and had I known in time what his habits were I question very much if I would have taken his case in hand at all. It was an ordinary case of Blind Internal Fistula, and from the condition of the parts involved there was no reason to anticipate an unsuccessful result, as there was no extension of the disease beyond the internal opening and I could discover no secondary sinuses branching off from the main sinus. Cold was evidently the exciting cause setting up sub-acute inflammation in the ischio-rectal fossa culmimating in an abscess which burst into the bowel. The escape at times into the cavity of foreign matter from the bowel would tend to keep up inflammatory action with formation of pus which found an outlet into the bowel and escaped along with his motions.

no positively advancing softening or severe cough, because, in addition to stopping a waste, it would remove an impediment to exercise in the open air. The objections to operating, where there is softening or trachie, are, that the concussion from coughing and the lack of power might prevent the wound from healing, and the use of the knife would necessitate confinement to bed, and thus injure the patient"

Case III. Wm Reid, Abington St, Iron-moulder aged 38, came to me in May, 1887 complaining of pain and occasional discharges of pus just at the verge of the anus. He was a spare dyspeptic looking man, an inveterate tea-drinker and had lost most of his teeth. No information pointing to any hereditary taint was elicited on enquiry into his family history. Both his father and mother were at the time alive and healthy. He was one of a family of six, two of whom were dead- both however of pulmonary disease, one of pleurisy and the other of pneumonia culminating in pulmonary abscess. The patient himself was temperate and always had been as regards the use of stimulants, and although never enjoying robust health had always been able to attend to his work. His lungs on physical examination appeared to be in a fairly healthy condition, although the expiratory murmur was prolonged somewhat at the right apex, especially at the back in which position there was also increase of dulness as compared with the opposite side. I remarked, however, no history of cough and no noteworthy amount of expectoration, and the chest was entirely free from râles of any kind.

He told me that he had experienced a feeling of pain and discomfort at his anus as far back as 1881, and that a little lump gathered at intervals outside the anus and burst discharging pus. He did not trouble himself much about it thinking that it was "piles". He had consulted a doctor a month or two before he came to me, and he told him that he was suffering from piles and gave him some ointment to apply, but instead of giving relief it appeared to make matters worse.

On examination I found a small opening in the skin at the edge of the anus posteriorly. A few drops of ichorous pus trickled from it during examination. When explored with the probe it was found to lead into a narrow and straight sinus directed obliquely forwards and upwards, and terminating in an opening on the left side of the bowel just at the upper border of the internal sphincter

On the evening of the 2nd June he took fully an ounce of castor oil and the next morning the retum, was cleared out with an enema. In the forenoon he was anaesthetized by means of chloroform, a director was passed through the sinus and then

Erichsen in his "Science and Art of Surgery" 9th Edition Page 932, thus describes "Anal Abscess"

It commences in the submucous tissue of the gut immediately above the anus. ..... It may arise from suppuration taking place beneath an inflamed pile, from wound of the mucous membrane ..... or .... exciting tubercular nodule in the submucous tissue. The pus thus formed burrows downwards between the mucous and muscular coats of the bowel till it reaches the anus; here it passes out beneath the skin and forms a rounded swelling at the margin of the anus. If unrelieved it may burrow still further in the subcutaneous tissue. The pus in this case lies superficial to the sphincter. These abscesses may be acute or chronic; when chronic they are frequently tubercular, advancing slowly and containing thick curdy pus. They usually burst both internally and externally, and are the most common cause of the ordinary fistula in ano.

a probe-pointed bistoury was guided along the director until its point was felt in the rectum. The director was then withdrawn and the point of the bistoury pulled down by the forefinger of the left hand in the rectum dividing the mucous membrane overlying the sinus. The sphincter was then put on the stretch by means of the two thumbs inserted into the anus and drawn apart so as to paralyse the fibres of the muscle. A little crystalline iodoform was then dusted over the wound and the anus was stuffed well with boracic lint. An opiate was afterwards administered to keep the bowels at rest for a day or two. On the 6th he took a hot hip-bath and after removal of the dressings the rectum was washed out with an enema of hot water and fresh lint and iodoform were applied. I dressed it daily for a week syringing it every time with a saturated solution of boracic acid. He was then able to go to his work and little over a fortnight after the operation the wound was quite cicatrized. I saw him again in January 1889 and he told me that it had never given him any trouble, and it was only on close examination that I could even discover the cicatrix. He is troubled pretty much with night sweats, but otherwise he appears to be in fairly good health. *

This was an instance of what Erichsen calls Anal Abscess. The abscess forms in the submucous tissue immediately above the anus and superficial to the sphincter and may be caused either by suppuration occurring underneath inflamed internal piles, or by foreign bodies escaping from the rectum. The pus readily works its way downwards between the mucous membrane and the muscle until it reaches the anus, where it appears in the form of a rounded, soft, projecting nodule which readily bursts if it is not interfered with, and is apt to gather again at intervals. In this case there was no evidence of the existence of piles, and I think it is highly probable that some sharp pointed body had escaped from the bowel exciting inflammatory action as the internal opening of the sinus was just at the point where such an accident would be most likely to occur, viz: at the narrowing of the rectum at the upper border of the internal sphincter. He had no doubts but that he was suffering

* "Science & Art of Surgery" 9th Edition

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In discussing Fistula in Connection with Phthisis Dr Allingham in "Diseases of the Rectum" 5th Edition, page 69, says

"Fistulae in persons of a phthisical tendency are marked by certain peculiarities which I think important to notice. Some have been already casually mentioned, but I will here state them clearly.

They have a disposition to undermine the skin and mucous membrane with remarkable rapidity, but not to burrow deeply. The internal aperture is almost always large and open — on passing your finger into the bowel you can feel it most distinctly, often the size of a sixpenny piece. The external opening is also frequently large and ragged, not round; it is irregular in form and surrounded by livid flaps of skin; when you pass your probe into this aperture you can sweep it round over an area of more than an inch, and not infrequently the skin is so thin that you can see the probe beneath. This is a very different condition from that of the external orifice of a fistula in a healthy person, which is usually small and puckering and the skin is not detached to any extent from the underlying structures.

not take the trouble to examine him for himself. One is very much tempted to do this in ordinary surgery practice, but as a rule of preceedure it is very unsafe. I have no doubt that this patient was also the subject of the phthisical taint and this had something to do with preventing it from healing spontaneously

The discharge is thin, watery, and curdy, very rarely really purulent. The sphincter muscles are almost invariably very weak. When you introduce the finger into the bowel you are hardly sensible of any resistance being offered. I think this is a most important indication of constitutional weakness, and from it I derive this practical lesson: When operating upon a patient with phthisical proclivity interfere as little as possible with the sphincter muscles, especially the internal. If you divide the sphincter, incontinence of faeces will almost certainly result.

It is common to observe in these patients much lanugo, soft, silky-looking hair round the anus. With any of these peculiarities strongly marked, I am always suspicious of my patients' strength; with all of them or several of them present, I am certain of his condition and act accordingly.

Case 1V. Malcolm Stewart, Mason, Garriochmill Road, aged 29, came to me in the beginning of May, 1888, complaining of an inflamed and painful swelling in the ischio-rectal fossa on the left side. He attributed it to sitting for some time on a cold stone. His family history was good, and he himself had always enjoyed good health.

Throbbing, and shooting pain followed by a feeling of fulness began in the neighbourhood of the anus and perinaeum about a fortnight before I saw him. On examination I found a tense, painful and fluctuant swelling with a red and inflamed surface a little to the left of the anus and extending somewhat on to the gluteal region.

I first made a free incision with a Syme's abscess knife, and then finding it necessary to use a director and probe-pointed bistoury I carried the the incision towards the gluteal region. The neighbouring integuments were considerably undermined and a large quantity of laudable pus gushed out. The cavity of the abscess extended to a depth of about an inch and a half into the ischio-rectal fossa, a certain amount of healthy tissue intervening between it and the bowel. I searched very carefully with a probe but could detect no further extension of the sinus. I washed out the cavity well with a saturated solution of boracic acid, dusted some iodoform into it and stuffed it with boracic lint. I dressed it daily in this way for about a week, and then found it necessary to clip off some of the overhanging flaps of skin. At each dressing the cavity was syringed out with concentrated boracic solution. It granulated well, and in 10 weeks there was a complete cicatrix. I saw him in the middle of February, 1889, when he told me that he had never had any trouble with it since, and that he felt in as good health as ever he did.

This was a case of acute Ischio-Rectal Abscess occurring in a patient quite free from any suspicion of being the subject of any phthisical taint, and was directly traceable to cold. The abscess was very extensive, and this was no doubt, why it took so long to heal. He was able to go to his work 3 weeks after the opening of the abscess. I waited for a week before cutting off the overhanging flaps of skin to allow the acuteness of the inflammation

In the same work added to above page 70. V. Allingham thus classifies the varieties of phthisical fistulae:

"I have noticed three varieties of fistula in conjunction with phthisis or phthisical tendencies. They may be termed, for operative convenience, the Fistula with Tuberculosis, Fistula in conjunction with chronic phthisis, and a Fistula which occurs in patients with a family tendency to Phthisis, viz. some of its members have actually had phthisis, and others have suffered from strumous joints or glandular disease. I should call this the Strumous Variety of Fistula.

Now, when a consumptive patient consults me, I think it most important to discover from which of the varieties he is suffering. If he is acutely tubercular and probably cannot live long, an operation is decidedly contra-indicated, or if any treatment be employed it must only be in the direction of affording relief from a fistula which is giving rise to great pain. For this kind always follows from some tubercular ulcer of the rectum and develops into a fistula with a large internal opening, into which faeces pass. Not for one moment would I think of curing or attempting to cure this condition. All that is desirable is to make a large external opening (but not to

to subside , and so to minimize the risk of haemorrhage. I gather from Erichsen (op.cit) that he considers such cases certain to terminate sooner or later in fistula, but this case shews that such is by no means a necessary sequence.

divide the tissues through which the retained faeces may escape and afford relief. This should be done without keeping the patient in bed for even one day, and if an anaesthetic should be employed chloroform should be given, and that only in sufficient quantity to lull the pain while the opening is made. This treatment enables the poor sufferer to end his days in comparative peace.

What I have termed the second variety comprises those cases of fistula in patients who have had haemoptysis and may at the time of consultation have the remains of a cavity or consolidation at the apex of the lung without any very active symptoms of phthisis. It is in these cases that the fistula begins in the bowel or just at the entrance to the anus and burrows outwards and undermining the skin, with an internal and a large external opening which has unhealthy, overlapping, livid skin. Judicious active treatment is here called for; it must stand to reason that the patient's body should, as far as possible, be restored to a healthy condition, in order that the lung may have a chance of recovering. The drain upon the system which the fistula exerts, together with the mental worry, necessitate interference."

Page 72.

"The ominous variety of Fistula may, or may not, have an internal opening,

Case V. Mrs McConnell, aged 30, residing in Kelvin Street, called me in to see her on the 2nd February, 1889. She was complaining of an acutely painful swelling in the left ischio-rectal fossa. I had attended her in her first confinement three weeks previously. The 2nd stage of the labour was considerably protracted owing to the absence of efficient propulsive pains. The presentation was cranial (2nd position) and I delivered her by the aid of the forceps. There was only the most trifling laceration at the posterior commissure of the vagina, and during the week's attendance that I made afterwards I gave most particular instructions, as I always do, that the parts should be carefully washed daily with luke-warm water, and she appeared to be making a fairly good recovery.

Her family history was good. She herself was a thin, pale, languid, unhealthy looking woman, but stated that she had never had any acute illness, and that she had never been confined to bed for more than a day or two at a time. She had a narrow flat chest, but there were no signs of tubercular disease, and she was never troubled with a cough.

She told me that a day or two after I had ceased attending her for her confinement she had a slight shivering and that afterwards she became feverish, and felt pain near the anus and comparatively superficial. She had poultices applied, and a swelling gradually formed.

I found this swelling inflamed and fluctuant, and on opening it with a Syme's abscess knife a good quantity of laudable pus rushed out. The cavity of the abscess extended into the ischio-rectal fossa to the depth of over an inch but did not approach near the bowel. I syringed it out with warm boracic solution and dressed it with boracic lint. Two days later, on the acuteness of the symptoms subsiding, I enlarged the external opening in the direction of the hip with a director and probe-pointed bistoury. I then filled the cavity with wood-wool sprinkled with iodoform, and I kept the dressing in situ with stripes of sticking plaster. I also gave her a tonic consisting of Qunine and Tinct.Ferr.Perchlor.and kept her in bed for a fortnight, dressing the wound daily. By the end of that time the wound was nearly filled with firm health granulations, and she was able to

and generally commences as a chronic abscess, quite painless and filled with curdy pus. Although some member of the family may be consumptive, there are no perceptible signs of this in the patient himself. I do not hesitate to operate upon such a fistula, for it (like suppurating glands in the neck and strumous testes) may be at first a purely local disease, and should be at once attacked, instead of being allowed to remain, and so perhaps become the starting point of acute tuberculosis.

attend to her household duties. From the first she had very little milk, and the child had to be fed from a nursing bottle.

This was to me an extremely interesting case, as it was the only instance of the kind occurring among nearly 800 cases of midwifery that I have attended, and I have often puzzled myself in speculating what could have been the exciting cause. There was nothing unusual in her confinement beyond what occurs in an ordinary forceps case, and by their aid delivery was very easily effected. I have thought that the initial cause may have been thrombosis occurring in one of the haemorrhoidal veins with softening of the thrombus and consequent suppurative inflammation. The conditions favourable to the occurrence of thrombosis would be present. Thus pressure of the gravid uterus acting on the veins in the pelvis during the later months of pregnancy might readily induce degenerative change in the wall of the smaller branches of those vessels, and this would tend to the formation of a thrombus .

If my suspicion is correct, and had the mischief originated higher up in the pelvis it might have given rise to pelvic cellulitis.In the text books I have consulted I have not seen this question mooted, and I am convinced that it is a point deserving at least of consideration.

Referring to the advantage and disadvantages of operative treatment in cases of fistula occurring in phthisical patients Dr. Allingham, page 73, says:

"Those gentlemen who object to operating in any case when a phthisical patient give different and rather contradictory reasons for their objections. Some say, 'Do not operate, for the wound will not heal, and the increased discharge will be detrimental;' others 'The healing of the fistula will be injurious to the patient, as the discharge prevents or retards the progress of the chest affection.' I have this remark to make here, that when a fistula has kindly healed I never knew a phthisical patient to be directly the worse for it, i.e. I have never seen the chest affection aggravated or suddenly get worse on the closing up of the wound. I think the idea that the discharge retards the progress of the lung disease is rather a remnant of the old doctrine of pelvis, issues, and derivatives, than a positive fact.

For my own part, I do not think we have many, if any, clinical facts leading to show that an operation for fistula in phthisical patients renders the lung affection worse, or makes it more rapidly

It will be as well here to give a brief description of theanatomical relations of the parts in which the above diseases occur, as this is necessary to a proper apprehension of the subject and to the measures adopted in dealing with the affections surgically.

The Ischio-rectal fossa is a space of pyramidal form lying between the rectum and the ischial bone. It is filled by a soft granular fat. Roughly speaking, its dimensions are about one inch wide at the surface, and it is about two inches in depth. Externally it is bounded by the obturator fascia covering the obturator internus muscle; internally, by the recto-vesical fascia in contact with the levator ani muscle. In front it is limited by the triangular ligament, and behind by the great sucro-sciatic ligament and glutens maximus muscle. Lying close to the ischial tuberosity are the pudic vessels and nerve. Posteriorly the artery lies at a depth of about an inch and a half from the surface, but anteriorly it is much more superficial. Crossing the centre of the hollow is the inferior haemorrhoidal branch of this vessel with accompanying veins and nerves.

Connected with the lower end of the rectum are three muscles -- two sphincters, external and internal, and the levator ani.

The external sphincter is flat and thin and surrounds the lower end of the rectum, attached behind to the coccyx, and in front to the central point of the perinaeum. It lies close beneath the skin. Its outer border projects over the ischio-rectal fossa. This muscle occludes the anal aperture and is under the control of the will.

The internal sphincter may be described as a thickened band, half an inch in depth, of the involuntary circular fibres of the gut, and encircles the lower part of the rectum in the form of a ring. It assists the external muscle in closing the anus, and is involuntary in its action.

The levator ani muscle bounds the ischio-rectal fossa on the inner side, and unites with its fellow to form a fleshy layer through which the rectum passes. It elevates and inverts the lower end of the gut after defaecation.

Owing to the nature of the contents of the fossa and its scanty blood supply it is, when subjected to any irritation, peculiarly prone

progressive,

I have had several cases, which certainly at first sight appeared to contradict what I have just stated: the patient is operated upon, and in four or five days inflammation of a lung and haemoptysis set in, this being in some cases the first attack. Now, one is not unnaturally led to conclude that the operation is the active cause of the sudden accession of the lung symptoms in these cases; but after all it may not be so; there are other factors to be considered. These may be mentioned: the natural excitement preceding and attending the operation: the effect of anaesthetics; the different and probably colder and "draughty" air of the hospital wards; and the sudden taking to the recumbent position, by which, in lungs predisposed to disease, hypostasis may be readily set up and pneumonia follow. This last I think a very important element in the phenomena, and, as I have said, never confine your patients who have a consumptive tendency strictly to bed. Let them recline on a sofa, and sit on air-cushions from the day of the operation, and I really think this precaution has a great deal to do

to become the seat of inflammatory action. Thus when it is exposed to a degree of cold which, in other parts of the body by nature more resisting would produce but trivial effects if any, the results in this neighbourhood are more serious and lasting in their nature.

When we consider its intimate relation with the lower end of the bowel we can quite understand how, in certain cases, sharp-pointed bodies such as fish bones and the like which have been ingested and have traversed the alimentary canal, becoming retained in the rectum, impinge on the mucous membrane, and gradually making their way through, become the starting point of inflammation. Also, when from any cause the rectal wall has become weakened it readily permits of the egress of septic matter into this neighbourhood.

With respect to the causes of the mischief of which the above may be regarded as common it is difficult in practice to estimate their relative frequency. We can conceive, for instance of a spicule of bone, after piercing the bowel and exciting suppurative change, either making its escape unobserved in the pus or becoming dissolved in it. W.H.Van Buren * mentions a case of fistula in which he found a fragment of chicken bone lodged deeply in a sinus in the ischio-rectal fossa. Apart from cold and direct injury, however, we find that patients themselves are generally at a loss to assign a definite cause for their complaint.

The acute form of Ischio-rectal abscess is frequently met with in robust patients and is attended by considerable constitutional disturbance.

Locally there is generally a considerable degree of pain and throbbing. As patients often have a dislike to apply to the surgeon for assistance they sometimes resort to poultices and fomentations for some time before they are compelled to apply for other help. In Case IV. the patient was suffering for about a fortnight before I saw him, temporizing by means of poultices and hot hip-baths and trusting to cure himself by these means. The

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* Lectures on Diseases of the Rectum, 1881.

with the result. You may accept it as a fact that phthisical patients in hospitals do not do nearly so well as phthisical private patients; and food feeding, nursing, and the comforts of a home may be credited to a great extent with the causation of the difference"

result was that when I saw him the pus had burrowed to a considerable extent on to the gluteal region. Had he applied earlier he would, in all probability have got immediate relief, and the wound, being less extensive would have granulated sooner. The risk of haemorrhage in those cases is lessened if the incision is carried in a direction radiating from the anus, as there is then less risk of injuring the inferior haemorrhoidal artery which crosses the ischio-rectal fossa from the pudic artery. It is impossible to insist too strongly on the importance of early incision in such cases. No time should be lost whenever the presence of pus is even suspected.

The Chronic form of abscess may take a long time to form and may be almost entirely free from pain. They occur almost exclusively in phthisical patients or in delicate conditions of the system such as supervene upon fevers and other wasting illnesses. Here also it is necessary to evacuate the abscess as soon as the presence of pus is ascertained. This form of abscess occasionally becomes widely extended, undermining the integuments to a considerable distance from the point of origin. It is apt to burst into the bowel if not dealt with early enough and a blind internal fistula results. It is probable that Case II may have originated in this way. In all such cases the general health of the patient calls for as much attention as the local condition and no means should be spared to restore the vital powers, as then the reparative process will be greatly facilitated.

If those abscesses fail to heal they sooner or later contract into a sinus, and so terminate in fistula. The mobility of the parts acted upon by the almost constant action of the sphincter muscles, the presence of so much loose areolar tissue, the unsupported condition of the veins which in those parts have no valves and the consequent tendency to stasis of the venous circulation all tend to retard the healing process.

There are on record cases of the spontaneous healing of fistula, but they are very rare. It is most likely to occur in cases of Blind External Fistula where there are no secondary sinuses. Dr Allingham* of St. Mark's Hospital, who is

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* " Diseases of the Rectum," 9th Edition 1888.

who is generally recognized as the greatest liv- authority on this subject states that about 1 per cent of the cases terminate in this way. He has also successfully treated several cases without having recourse to operative measures. In those cases he first dilates the external opening by means of sponge tents. When the opening is large enough he inserts to the end of the sinus a small piece of wool saturated in strong carbolic acid with 10 per cent of water, and then inserts a drainage tube dressing it thus daily. He also mentions one case in which by means of a bone collar-stud with a hole drilled through it to permit the pus to escape, he managed to keep the external orifice patent without irritating it and obtained a good result. Following Professor Dittel of Vienna Dr Allingham has been successful in dividing some fistula painlessly and bloodlessly by means of the elastic ligature without having recourse to the knife. It is only, however, in cases uncomplicated by secondary sinuses that this is possible. He relates (op.cit. page 37.) that he has operated in this way on thirteen medical men, and that they have all declared that the ligature divided the fistula without pain, and that they were able to go about and attend to their patients. I think that this method of operating has not attained the popularity that it deserves.

Fistula is the most common of all diseases in the neighbourhood of the rectum. Dr Allingham (op.cit.page 13) mentions that of 4000 consecutive cases of rectal disease treated at St. Mark's Hospital 1057 were pistula. It is found to be commoner in men than in women, and is oftener met with in people at the prime of life than at either extreme. It is also found amongst all classes of patients. Madame de Sévigné speaks of it in her letters as the "Maladie du roi," and says that under Louis XIV who was a sufferer from it, it was very prevalent at court, and that many underwent an operation for its cure, even some who did not have the disease (!).

Fistula in Ano very frequently occurs as a complication of phthisis. For our present purpose this may better be put conversely by stating that a great many patients suffering from fistula are phthisical. Indeed so common is this conjunction

of the two diseases that whenever a case of fistula comes under our notice the possibility of the co-existence of phthisis always arises in the mind as a factor to be dealt with in the case. Dr Allingham (op.Cit.) states that out of 1632 cases of fistula treated by him in private practice 234 or 14.3 per cent were either phthisical or presented symptoms such as preshadowed the appearance of phthisis. Dr Benson [1] puts the proportion at 10 to 15 per cent.

The question has been frequently discussed whether operation for fistula is permissible in phthisical patients. Formerly some used even to think that the discharge of pus from the fistula was an effort of nature to throw off the disease, and that, if an attempt were made to cause it to heal the pulmonary disease would advance with fresh virulence on the closing up of an outlet to the habitual discharge of purulent matter. Nowadays we find a general concensus of opinion that in many cases of undoubted phthisis it is allowable and even advisable to operate, but that special care and judgment require to be exercised. When there is acute tubercle in the lungs an operation cannot be attended by permanent cure, and all that need be attempted is to relieve the urgent symptoms.

Chas. B. Kelsey M.D. [2] lays great stress upon the necessity of trying to remove cough if it be present, before attempting to operate. No doubt when violent and frequent it is a decided contra-indication, interfering as it does very certainly with the healing of the wound. Again when the patient is weak and emaciated it is well to postpone active interference until he has regained some measure of strength. To effect this we may recommend rest and change of air together with nourishing diet and suitable tonics and, when the stomach can tolerate it, Cod Liver Oil. Then when he is deemed strong enough the operation is more

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[1] "Diseases of the Rectum" 2nd Edition
[2] "Diseases of the Rectum and Anus" 1883.

likely to prove successful and thereare more likely to be healthy granulations, and the necessary confinement after the operation is also better endured.

Although to the surgeon engaged in hospital work these affections and their treatment may appear comparatively trivial, yet to men occupied in general practice, who from established custom, especially in cities, rarely undertake any but the minor operations, they are likely to be of interest as something outside the general routine of their work. This probably explains why my attention was specially directed to the consideration of this subject. My experience so far as it has gone has shewn me that a great amount of relief from pain and discomfort can be obtained from an operation simple in itself and involving little danger even in patients suffering from concurrent disease. This is well illustrated in cases I and III, in both of which the patients had many of the usual signs and symptoms of phthisis well developed, and who not only got rid of the annoyance and drain on the system produced by fistula of long-standing but were undoubtedly improved as regards their lung affection. It may be argued that there is not sufficient evidence to shew that the cessation of the symptoms of pulmonary mischief was directly traceable to the measures taken for the cure of the fistula yet as C.B.Kelsey * tersely puts it"phthisis alone is better than phthisis and fistula". And undoubtedly much is gained by relieving a patient of a source of anxiety and annoyance which is constantly obtruding itself upon his attention; and in a case of incipient phthisis it is conceivable that the healing of a fistula when present may turn the scale in at least causing the disease in the lungs to become quiescent.

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* "Diseases of the Rectum & Anus".

List of Authorities Consulted.

Allingham on Diseases of the Rectum. 5th Edition. 1888.

The Surgery of the Rectum.5th Edition
By Henry Smith F.R.C.S.

Diseases of the Rectum. 2nd Edition
By Samuel Benton L.D C.Vete.

Lectures on Diseases of the Rectum. 1881
By W.H.Van Buren M.D.

The Rectum and Anus, their diseases and treatment. 1887
By Chas. B.Ball. F.R.C.S.J.

A Practical Treatise on Diseases of the Rectum.1887
By Alfred Cooper F.R.C.S.

The Diseases and Malformation of the Rectum and Anus.
2nd Edition By T.J.Ashton.

Diseases of the Rectum and Anus.1883
By Chas. B.Kelsey M.D.

Dictionary of Practical Surgery.1886.
By Christopher Heath.

The Science and Art of Surgery.
By John Erie Erichsen F.R.S.
9th Edition. 1888.

Quain's Anatomy 8th Edition.

Demonstrations of Anatomy 7th Edition.
By George Viner Ellis.
