

AN

## INAUGURAL DISSERTATION,

ON

*Fistula in Ano*

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# Fistula in Ano

What I understand by the term Fistula in Surgery, is a deepseated sore, with a narrow orifice, which is callous and has no disposition to heal; and the term Fistula in ano, I conceive to be the same applied to the anus. I know of no technical term that has been more misapplied, than this, and no one that has led to a more abominable practice in Surgery. Simple healthy abscesses in the vicinity of the anus, are often believed to be fistulous, on account of the slight induration; and the treatment in such cases produce such disturbance as will cause an exacerbation of the disease; and add to the evil it is trying to alleviate. This originates from a misinterpretation of the term. The custom then of giving to every collection of matter formed near the anus, the appellation of fistula; has conveyed a false notion of the true fistula; and has been productive of such

modes of treating them as are altogether inefficient; and diametrically opposite to that which ought and should be pursued. Among the ancients whenever a tumour could be discerned with the least degree of induration, and with an orifice discharging a thin gleet; it was conceived to be fistula; and being altogether ignorant of any way of curing it, except with the knife, or the caustic, they usually plunged in the knife, or destroyed the part with escharotics to accomplish this end; which was exceedingly hazardous to the patient.

Abscesses near the anus do sometimes become fistulous from bad habits; from extreme neglect, and from gross mistreatment: but by far the greater portion of them in the beginning have no tendency to become fistulous; nor would they become so, were they not greatly neglected both on the part of the patient and the

surgeon. In fistula in ano the sinus or sinuses may point in different directions, and receive different names, according to the direction in which they point. First there is the complete fistula with two openings, the one into the perineum near the anus, and the other just above the sphincter ani. Again there may be but one opening, and that may be into the intestine, and is called occult or blind internal fistula; or there may be but one opening, and that into the perineum near the anus; and is called imperfect or blind external fistula. There is still another kind that has several sinuses communicating with the abscesses; this is called compound fistula, and is more complicated than the rest.

*Causes of Fistula.* It was the opinion of some of the ancient writers that this

disease was produced in but one way; that being by the bursting of an internal pile; but I believe this to be erroneous. More modern writers supposing the causes to be various all of which are founded upon the most satisfactory evidence. Collections of the matter in the neighborhood of the anus often burst spontaneously; and the hole through which the matter escapes is not always in the most dependent part; and, of course is incapable of performing the object nature had in view; viz to throw off the <sup>matter</sup> formed therein. A portion of the matter is therefore retained, and instead of its healing up, it contracts to a small size, and, becomes by degrees indurated and, continues to expel the matter that is formed, and, thus fistula is produced. In persons of bad habits; an obstinate costiveness; attends this inflammation

accompanied with painful distention and enlargements of hemorrhoidal vessels, and in the vigorous efforts to expel the hard faeces, these vessels and the adjacent parts become still more congested and thus a morbid action is set up; pus eventually forms which may burst and produce a fistulous abscess as mentioned above. Again it has been caused by pins, fish bones and the fragments of bones of other animals, perforating the rectum as they pass through the alimentary canal. On the removal of these exciting causes the fluid faeces enter the perforation which excites; and irritates the parts until inflammation is set up which eventually results in fistula. Besides the repeated action of the sphincter and levator ani muscles, increase the inflammation tenfold or separate adhesions where they are disposed to unite thus pus is formed in the mucous membrane and cellular tissue adjacent the

bowel and as a natural consequence fistula. It is supposed by some that it always arises from an ulceration of the mucous membrane of the rectum; which on account of the inflammation produced by the admission of the fluid faeces gives rise to abscesses, and abscesses to fistula. This supposition is confirmed by the fact that fistula is so common in consumptive persons who are more or less affected with ulceration of the bowel. It may be the result of pressure upon the parts in the immediate vicinity of the anus prohibiting a free circulation; which would result in absorption, inflammation, and suppuration. It may be produced by the suppuration of a boil, congestion and swelling of the lower bowels, hemorrhoids, condyloma, prolapsus of the lining membrane of the anus, inflammatory swelling and acute or chronic, abscess all of which I might treat.

of more extensively but I deem it unnecessary as I would be compelled to repeat in part what I have already said. This disease (Fistula in ano) is often connected with a diseased condition of some of the most important viscera, such as the lungs liver and kidneys. The derangements of these ~~these~~ organs were by the most ancient writers believed to have originated from fistula but the reverse of this opinion is now believed to be true. viz. that fistula is the effect of these derangements. As I shall have occasion to allude to these functional diseases in the treatment I will discontinue my remarks on this subject as I would be compelled to rehearse: my object being to avoid repetition.

Symptoms. The symptoms of this disease are as various as the causes. each pa-

8

ent describing them as being peculiar to himself. There is often a sense of dullness and weight in the part affected sometimes there is an excessive itching, and at others; an acute or dull pain. These sensations are generally at their acme after each evacuation from the bowels. The first indication of this disease is the formation of an abscess in the vicinity of the fundament. It first appears hard and somewhat elevated, and upon being examined by the touch appears moveable. If the parts be inspected by the eye there will be seen a discoloration produced by the inflammation.

There is often great <sup>rain</sup> evinced by the expulsion of the faeces. the patient complains of tenesmus and pain in the nates of the affected side. The patient usually in the

begining has a full jarring pulse with great thirst and is generally much fatigued on account of his great restlessness. If the patient be not successfully treated or if the progress of the disease be not stopped the pulse will soon change to an unusually low faltering one and his strength and spirits sink rapidly and he will seem in every way dejected. This is generally the case with intemperate persons and those of unusually bad habits. If the abscess is deep seated much pain is felt before suppuration has taken place, and before the matter finds its way out. If however the abscess is near the skin the pain is generally less. This disease has been taken for psoas abscess and vice versa. Psoas abscesses are said to be very numerous in Europe but are of rare occurrence in the

United States. This disease (Psoas abscess) is often connected with a diseased spine. It sometimes forms a swelling above and sometimes below Poupart's ligament, and the matter generally dissects its way under the fascia of the thigh. It sometimes makes its way through the sacro ischiatic foramen and assumes the appearance of a fistula in ano. The uneasy sensation in the loins and the impulse communicated to the tumour by coughing is an evidence that the disease arises in the lumbar region, but we can never be sure that a psoas abscess exists unless we have an ocular demonstration of the fact. The occurrence of this disease in the United States is not sufficiently often for me to occupy much time or space in speaking of its connection with the disease in question I shall therefore resume my subject

Treatment There is nothing in the nature of an abscess in the vicinity of the anus that renders it difficult to cure. They are as susceptible of cure as they are in any other part of the body if the proper course be pursued. If there is inflammation in the parts about the fundament, the actions of the muscles are a constant source of irritation at each evacuation of the bowel which renders it more difficult to cure than elsewhere. Abscesses in the vicinity of the anus should always be opened at an earlier period than might be deemed necessary in any other part of the body, for if an incision is not made at an early period the matter may dissect its way through the cellular tissue into the intestine or burst through the perineum near the fundament and produce either imperfect or perfect fistula whereas if an inci-

ion had been made in time it would have saved the patient great pain and perhaps from fistula itself. In this disease the external end of the sinus sometimes closes up and the patient has no pain and is often indulged in the pleasant illusion that he is well, but before he ~~has~~ indulged in this belief long his hopes are baffled by an uneasy sensation perhaps throbbing in the vicinity of the affected side and at last the cicatrix bursts and the discharge becomes as copious as before. If the patient labors under any constitutional or organic derangement such as Consumption, Hepatitis &c the operation should be prolonged and the system restored to its healthy action before any hope of cure can be indulged in. If an operation is performed while these organs are in a state of derangement they become still more affected.

through sympathy, though there is no direct communication between them through the nervous system; and react upon the fistula and thus they mutually increase the morbid action until death which will inevitably follow.

The condition then of the lungs, liver, kidneys, &c should be examined into before an operation should be performed nor would a surgeon be justified in performing an operation under these circumstances. Those who are subjects of this disease generally look upon an operation with much dread and will submit themselves to any treatment that may be suggested that offers the least possibility of cure before they will that of an operation. If we are called to the disease in the commencement we should not attempt to prevent suppuration as is sometimes the case but

on the contrary we should promote it and moderate the symptoms as far as is in our power and when matter is formed let it out and treat it in the manner that is most likely to produce a speedy and lasting cure. A soft poultice is the best thing to forward suppuration. If the patient is of a full sanguine habit and if the pain is great and the fever high a general bleeding and a mild cathartie will be found of great advantage. The different forms of fistula are treated in different ways. Vis the blind external fistulae are treated by injection and by compression or the orifice is enlarged to give a free exit to the pus and as a last resource, the sphincter is divided and the parts put at rest. The blind internal form is generally made complete and the treatment then

comprises several methods viz compression, injection, cauterization, ligatures, excision, and incision. Of these the Ligature and Incision are the methods most relied on by the profession. It is very tedious and difficult to operate by ligature and often very painful especially when the skin only remains to be divided and then the bistoury is often had recourse to. The operation by ligature is at present almost abandoned by the profession and is only resorted to when the patient cannot be prevailed on to submit to an operation by the knife.

"A metallic thread may be used; introduced alone or by means of a director or by the canula of a trochar previously passed into the fistulous sinus. A piece of strong silk thread is generally used by means of an eyed

probe of flexible silver. When the ligature perforates the intestine it is brought down and tightened by a single or a double bow knot which constriction can be augmented at pleasure. This operation is exceedingly difficult on account of the powerful spasmodic action of the sphincter which deadens the sensation of the guiding finger. To obviate this difficulty (as well as others which are unnecessary to mention here) my preceptor Dr. Park of Franklin has invented a very ingenious set of instruments which are preferable to the old ones and which I shall hereafter describe. The only remedy that can be confidently relied upon in this affection is the division of the sphincter so as to completely paralyze it and prevent its action for a while. The success of the operation seems to depend

upon this important point. After the general health of the patient has been restored he should be prepared for the operation. The digestive organs and secretions must be put in good order. The bowels should be emptied of their contents by castor oil or some other mild cathartic, and an injection after which an opiate should be administered from time to time so as to prevent their disturbance for several days. The patient is generally made to kneel upon a chair with his knees upon the seat and his elbows upon the back or he may prefer leaning over a table or bed in which case his feet should be well secured. The operation is then commenced and proceeded in according to the circumstances of the case. In complete fistula the depth of the orifice and the direction of the sinus having been previously examined into the forefinger

is well greased and inserted into the bowel the probe pointed bistoury is then introduced into the external orifice and pushed gently forward untill it comes in contact with the finger. If the natural opening cannot be found the point must be made to perforate the bowel. The knife and finger being in contact are brought down together dividing ~~all~~ the textures between the sinus and the rectum and laying the two cavities into one.

The operation is the same as regards the blind external form. The blind internal form is made complete and the operation proceeded in as above. After we are perfectly satisfied that the division is complete we should do something to prevent its sudden reunion. A piece of lint moistened with oil or some

stimulating ointment will accomplish this if it be carefully insinuated to the bottom of the wound. In dressing it the finger should be kept in the rectum to keep it in its natural position. This part of the dressing should be retained until suppuration is established. In two or three days a mild laxative may be administered and the lint will pass off with the evacuation. The part should be kept clean and an astringent lotion may sometimes be used with advantage.

The patient should be kept in bed until the cavity heals. If there is profuse hemorrhage it may be suppressed by a T bandage or the cautery. Nothing more is required in the treatment of this disease except that the lint be kept in its place so as to

keep the divided edges asunder that the wound may heal by granulations from the bottom. The instruments that I proposed describing above offers many advantages that the others do not. the description of which I shall give in the language of the inventor "With these instruments the operation can be performed with much greater facility and with less danger both to the patient and surgeon." They are roughly made, the longest being moulded of the ordinary syringe metal, and consists of a conical tube. resembling a speculum closed at the apex. and may be very well applied to that purpose having a large oval or elliptical opening in the side. The calibre of the cone is sufficient to admit the forefinger and the perforation corresponding to the tactile portion of it, and of such length

and width as to permit free exploration. The extremity of the perforation is continued towards the apex as a slit of a line in width and half an inch long. The second instrument is a stylet with disconnected point and enclosed in a canula. The point has cutting edges, and an eyelet for carrying a ligature. The third consists simply in a different application of the sheath to the ordinary curved bistoury. The guard being so applied as to be more easily thrown off than that generally employed. The cone being passed up the rectum, prevents the paralizing effect of the sphincter from being exerted upon the finger, at the same time that the large perforation in its side does not embarrass its motion or prevent its adaptation to the extremity of the probe or

director, and ascertaining where the point of the bistoury or stylet should, or has penetrated the bowel. The finger may then be withdrawn a little so as to permit the point of the instrument to be pushed forward into the cone and engage in the slit, by which the knife will be firmly held and strengthened so that on the withdrawal of all together the necessary incision will be completed without risk of the surgeon's finger being wounded. It is important to have an additional support to the bistoury, especially if we use the closing shellhandled ones. Sufficient force can scarcely be exerted upon their handles to make sections with the requisite precision. If it is desirable to carry a ligature, the disconnected points of the stylet, and with the loop of the ligature will be engaged within the slit and with-

drawn within the cone; or the loop can be more readily seized by the forceps, the cone acting the part of the speculum. The advantages of their employment over the ordinary mode of cutting upon the finger, may thus be enumerated: 1<sup>st</sup> The conical tube prevents the spasm of the sphincter from embarrassing the finger, and consequently facilitates the speedy accomplishment of the operation, thereby curtailing the sufferings of the patient. 2<sup>nd</sup> At the same time that it ensures the thorough section of the parts it does not endanger the cutting of the surgeon's finger. 3<sup>rd</sup> It imparts support, strength and firmness to the knife. 4<sup>th</sup> It makes easy the seizure of the loop of the ligature, as the forceps may then be directed by the eye. 5<sup>th</sup> In case of cutting an artery requiring ligature it would be easily accessible through the large

perforation in its side. 6<sup>th</sup> The stylet point and eye being detached from the shaft, will, with the loop, be withdrawn within the cone without risk of injuring the soft parts. 7<sup>th</sup> The advantage of the different shield from that generally employed is in its more ready detachment without drawing back the blade, which if withdrawn far enough to detach the shield may engage the soft parts without reaching again the bottom of the fistula, thereby leaving such a cul de sac as may determine the formation of another fistula.