# Clinical Lecture

ON

# DECEPTIVE ABDOMINAL PAIN IN LATENT HERNIA, ESPECIALLY WITH REFERENCE TO THE SURGICAL ASPECT OF CERTAIN CASES OF SO-CALLED INDIGESTION.

*Delivered at St. George's Hospital Medical School on March 20th, 1894,*

BY WILLIAM H. BENNETT, F.R.C.S. ENG.,
SURGEON TO THE HOSPITAL, AND EXAMINER ON SURGERY AT THE UNIVERSITY OF CAMBRIDGE.

GENTLEMEN,—There is a patient now under my care in the Fitzwilliam Ward whose case illustrates so well how very deceptive symptoms of pain about the abdomen may be that I think it is a good case for your consideration, first of all because I am not quite sure that some of the causes of abdominal pain are so well understood as they should be, and, secondly, because I happen to have seen in the course of the last few years several other instances which teach exactly the same lesson as this man's case. The patient I refer to is a man twenty-three years of age, who was admitted to hospital on Feb. 28th. He was sent to me with symptoms which were thought to be those of "perityphlitis"; he was sent, in point of fact, with a view to the removal of his vermiform appendix for the relief of the discomfort from which he has repeatedly suffered. He had, for three or four years, been suffering, on and off, from recurrent abdominal pain. Whenever he took any unusual exercise, if he took a long walk, or ran, or did anything of that kind, or if he happened to eat any indigestible food, he was always attacked by a kind of "crampy" pain in the lower part of his abdomen, just over the cæcal region. This pain sometimes lasted as long as two or three days, was invariably accompanied by tenderness over the cæcum, and was also always followed by obstinate constipation. These symptoms, as you will see, fairly well resemble the effects which sometimes follow the condition which we call "perityphlitis." Upon examining the man somewhat cursorily in the surgery I could not make out any sign of thickening or other indication of disease about the vermiform appendix. At that time he had no pain, as he had not been exerting himself very recently and had been carefully refraining from indigestible food. Assuming, however, for the moment that the case was one of the nature suspected, seeing that the man had been sent with a view to operation, I took him into the hospital. On the following day we again examined him as he lay in bed, and again I failed to find any symptoms whatever of anything wrong about the region of his cæcum; but I noticed that the right spermatic cord was considerably larger than the left. Upon feeling it, it seemed at first as if the man was the subject of a varicocele, and when questioned on this matter he said that for six months he had been wearing a truss because someone had told him he had large veins on that side of the scrotum, and that a truss was a good thing to relieve the discomfort sometimes caused by that affection. Very little examination made it evident that the case was not one of varicocele at all. There was about the right spermatic cord a softish, flabby, nodulated mass, feeling somewhat like large veins occasionally do in a very tense varicocele, but still differing altogether from a varicocele in that they ceased abruptly just above the testis, terminating in a blunt end—an arrangement never seen in a varicocele passing so far down into the scrotum. It was certain, in fact, that this man had a small nodule of omentum in an old hernial sac, of which he was not aware. Following that idea a little further, I came to the conclusion in my own mind—and expressed my conviction to some of you at the time—that the symptoms which were so very like those of perityphlitis were due, not to the existence of any mischief round the vermiform appendix or cæcum, but to this little nodule of omentum lying in a hernial sac. Upon that assumption a few days afterwards I cut into the groin with a view to performing a radical cure for the hernia which I supposed to exist. Presently, after exposing a thin sac, I came upon the little nodule of omentum, as I expected, with a small stalk passing up through the very narrow neck of a hernial sac. This nodule of omentum was adherent below, and could not be reduced at all; but it was connected with the parts inside the abdomen by its long stalk. Such was the condition of things then, and in my mind it fully explained the symptoms of which the man complained, the history of his suffering being, so far as I could judge, something like this. In an ordinary way the piece of omentum, connected with the omentum inside the abdomen by a long stalk, lay in the sac with the stalk quite loose and flaccid, therefore the man was usually quite unconscious of its existence; during any great exertion, however, or if he ate any particularly indigestible food, a good deal of movement in the intestines and alteration in the intra-abdominal tension would be brought about, the result being that this stalk or tag of omentum was pulled upon, and so was caused the intra-abdominal pain from which he suffered; and, as it happened that the stalk went up towards the right side, the dragging upon it afforded a fair explanation of the resemblance of the pain to that of perityphlitis. It will remain to be seen whether this man again suffers from the pain which formerly troubled him. I do not think he will. I have no doubt the explanation of the symptoms which I have given you is the real one, and that the treatment adopted will cure him not only of the hernia but also of these "crampy" pains from which he suffered.[1]

My next case is a very interesting one of the same kind, but a little more obscure. It occurred in a patient about thirty-two years of age, who for eight or ten years had been constantly the victim of very acute dyspepsia—at least, that was her account. She stated that after taking food, especially indigestible kinds of food, which would naturally be expected to excite rather energetic peristaltic action, she always suffered from this acute crampy "indigestion" (that again was her own term). She had been to more than one medical man, and had been treated for indigestion by them all. She had taken, so far as I could ascertain, almost every drug having any reputation for the cure of dyspepsia. Still getting no relief, she became wearied, and, for some reason or other, in the course of her peregrinations in search of relief she came to see me. Following a rule, which I think is a good one—viz., in any case of abdominal pain to always thoroughly examine the patient and not to accept the patient's word merely that the case is one of indigestion, constipation, or what not—I examined her as carefully as I could, and, I am bound to say, could find nothing. At last, however, as I happened to be examining the middle part of the abdomen, she all at once said, "That is the spot where the pain always begins." That led me, of course, to examine the spot a little more minutely; and there I found, exactly in the middle line, about halfway between the ensiform appendix and the umbilicus, a small, round, movable nodule, about the size, apparently, of an ordinary filbert, of which the patient knew nothing, and which, she said, nobody had discovered before. Indeed, so far as I could learn, hardly anyone whom she had consulted about her symptoms had examined her abdomen at all, excepting over the liver region. It had apparently been assumed, from the symptoms she described, that she was suffering from acute indigestion, and she had been treated accordingly. The little nodule, then, in this case explained the history of the many years of "indigestion," so called. You probably know that it is not at all uncommon to find in the middle line of the abdomen little openings the result of defective coalition of the parts in that situation during development, and that when these small defects exist there is generally a tendency to a protrusion, through the opening, of the fatty tissue lining the inside of the abdominal wall—the subperitoneal fat. But occasionally the protrusion is something more than that. It is sometimes a small omental hernia lying in a little peritoneal sac just under the skin. In this woman, then, I concluded that there existed in the middle line of the abdomen a condition very much the same, from a mechanical point of view, as was found in the man whose case I have just related. She had, I believed, a piece of omentum in a hernial sac connected with the parts inside the abdomen by means of a stalk, so that when the intestines rolled about under the impetus of exercise, great exertion, or indigestible food she felt this same crampy pain which she described as indigestion and for which she had been unsuccessfully treated for years with drugs applied simply to the treatment of that complaint. The history of

[1] The patient was perfectly well three months subsequently, no recurrence of the old symptoms having taken place.

the case was simple enough, and the treatment clear. This little nodule which proved to be a piece of omentum was taken away; it was not larger, as was found upon cutting down upon it, than a large pea. It felt larger before because the sac in which it lay was enveloped by a mass of adipose tissue which is generally found lying over these small openings in the middle line of the abdomen. The tissue is really modified embryonic tissue, the same sort of material as is so commonly met with about the sac of a femoral hernia. After the removal of the piece of omentum all the symptoms of indigestion disappeared.

The next case was a remarkable one, because it shows the way in which spontaneous relief from pain may occur in conditions of this kind. A man came to see me in consequence of a tender swelling in the right side of his scrotum, which alarmed him somewhat, because it followed upon rather a peculiar circumstance. For many years he had been in the habit of suffering from almost the same symptoms as the man in Fitzwilliam Ward—that is to say, he was constantly getting recurrent attacks of abdominal pain and tenderness, with obstinate constipation. He could never explain exactly why they came, and he never knew when they would come; but, as a rule, they tended to occur when he rose from the recumbent to the erect position; they came on, therefore, most frequently when he got up from bed in the morning. They only happened about once in every six months and had occurred seven or eight times altogether. He had been told by some persons who had seen him that he was probably the subject of some unnatural condition about his cæcum—the assumed unnatural condition being, I suppose, some disease of the vermiform appendix. During the last attack of pain, which occurred about a week before he saw me, he had attempted to lift a box, and as he was doing this he felt a sudden very acute pain in the groin, which made him feel quite sick and faint for the moment; then all at once his pain ceased and did not recur in the same form; but, on the other hand, he noticed that he had a painful swelling in the scrotum. He therefore came to know what it all meant. He had, so far as I could see, a very small hæmatocele, but the parts were so tender, and altogether he was so sensitive, that I could make out nothing definite at first. In the course of ten days I saw him again. At that time he appeared to me to have a varicocele with a large mass of blocked veins in its centre; that was the impression the case gave me. I had never seen anything quite like it before; but, seeing that a varicocele is a collection of large altered veins, and that blocking of these veins does, one knows, sometimes occur, I assumed that the condition was as I have stated—rather because I could not see any other cause for the swelling than because it seemed particularly like a thrombus. Well, as there was a varicocele there, and as the diagnosis of the case was somewhat doubtful, I suggested that the best thing for him to do would be to have the thing explored. He would then, at all events, have the advantage of getting his varicocele cured, and if it was a blocked varicocele, the block not extending as high as the inguinal canal, the division of the varicocele above the point of blocking, I thought, must at all events be advantageous. So we decided that this should be done. On cutting down upon the varicocele in the ordinary way I came upon a small cyst containing a little blood-stained fluid, and lying in the cyst was a small, loose mass of fat. I picked it up with the forceps and was going to take it out altogether, when I found it was attached by a little process to the base of the sac, and for the moment I thought it was one of those lipomatous congenital tumours which are sometimes seen about the spermatic cord, and that some injury which the patient had done himself whilst lifting the box had caused hæmorrhage to occur round about it, which I thought might account for the fact of its lying in the middle of the blood-stained fluid quite by itself, attached by a process to the bottom of an adventitious sac. But upon a little investigation it was quite clear that this supposition—which, of course, was the result of a merely momentary impression—was altogether wrong, and that the cyst was not an adventitious thing at all, but was the sac of a hernia, and that this small piece of omentum represented the contents of a hernial sac, of the existence of which the patient had been unaware. In the exertion which he had been making at the time when the pain suddenly ceased he had broken across the stalk of the piece of omentum. With the breaking of the stalk the pain ceased, because there was no further tension on the part. The stalk withdrew into the abdomen, and the man was altogether relieved from the pain. But there was still left in his scrotum the tag of omentum which originally constituted his hernia; the swelling and hæmorrhage were connected with the breaking off of the stalk. I operated on the varicocele and obliterated the hernial sac, and he has had no further symptoms. This case is instructive, as it shows from beginning to end the history of a point I wish you to understand. The patient had in an old hernial sac an adherent piece of omentum connected, by means of a long thin stalk, to the parts inside the abdomen. Under ordinary conditions this stalk was flaccid and exercised no traction upon the parts it connected, hence no discomfort arose; when, however, by reason of some exertion, or in consequence of the taking of indigestible food, violent peristalsis was started in the intestines, or the intra-abdominal tension, &c., was increased, the stalk, instead of being flaccid, became tense and dragged upon the parts between which it passed. The tugging of this long adhesion—that is what the thin stalk amounted to, for practical purposes—upon the omentum inside the abdomen started the "crampy" sort of pain which, common in all cases of omental hernia, is in some instances mistaken for mere indigestion. In this particular instance the cure was spontaneous, because during the attempt to lift the box the tension on the stalk of omentum was so great that it broke across. Thus the tag of omentum in the sac was set free; no traction upon the part being now possible, complete relief of the symptoms necessarily followed.

Such, then, I take to be the explanation of the pain in these cases. The situation of the hernia is of no moment; it may be in the scrotum, in the middle line of the abdomen, or elsewhere. Here is another instance.

The patient, a domestic servant, was constantly having to give up her work because she had indigestion, with feelings of great faintness, and colicky pains about the lower part of her stomach. She had been told her condition was due to drinking tea, and again it was because she took milk; in fact, whatever she drank or ate seemed to cause pain. In this condition she went on with her work, getting thoroughly disheartened. At last she came to the hospital, and, fortunately for her, she happened to come on a day when she had the pain rather badly. Following my invariable rule again, I examined her carefully, and found a little fulness in one groin, just above the labium; this I took to be the key of the situation. She had, as was subsequently proved, an unobliterated canal of Nuck; the funicular process of the peritoneum had not in her case quite closed, and she had, in the same way as the other cases, a little tag of omentum passing down into the sac thus formed. We operated upon her, removed the omentum, and closed the neck of the sac; she had no further symptoms.

The case I now come to is an extremely interesting one.[2] A patient consulted me with regard to intense rolling and "crampy" pains about the upper part of his abdomen which always followed the taking of food. He had suffered from these pains for a considerable time and had been treated for dyspepsia, for the cure of which he had, to use his own words, "learned to swallow many things" in the way of drugs, &c., but without effect; in fact, the more medicines he swallowed the worse were the symptoms, until at length his life was becoming unbearable. He had a hernia in each groin, of the ordinary reducible kind; he wore a double truss, which kept the ruptures up perfectly. The symptoms of which he complained were clearly not in any way connected with these herniæ. Upon examining the abdomen there was found, about one inch above the navel, exactly in the middle line, a small, round, movable tumour as large as a cherry, having all the characteristics of a lipoma. He then stated that all the pain from which he suffered started from that spot and gave him the impression of something inside being bound down there. He felt sure that if this could be "loosened" he would be quite well. I therefore cut down upon the small tumour and exposed a rounded nodule of fat, which, terminating deeply in a thin stalk, passed through a small opening in the abdominal aponeuroses not larger than a No. 8 catheter (English). It was continuous with the subperitoneal fat, and the peritoneum was not seen in the operation. The tumour was, in fact, a congenital lipomatous mass passing through an opening in the middle abdominal line, of the kind to which I have already referred early in this lecture. The removal of this herniated fat entirely cured the patient, who, after the soreness resulting immediately from the operation had passed away, experienced no further discomfort;

[2] This case occurred later than the date of this lecture; it is, however, inserted as it has such a direct bearing upon the matter under discussion.

the pains after taking food and the so-called indigestion entirely disappeared. The especial interest in this case lies in the fact that it demonstrates very conclusively that pains and discomforts indistinguishable from those produced by omental hernia may be caused by the protrusion through the abdominal wall of the extra-peritoneal fat, which may also give rise to symptoms easily mistaken for dyspepsia and only curable by the removal of the protrusion, an operation of extreme simplicity and without risk of any kind, seeing that the peritoneum is entirely uninvolved.

One case more before I conclude. A patient advancing in years consulted me concerning some swelling of one leg, and, whilst discussing his symptoms mentioned that he was constantly getting attacks of "acute indigestion," with colicky pain across the middle of the abdomen. These attacks generally came on if he took a heavy meal, and lasted sometimes for hours; they finally, as a rule, subsided almost suddenly, considerable eructations occurring at the same time. The abdomen always remained "sore" afterwards, and constipation invariably followed. At the time this patient came to me he was quite free from "indigestion"; but he allowed me to examine his abdomen, which appeared to be natural, excepting that there was undoubtedly a small defect in the abdomen wall under the navel, which I concluded was the opening of the sac of a small umbilical hernia, although no protrusion of any kind was at the time perceptible. Somewhat suspecting that this umbilical defect might have been connected with his "indigestion," I asked him to allow me, as a matter of curiosity, to examine him when he was next suffering from one of the attacks—a justifiable proceeding on my part, as he had long ago, he said, given up medical men, as they failed to cure or explain this "indigestion." I therefore saw him in his next attack and found at the umbilicus a small, tense, rounded tumour, obviously an omental hernia, which now filled the previously empty sac. I was fortunately able to reduce the little rupture, and the symptoms subsided at once. The obvious treatment, speaking generally, of such a case is the removal of the hernia by operation; but in the case now related other circumstances rendered operation unadvisable. I mention the case, as it illustrates the occasional relation of so-called indigestion to small, unnoticed, umbilical hernia. Extremely small omental herniæ at the navel are much more common than is generally supposed, and often escape notice simply because they are so small; in spite of their small size, however, they account, I have had plenty of evidence to show, for a goodly number of cases of obscure abdominal pain, the mechanism being the same as that I have described just now. In one case of this kind which I saw the apparent "indigestion" was caused by a hernia in the loin. Hernia into the loin is not a very common thing, but, although uncommon, it is really less rare than it is generally supposed to be, as it is so easily overlooked, the loin being the last place in which a hernia is, as a rule, suspected to exist. This patient was a man who for years had complained of great discomfort, which he also had attributed to dyspepsia. He was not quite certain whether it arose from dyspepsia or gout. He was, at any rate, sure it came from one or other, and he had been treated for both, with no success. When he took purgatives containing nux vomica he always obtained some relief, while, on the contrary, if he took an ordinary purgative, such as castor oil, he always got these attacks of curious flatulent pain over the right side of his abdomen. On making a careful examination I found a distinct projection in the right loin, with an impulse on coughing, and possessing all the characteristics of hernia, which it was. His symptoms were without doubt entirely due to the gut, which, getting entangled in this hernial sac, set up irritation and caused his discomfort. The hernia being easily reducible, he was ordered a belt with a properly arranged pad, and he assured me he never had "indigestion" afterwards.

These cases will be sufficient to impress upon you the fact that symptoms are not always exactly what they seem, and more especially to emphasise the desirability, in every case of pain about the abdomen, no matter what the patient tells you the cause may be, or what may have been said by other persons concerning it, of invariably making a careful examination of the whole abdomen. In these cases I have mentioned the cause of the distress and discomfort from which the patients suffered would never have been determined at all without the thorough examination of the abdomen which was made. For instance, in the second case, where the little nodule of omentum in the middle line of the abdomen existed, unless I had made an examination very carefully indeed, it is almost certain that I should have missed the spot which the patient recognised as that from which all her discomfort seemed to start. In consequence of that good rule and its rigid application these patients, at all events, were relieved of discomforts from which they had been suffering for many years, and from which they had altogether failed otherwise to obtain relief. It is, therefore, an excellent thing to bear in mind what I have said about the necessity of a general examination of the patient's abdomen in cases of apparent "dyspepsia." In all these cases of abdominal pain it is also wise, especially if the pain be "crampy," to examine the scrotum in order to ascertain whether both testicles are in their natural position, because I have at the present moment within my recollection another case, something like those of which I have been speaking, in which all kinds of obscure abdominal pains had existed for some years, during which the patient had been treated for many conditions—amongst others, that of floating kidney, which did not appear to exist. There was on the left side what is called a "migratory testicle"—a testicle which, as you know, is sometimes in the scrotum and sometimes in the inguinal canal, because the upper portion of the tunica vaginalis has never been properly obliterated. In such cases the testicle, when it rises into the inguinal canal, is occasionally retained there for a short time and subjected to a certain amount of pressure in consequence. Irritation follows, and curious pains occur about the abdomen, referred sometimes to the pit of the stomach and sometimes to the loin, but often, curiously enough, not to the testicle itself. That is another point worth remembering in cases of abdominal pain of this sort. In all these cases, therefore, in addition to examining the abdomen itself and the inguinal canals, the scrotum should be investigated in order to make sure that the testicle is in its natural situation, and to see whether it is possible, with a little gentle pressure, to push it up into the inguinal canal. If that is possible, you are justified in concluding that these vague, intractable abdominal pains may perhaps be due to the abnormal condition of the testicle which I have just mentioned. If this is so, the pains can be entirely removed by the use of a well-fitting light truss to prevent the unnatural upward movement of the testicle.

These cases, I venture to think, are of considerable interest. They speak for themselves, and the main lessons taught by them are obvious and, in some respects, elementary. The importance, however, of the relation between "latent hernia"—i.e., hernia of which the local signs are insufficient to attract attention—and the symptoms of certain cases of so-called indigestion has not, so far as I can tell, been hitherto sufficiently realised by the majority of practitioners.

# A Clinical Lecture

ON

# DILATATION OF THE RIGHT VENTRICLE.

*Delivered at the Birmingham General Hospital on June 4th and 11th, 1894,*

BY T. STACEY WILSON, M.D. EDIN., M.R.C.P.,
PHYSICIAN TO THE BIRMINGHAM GENERAL HOSPITAL.

*(Concluded from p. 566.)*

I HAVE now discussed: (1) the pulmonary systolic murmur, its etiology and auditory characters: (2) the accentuation of the pulmonary second sound; and (3) the venous hum known as the *bruit de diable*. This brings me to:—

4. *The murmur due to tricuspid regurgitation.*—Theoretical as well as practical considerations seem to show that tricuspid regurgitation must accompany dilatation of the right ventricle, at all events if it be well marked; but from a clinical point of view it is sometimes difficult to point to any physical sign which makes its presence or absence certain in any particular case. It can, I think, be truthfully affirmed that there is no physical sign which is characteristic of tricuspid regurgitation in the way in which the systolic apical murmur with displacement of the apex beat is characteristic of mitral regurgitation. Perhaps the two most reliable signs are, firstly, the presence of a systolic murmur audible in any or all of the following situations: (*a*) over the body of the right ventricle; (*b*) over the right auricle, and especially over its appendix, when this portion of the heart comes near enough to