UNIVERSITY COLLEGE HOSPITAL.

Practical Clinical Remarks

ON

CONGENITAL HERNIA,

COMPLICATED WITH AN UNDESCENDED TESTIS.

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GENTLEMEN,—I wish to make some observations upon a case of strangulated congenital hernia, complicated with undescended testis, which came into the hospital a few days ago. In order to render these remarks more intelligible than they might otherwise be, I must first briefly describe that condition of things which allows a congenital hernia to occur. The testes are, as you know, in the foetus contained within the abdomen, and only descend into the scrotum a short time before birth, the involution of peritoneum which they carry with them becoming the tunica vaginalis. At first the cavity of the tunica vaginalis communicates freely with the peritoneal cavity; but the aperture of communication becoming occluded by a natural process, which takes place during the latter part of intra-uterine life, and which is generally complete at birth, these cavities continue distinct and separate. It occasionally happens, however, that, either in consequence of the descent of the testis being retarded, or the natural process of occlusion not taking place, the cavities of the tunica vaginalis and peritoneum remain continuous. In this state of things it is not uncommon for a knuckle of intestine to slip into the tunica vaginalis, and lie in contact with the testis, thus constituting the ordinary form of congenital hernia. The testis, you will observe, occupies the scrotum, and the intestine falls into the tunica vaginalis. This form of congenital hernia requires no special consideration, and I mention it merely in order to say that it is not the form which I am about to describe to you.

The second form of congenital hernia is that in which the hernia is complicated by, and lies in contact with, a testis, which either does not descend at all, remaining an abdominal organ, or else becomes engaged in the internal abdominal ring or inguinal canal, but never descending beyond the external abdominal ring; this condition of the organ, whether the testis be lodged within the abdomen, or become engaged in the abdominal ring or inguinal canal, constituting the malformation termed undescended testis. In such a state of things as this the genital organs may be perfectly developed, and the sexual propensities and instincts exist. The scrotum, however, remains empty on one or both sides, though the testis is often lower in the canal on one side than on the other.

The case to which I wish to direct your attention is one of this description, but of something more than this, being complicated with a hernia. Before going into the particulars of this case, I will briefly recapitulate the different conditions under which an undescended testis may present itself to the surgeon.

The first of these is that of a small, hard, painless tumour, the size of a small walnut, in the inguinal canal, which may readily be mistaken for a hernia. The scrotum, however, is empty upon the corresponding side, or on both sides; and the tumour, instead of being smooth and uniform like a hernia, is more or less nodulated, and hard to the feel, and is not reducible. There is no gurgling in the tumour, and when pinched, the peculiar sickening sensation characteristic of injury of the testis is complained of by the patient. Sometimes it will be found that a truss has been worn under the impression that the tumour was a hernia.

The second of these conditions is that of a testis in the inguinal canal becoming inflamed. Inflammation of an undescended testis lying in the inguinal canal is a condition of great surgical interest and importance in a diagnostic point of view, and is not unfrequently mistaken for strangulated hernia, as in the following case:—

About ten years ago, I was called up one night by the house-surgeon to see a man who had been sent up from the country to be operated upon for hernia. On reaching the hospital, I found him in a warm bath, and the house-surgeon engaged in employing the taxis. On inquiring into the case, I was told that the patient had had a swelling in the right groin for a year or two, and had worn a truss, on the supposition that it was a hernia; but the pressure of the pad causing great uneasiness, he had left it off from time to time when at work. On the preceding day, he had been attacked with colicky pains and vomiting, and the supposed hernia had become greatly swollen and painful. The taxis had already been employed, and caused him severe pain. On his admission, the house-surgeon took the same view of the case as had been previously done in the country, and adopted the ordinary treatment for reducing a strangulated hernia. On examination, I found within the right inguinal canal a tumour nearly as large as the fist, hard and somewhat irregular below, soft and rather fluctuating above, lying completely above the external ring. Great pain was experienced when pressure was made upon the tumour. The left testis had descended; the right side of the scrotum was empty. The patient had not vomited since his admission, and his bowels had acted in the morning. There was a good deal of pyrexia. From the feel of the tumour, the empty scrotum on one side, and the general symptoms, I came to the conclusion that this was merely a case of inflamed testis in the inguinal canal. I ordered him to be bled in the arm to eight or ten ounces, to have a dozen leeches applied to the tumour, followed by hot fomentations to the abdomen, and an aperient enema. Under this antiphlogistic treatment, the pain and other symptoms subsided, the swelling alone remaining, though in a much diminished form.

This is a good instance of inflammation of a testis retained in the inguinal canal, a condition which is not unattended with danger; for cases are on record in which the inflammatory action extending to the peritoneum has occasioned death. The proximity of the inflamed testis to the peritoneum, and the liability to implication of that membrane, must, therefore, be borne in mind in these cases. The symptoms which present themselves in such cases—the colicky pains and tenderness about the abdomen, the nausea, and possibly vomiting—are due to the compression of the inflamed testis by the congested and somewhat unyielding tissues amongst which it is lying, and are too often aggravated by repeated attempts at the taxis improperly made. Under ordinary antiphlogistic treatment they soon pass off. Should an operation be performed on suspicion that there is a strangulated hernia in the canal above the undescended testis, before very positive symptoms of strangulation have shown themselves, it will probably happen that no intestine is found, but that the patient will be exposed to the same danger as if a hernia had existed, the tunica vaginalis investing the undescended testis being in direct communication with the peritoneal cavity, which will thus be opened. No operative procedure should, therefore, be had recourse to, unless positive symptoms of strangulation have unequivocally manifested themselves.

The third condition in which an undescended testis may present itself is in the form of a sarcocele in the inguinal canal, where it may undergo morbid degeneration, simple or malignant, as readily as in the scrotum. In such a case as this you will have a solid indolent tumour, progressively increasing in size, lying in the canal, there being no testis in the scrotum, on the side of the tumour. Such a mass as this may be removed. I have never had occasion myself to do this operation, but it has been successfully performed, amongst others, by Mr. Storks, whose early retirement from the surgical profession is so much to be regretted.

The fourth and last condition of things of which I have to speak is when a congenital hernia is complicated with an undescended testis. The testis lies in the inguinal canal, probably as low down as the external abdominal ring, and above this a knuckle or loop of intestine has slipped into the canal, forming a hernial tumour—that is to say, a congenital hernia, above and behind an undescended testis. So long as the intestine is not strangulated, this complication is likely to escape observation; but when once strangulation has set in, the local signs and constitutional symptoms render it at once manifest.

I have had two cases of the kind in my own practice lately,

which I will briefly relate to you. The first was one to which I was called by my friend, the late Dr. Pretty. A young gentleman, about fifteen years of age, residing at Islington, while playing at leapfrog, felt a sudden pain in the groin, of a very severe and sickening character. In the evening he vomited; and, on the following morning, the symptoms having become urgent, Dr. Pretty proceeded to examine him for hernia. He found the right testis had not descended, while the left had. The right inguinal canal was occupied by a tense, elongated tumour. The lad's parents were not aware of the non-descent of his testis, though he himself knew it, but had kept it a secret. Dr. Pretty sent for me in the course of the afternoon. I found a tumour in the right inguinal canal, extending as far as the external ring, but not below it. It could be divided into two parts, the lower one rather hard and irregular, the upper small, not larger than half a walnut, tense, and elastic. There were the ordinary signs of strangulation: vomiting of bilious matter and constipation, with dragging pains in the abdomen. The treatment which had been resorted to had produced no good effect. I, therefore, proceeded to operate; and having exposed the tumour, and let out a quantity of clear serous fluid from the tunica vaginalis, found at the upper part a small knuckle of intestine, tightly constricted by the inner ring. This was divided, and the gut reduced; the testis was left *in situ*, it not being desirable to reduce it. The boy had a sharp attack of peritonitis; but, under the influence of leeching, and calomel and opium, made a good recovery.

The second case happened the other day. Last Friday evening I was sent for to see a young, strongly-built man, who had been sent up to this hospital from Luton, and who stated that he was suffering from a hernia. From the notes of the case, which is very fully reported in the case-book, it appears that on the Wednesday previous he had been at a fair, and had stayed out late, and that next morning, while at work at the plough, he suddenly felt a lump in his right groin, and was soon after attacked with bilious vomiting. The tumour soon became painful, and several unsuccessful attempts were made to reduce it. About nine months ago a similar tumour had appeared in the same situation, but had been easily reduced, and he had neglected to wear a truss.

I saw him about eleven P.M. The scrotum was empty on both sides, neither testis having descended, and there was nothing, not even a retained testis, in the left inguinal canal; but in the right inguinal canal was a tumour, somewhat oval in shape, smooth and uniform, slightly elastic, very tender to the touch, though not the seat of any great pain. It was doubtful whether this was merely an inflamed testis, or whether it was one complicated with a hernia; but as symptoms of strangulation had not declared themselves, his countenance being good, his pulse only 78, his having had no vomiting since admission, the abdomen being flat, and there being but little pain and no tension about the tumour, I did not feel myself justified in operating at once. I accordingly ordered a dozen or eighteen leeches to the tumour, fomentations to the abdomen, a full dose of calomel, and an aperient enema. During the night sickness came on; he did not keep down the aperient medicine which was administered, and his bowels did not act. In the course of the afternoon, the symptoms becoming more urgent, I proceeded to operate. There was nothing unusual in the incision, except that it had to be made higher up than ordinary, and disclosed a dark tumour, distended with bloody serum, which proved to be the tunica vaginalis, forming the sac of a hernia; a loop of intestine, about three inches in length, being tightly constricted at the internal ring. The stricture was, I think, the tightest I ever met with, and I had to lay open the inguinal canal, in order to divide it safely without wounding the gut. Behind the loop of intestine was found an undescended, ill-developed testis; this was left where it was. The patient became low and depressed after the operation, and on the following morning had an attack of vomiting, and died apparently in a state of syncope soon after.

On examining the body after death, we found no peritonitis; the loop of intestine was of a deep-maroon colour, filled with flatus, and with one or two patches of lymph upon the surface, but evidently in a condition that would have recovered itself. The right testis, that on the side of the hernia, was in a state of inflammatory congestion, being of a dark-purplish colour, and double the size of the other, its epididymis being very considerably larger, though short, hard, and imperfectly developed. It was surrounded by a distinct tunica vaginalis, and had probably remained in the canal for some time. The left testis lay entirely within the abdomen, looking very much like an ovary, and was very small and imperfectly developed, of a pale, dull white colour.

Before concluding, I may mention that, so far as my experience goes, operations for strangulated congenital hernia are, as a rule, highly unsuccessful. The mortality is greater after operations for this form of hernia than for any of the other varieties of inguinal rupture. The reason of this I believe to be, in a great measure, that the stricture is peculiarly tight, that it is always situated in the neck of the sac (and that does not admit of external division), and that, the hernia lying in an unclosed tunica vaginalis, the peritoneal cavity is necessarily extensively opened up.

INTESTINAL FEVER ESSENTIALLY CONTAGIOUS.

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"L'affection typhoïde, est elle contagieuse? La réponse à cette question se trouve dans les faits que la science possède; et il me suffit d'en rappeler quelques uns pour en convaincre le lecteur."—Louis.

INTESTINAL FEVER, COMMONLY CALLED TYPHOID FEVER: MODE OF PROPAGATION.

(Continued from p. 5.)

THE first thing to arrest attention after the disorder had become rife in North Tawton, was the strong tendency it showed, when once introduced into a family, to spread through the household. Thus in the family of Ann N—, a young woman who was taken ill in the second week in July, and who was the subject of the first case, the mother, a brother, and a sister—making four in all—were one after another laid up with the same fever; the father, who had already had the disease in former years, and a young infant, being the only inmates spared. In another house, four out of six persons were successively attacked; in another, three, and so on. Without going into further details of these cases (of all of which I possess accurate notes), it will be sufficient to say that, before the disease finally died away, there were few houses in which, having once appeared, it did not further extend itself to one or more members of the family. This, which was throughout its most striking character, was, in itself, sufficient to lead to a strong presumption of the contagious nature of the disorder.

But while these events were occurring in the village itself, there were others happening at a distance, which converted this presumption into a certainty. During the prevalence of the fever in North Tawton, it so happened that three persons left the place after they had become infected. By a fatality which is but too common under such circumstances, all three communicated the disease to one or more of the persons by whom they were surrounded in the new neighbourhood in which they were taken sick. Two of these three persons were sawyers by trade, who had hired themselves for a few weeks to a timber merchant living in the village. While these men remained in North Tawton, they lodged in a court with a single and a common privy, and next door to a house in which the fever was. In the course of time both these men took the disorder, and on the occurrence of the first decided symptoms, both returned to their own homes, in the parish of Morchard, about seven miles off.

The first, A— by name, was a married man, with two children. He left North Tawton on the 9th of August, being already too ill to work. Two days after reaching Morchard he took to his bed, and at the end of five weeks he died. Ten days after his death his two children were laid up with the same fever, and had it severely; the widow escaped. C—, the other sawyer, was a single man, and an aged couple who lived with him were the only other inmates of the house. Like A—, he was driven from North Tawton by indisposition, which rendered him unable to follow his employment, and cut off his means of support. He began to droop on July 26th, but did not leave for Morchard until Aug. 2nd. On the 3rd he finally took to his bed. His attack was severe, but, after a long struggle, he recovered. When this man was at his worst, a friend who came to see him was called upon to assist in raising him in bed. While thus employed, the friend was quite