A Clinical Lecture

ON

SOME CASES SIMULATING ACUTE APPENDICITIS.

Delivered at University College Hospital.

By ARTHUR E. BARKER, F.R.C.S.,

Professor of Surgery at University College, and Surgeon to University College Hospital.

THE case before you is one of those which remind us in a way that to my mind is most salutary of the difficulties often met with in diagnosing appendicitis. I venture to think that a feeling is growing up rather too widely that affections of the vermiform appendix are on the whole very easy to diagnose. But I do not think that this is the view held by those who have had the largest experience. These affections may in many cases be easily recognized, yet one has only to look back through any long series of them to see in how many cases they have been simulated by other intra-abdominal conditions.

I propose now to ask any or all of you who have seen difficult cases where the diagnosis of epityphlitis was either doubtful or actually incorrect to mention them, and I will write them down on the board, and I think you will find that the resulting list will be a long one. I know that you have recently had opportunities of seeing several such cases, and I will, if necessary, suggest to you others which you may have forgotten or missed. Besides this, I shall add other cases, either from hospital or other practice, which I have had to operate on and which have impressed me much. In the constant succession of appendix cases occurring here it is probable that I have mentioned these cases before, but to allude to them again and write them down in our list will not be unprofitable.

Now let us see what we have got from the various gentlemen round the bed, including myself. The list of conditions which have closely simulated appendicitis, you see, is a long one, and yet I have not written up a single one which has not been seen by either you or myself, and which has not been particularly embarrassing to the diagnosis. Our list stands thus:

1. Ruptured pyosalpinx.
2. Ovarian cyst strangled by twisted pedicle.
3. Twist and strangulation of omentum.
4. Perforated gastric ulcer.
5. Retrocaecal hernia.
6. Broken-down caseating glands.
7. Ileocaecal cancer with abscess.
8. Haematoma of broad ligament.
9. Reduction of hernia *en masse*.
10. Intussusception.

As to the first on the list, you have had several opportunities lately of realizing how very difficult it is to distinguish between a pyosalpinx with localized peritonitis and an inflammation starting in the vermiform appendix. I recall one, not long ago, which I was asked to see in the medical wards. The woman had been sent in as a case of acute appendicitis, and I was asked to see her with a view to operating. I was not satisfied as to the diagnosis, and arranged to see her again in the morning with the physician in charge. She had then so much improved that it was decided to wait still. After this I did not see her again, but I heard afterwards that she had left the hospital much better, then had another attack and was taken to another hospital, where a most perfect pyosalpinx was removed. More recently another case was admitted into this ward for appendicitis. My own diagnosis was pyosalpinx, and on operating I found this condition and removed the diseased parts with the best results. In the case before you a great deal of doubt existed in both Dr. Martin's and my own mind up to the time at which I opened the abdomen. We were both prepared for either condition. It turned out, however, to be an appendicitis, and the patient is now convalescing.

Two or three cases have also occurred here in which an ovarian cyst of small size, strangled by torsion of its pedicle, has closely simulated the disease in question. The first I have seen was that of a child of 13, and the symptoms were typical of appendicitis in its acute form. It had the sudden onset of pain in the right iliac region, followed by vomiting, rise of temperature, and with a defined swelling in the pelvis, very tender to palpation. It was only on opening the abdom-

men that I recognized the nature of the tumour, which was easily dealt with, the patient making an excellent recovery. The next case was one of a woman of 23, to whom I was called here late one evening. She had been admitted into the gynaecological ward, but was there diagnosed to be suffering from an acute attack of appendicitis, and was transferred to my ward for operation. The symptoms were precisely similar to those in the last case, and, besides, there was much abdominal swelling. On operating, I found an ovarian tumour, with a twisted pedicle, and thereby so strangled that it had burst, and a quantity of intracystic growths had escaped from it with much fluid. These were removed with the rest of the tumour, and the patient made a good recovery.

As to No. 3, I have only had one case of omentum twisted on itself and strangled, but several similar cases have been since recorded. The patient, a man aged 24, was admitted some years ago with a history and symptoms wonderfully like those of acute appendicitis. He had had for a long time a right reducible omental hernia. On admission he stated that he had been seized with a sudden pain in the right groin, and had vomited. His abdomen was distended, and there was a hard, tender lump above Poupart's ligament. The temperature was considerably raised, and he looked hot and flushed. Regarding the trouble as due to appendicitis, I opened the abdomen over the swelling. Immediately a black mass was seen covered with lymph and adherent to the surrounding small intestines. On separating it from the latter, and drawing it into the wound, it was seen to be a mass of omentum as large as a fist, in a semigangrenous condition, due to torsion of its proximal portion, which formed a kind of pedicle. This had been twisted round and round until it formed a hard cord. Twelve half-turns were necessary from left to right before it was released. The healthy portion above was tied firmly, and the black mass was removed. Recovery was good. This is a curious condition, and has excited some notice abroad, where the causes of the torsion have been more or less explained by some ingenious hypotheses.

You may think it strange that a perforated gastric ulcer (No. 4) should give symptoms capable of being confounded with those of appendicitis. But this has been my experience. Perhaps I ought to be ashamed of having found a difficulty in the diagnosis, but I am afraid I am not in the least ashamed, though I do regret my inability. The patient was a parlour-maid, aged 24, and of the very healthiest appearance. I happened to have seen her at about 9 p.m. putting her mistress into a cab, and apparently in perfect health. I was called to see her a couple of hours later, and found her groaning with pain, which had suddenly attacked her at about 10.15 p.m., when she was turning over in bed to go to sleep. The pain had begun in the right iliac fossa and spread over the whole abdomen. When I saw her the walls were rigid and very tender; there was a slight absence of resonance in the right flank. She had been sick. The temperature was only 100°, and the pulse good and about the same figure. There was no shock. As she suffered from a reducible right inguinal hernia which she had put back on getting into bed, I thought at first that it might have gone back *en masse*, but there were no clear signs. I gave opium and fomentations for the night, but in the morning, as the temperature and pulse had risen and the distension was greater, I removed her here and prepared for an exploration. I thought the choice of diagnosis lay between a reduction of the hernia *en masse* and an attack of appendicitis. This being so I opened as for the latter. Immediately there ran out of the wound a large quantity of glairy thin fluid which welled up from the pelvis. The appendix was healthy, and the sac of the hernia was found only filled by the fluid mentioned. This was sponged out in large quantities, but where it came from was the mystery. I thought for a moment it might be derived from a ruptured ovarian cyst. At last, on pushing a sponge on a holder upwards on the right side towards the liver, a gush of gas and an extra quantity of fluid came down from above, and I recognized the gastric perforation. I left a flat sponge in the iliac wound opened in the middle line above the navel, closed the perforation in the stomach wall, and then closed the iliac wound and part of the other. The patient made an excellent recovery, and I heard of her in service not long ago.

In No. 5 we have a very rare condition, which I have never seen in hospital. But some years ago I was summoned to the country to see a lady of about 35, said to be suffering from an attack of acute appendicitis. She had been seen by a consultant physician, who had confirmed this diagnosis on apparently good grounds. I can only say that it seemed in its history and present symptoms to be a fairly straight-

forward case in a rather desperate condition. An incision was at once made over the caecum, and a quantity of greenish gangrenous fluid at once escaped with flakes of lymph. I then drew gently on a mass presenting in the wound, and at once a knuckle of small intestine came forward from behind the caecum in a state of advanced gangrene and quite rotten. This was secured in the incision and opened there, or rather it could be wiped away. All this was done in a very short time; but the relief came too late to arrest the general abdominal sepsis, and the patient died. Cases are, of course, on record where this condition has been suspected or diagnosed and relieved successfully by operation.

Broken-down caseating glands in the right iliac fossa (No. 6), simulating a subacute appendicitis, are not so uncommon. Here the patient has probably had antecedent attacks of pain and more or less trouble with the bowels from the localized tuberculous peritonitis. One case from among a number will illustrate the difficulty of diagnosis. Some years ago I was asked to see a little girl, 10 years of age, in the country, who had been ill for some time with all the symptoms of subacute epityphlitis. The temperature was up and down: there was a diffused swelling in the right iliac fossa, not very painful. On opening over the caecum, I at first thought that I had really found a thickened appendix containing concretions lying among adherent intestines and omentum. But on closer examination this proved to be a chain of caseating glands running from the caecum through the mesentery. Some had burst, some were just breaking down. I removed as many as I thought could be safely taken away, and the patient recovered after a tedious convalescence.

No. 7 (ileocaecal carcinoma with abscess) must be a fairly uncommon condition, and yet I remember such a case several years ago here. It seemed typical, and there was a large abscess over the anterior iliac spine. This I opened and drained. It was not until the woman's death a long time afterwards that the necropsy revealed the fact that there was a ring of cancer in the valve and a perforation which had led to the abscess.

But I remember a much more puzzling case which I had to operate on two years ago down in Kent. It was that of a lady of 55 who had a round and perfectly movable tumour in the right iliac fossa with some symptoms of obstruction not acute and little or no fever. Here I was uncertain until I had opened the abdomen as to whether we had not to deal with a malignant growth of the ileocaecal valve. And even while I was clearing the puckered and hard mass I was preparing for an enterectomy. It turned out, however, that the mass was a chronically inflamed appendix included in tough adhesions. Finally I cleared the appendix, which was very long, thick, and hard removed it, and closed the abdomen. Recovery was perfect, and I have heard within the last few days—while seeing another case in her town—that she is quite well. Other cases I have seen suggested the same difficulty.

Remember that there are cases of appendical inflammation which are quite latent. A patient may have a lump in the iliac fossa with few or no symptoms of appendicitis, with little or no tenderness and no raised temperature, and it may last for months in this condition and yet after all turn out to be a suppurating appendix. Some of you must remember a strong, healthy, country labourer, aged 26, from Surrey, who has just left the hospital. He looked perfectly healthy but had for some time had an occasional pain in the right iliac fossa. When he arrived here he had no trouble except the lump and no fever at all, and yet he had a considerable abscess containing three stercoliths behind the caecum. And at the present time, and since this lecture was delivered, I have a still more striking case under my care in private. A particularly healthy, ruddy, and well-nourished gentleman of 45 came to me a couple of weeks ago at his doctor's request to consult me about a lump in his right groin the size of a large egg. This he had had for many months. It was smooth and painless, and very hard. It could be moved easily from side to side, and only when pressed far inwards was there a sense of dragging. His temperature was steadily a little under normal. Beyond dyspepsia and an occasional attack of flatulence and diarrhoea he had no symptoms of intestinal derangement, and he went about his ordinary work without trouble. I was quite prepared at his age to find a new growth, but when I operated five days ago I found an appendical abscess containing about half an ounce of pus.

In reference to No. 8 you might ask how could a haematoma of the broad ligament simulate appendicitis? And yet it can closely. Some years ago I was called up here to operate on a case of acute appendicitis in a little girl, aged 10 years. She had been seized some hours before with violent pain in the

right side of the pelvis, had vomited, become distended and tender, and her temperature was high. There was a considerable swelling on the right side above Poupart's ligament, which was very tender. Every one of those who saw the case thought it was a typical appendicitis. When I opened the abdomen on the right side there ran out a quantity of blood-stained fluid, of which the pelvis was full. The appendix was perfectly normal, and there was no peritonitis. But the right broad ligament was distended with a large black haematoma, from which the serum had exuded. I only wiped the pelvis dry, and returned the broad ligament to its place, and all went well. I suppose this was an abortive attempt at menstruation. The case is fully recorded in the *Transactions of the Clinical Society*.

As to No. 9, I only recall one case in which reduction of a hernia *en masse* had to be considered in this connexion. It has already been alluded to in discussing the case of perforated gastric ulcer. But in that case it was certainly not out of the question.

No. 10 (intussusception) ought never to be mistaken for appendicitis. And yet I was called into Surrey some years ago by a very shrewd practitioner, whose telegram ran, "Intussusception case; please come at once prepared to operate." I went, but found the case to be one of acute appendicitis in a boy of 6. On this I operated with an excellent result, the appendix was removed, and a quantity of inflammatory fluid drained off, recovery following without much trouble.

I cannot follow up this subject further just now. The mere enumeration of the conditions which may simulate appendicitis and the relation of one or two cases illustrating each has led us far enough to-day. On some future occasion I may try to sift the cases and offer you clues which may help in differential diagnosis. But just now my aim has been to remind you that the diagnosis of appendicitis must be approached with great care. In these days when we are operating on very large numbers of typhilitic cases in a routine way I think we need to be reminded of this from time to time. The ultimate diagnosis will in many cases only be arrived at when the abdomen is opened. But if we do not recognize the possibility of finding perhaps any of the conditions mentioned above and have not prepared our minds beforehand to deal with any of them, valuable time may be lost and mistakes in manipulation may occur. Moreover, we may not have made proper preparations for the operation beforehand, and so be landed in difficulties.

The Erasmus Wilson Lectures

ON THE
PATHOLOGY AND SYMPTOMS OF ADENOCARCINOMA OF THE RECTUM.

Delivered before the Royal College of Surgeons of England.

By SIR CHARLES B. BALL, M.Ch., F.R.C.S.I.,
HON. F.R.C.S. ENG.,

Regius Professor of Surgery in the University of Dublin.

LECTURE II.—ADENOCARCINOMA. PATHOLOGY.

As in a simple adenoma, the essential element in adenocarcinoma is the fact that it springs from and involves the mucous membrane, it has already been pointed out that the only positive difference is that the malignant form penetrates the basement membrane and becomes widely diffused, it is therefore possible to assert positively that a tumour of the rectum which does not involve the mucous membrane is not an ordinary cancer; and as quite 95 per cent. of the cases of rectal carcinoma are of the adenomatous type, the importance of this clinical point is obvious.

The degree of malignancy of a cancer as indicated by the tendency to recur after operation we know well varies greatly with its situation; for instance, an epithelioma of the lip is less malignant than the same disease occurring in the tongue; and epithelioma on the scrotum less malignant than when it occurs upon the penis. What then is the relative malignancy of cancer of the rectum to similar disease in other parts of the body? If the case comes under notice before the disease has completely penetrated the intestinal tunic, the prospect of permanent cure by removal is very good indeed, unfortunately, however,