NOTES OF A CASE IN WHICH LAPAROTOMY HAD
BEEN TWICE PERFORMED, WITH SIX MONTHS'
INTERVAL, FOR THE RELIEF OF INTESTINAL
OBSTRUCTION RESULTING FROM THE PRESENCE
OF LARGE CONCRETIONS IN THE COLON.

By JOHN LENTAIGNE, F.R.C.S. ;
Surgeon to the Mater Misericordiæ Hospital.

[Read in the Section of Surgery, November 8, 1901.]

THE case which I now bring before you is that of a little boy who has been twice on the verge of death from chronic intestinal obstruction, resulting from the presence of huge concretions in the sigmoid flexure of the colon, and who has been saved each time by an exploratory laparotomy, which revealed the cause of the disease and allowed of its removal.

CASE,—The patient was admitted to the Mater Misericordiæ Hospital on September 4th, 1899, with a history of having suffered from attacks of constipation and vomiting, with febrile disturbances, and often severe pain and distension of the abdomen, for the past two years. These attacks had become very frequent of late, and very severe in character, until the last one, which had set in five weeks before admission. Even during the intervals between the attacks the bowels had never moved except after purgative medicine had been taken. For some time past the action of purgatives and enemata had been less and less satisfactory, and had often failed entirely to give relief.

On admission the boy, who was ten years of age, was found to be greatly emaciated; his abdomen was tensely and uniformly distended, percussion note being mainly dull below the stomach area, in both flanks, but especially so in the left. There was an uncertain and variable resonance in front. No tumour of any kind could be felt. The tongue was furred, pulse 92, temperature 100° on the day of admission, normal after admission for four days, when it rose to 100° after administration of a purgative. The rectum

was empty, but at the end of the finger a hard, resisting, fleshy mass could be felt. The examination caused great pain. The diagnosis was very obscure. Chronic tubercular peritonitis was suspected—the emaciation, the abdominal pain, repeated attacks of vomiting and the distension of the abdomen all seeming to point to that affection; and this assumption was endorsed by those of my colleagues and other medical men who saw the patient with me. The prognosis of the case seemed very unfavourable, but as there was no hope of relief from anything else laparotomy was decided upon. Next day, on again examining the patient's abdomen, I distinctly felt a hard mass in the left iliac fossa. This mass was easily displaced by pressure, and could then no longer be felt. It was evidently a tumour of some kind, connected probably with the intestine, but the condition actually found at the operation was never recognised by me or anyone else before the abdomen was opened.

On September the 22nd I performed exploratory laparotomy, assisted by Dr. Blayney. On opening the abdomen by an incision in the median line no trace of peritonitis was found, but a large, smooth mass, which at first seemed like a very greatly distended stomach, presented itself. After extending the incision this was lifted out, and proved to be the large intestine enormously distended. Its contents seemed to be semi-fluid when it was examined by the hand. At its lower part, near the rectum, a hard, round mass could be felt. This mass was evidently free inside the bowel, and could be easily moved in an upward direction. I incised the gut by a vertical incision on the convex border and extracted the mass, which proved to be a fæcal concretion of the shape and size of a very large orange. I then proceeded to empty the gut and squeeze out a large quantity (two large basins full) of black, semi-liquid, clay-like fæces. Further examination showed a second mass, lower down in the gut. It was at first very difficult to get this body up out of the pelvis, but by means of pressure upwards from within the rectum I succeeded in getting it up and then extracted it. The finger of my assistant could then be reached in the rectum from the intestinal incision. I then closed the long incision in the bowel by continuous silk sutures. The bowel wall was nearly half an inch thick, and it was not easy to effectually close the opening. The bowel was returned and the abdominal wall was then sutured in the ordinary way. The patient made a quick and uneventful

recovery. On the day of the operation a large motion was passed, and nearly every day or every second day after the bowels acted of themselves. The boy gained flesh and strength rapidly, and was discharged apparently quite well on October 7th.

Immediately after the operation I cut through the larger of the two masses and found it to be of the consistence of fairly hard putty. It was black and clay-like, and was perfectly homogeneous in character, no concentric layers or nucleus of any kind being visible. I regret to say that these specimens were lost owing to the hospital porter having thrown them out with other *débris* after the operation.

On discussing the matter with the nurse who had had charge of the boy before his admission into hospital, I was told that when a small child he was said to have been in the habit of eating clay, cinders, and other such unwholesome articles; and from the black and clay-like appearance of the masses themselves and of the *fæces* above them I was inclined to believe that these concretions were masses of clay which had accumulated in the bowel. The lad, however, denied having eaten anything of the kind for many years. Microscopical examination of the *fæces* proved them to be mainly composed of vegetable *débris*.

The boy remained apparently perfectly well for nearly four months, when he again began to get thin and to suffer from constipation, with slight abdominal pain. This condition was relieved by purgatives and enemata, but the abdomen steadily increased in size, and soon occasional attacks of vomiting with severe pain would set in. The abdomen was repeatedly and carefully examined but no tumours could be felt, and it was thought, as the boy had certainly not eaten any clay or cinders since the operation, that the trouble was probably due to the adhesions in the neighbourhood of the incision.

On March 21st, 1900, the boy was again admitted to the Mater Misericordiæ Hospital. His condition then was undoubtedly worse than before the first operation. He was as much emaciated as before, and his abdomen was as tensely distended, but he was much weaker, and he could hardly retain anything in the shape of nourishment except when given in small quantities. A careful examination of the rectum was made; it was found to be empty of *fæces*, but a fleshy mass was felt at the tip of the finger, three or four inches from the anus. It was frequently attempted

to administer enemata by means of the long tube; these failed to bring away anything except a very little fæces, which came away on March 29th. The attempts to pass the tube caused much pain and were greatly resented by the patient. On March 30th I again opened the abdomen and found almost exactly the same conditions as at the first operation. There was no sign of peritonitis, past or present, no adhesion anywhere, but the same enormous distension of the intestines. I again incised the gut and came down on the silk suture used at the previous operation; this was taken out practically unaltered. The bowel contained the same thick, semi-fluid, black fæces; there seemed to be but little gas in the intestines. Occasionally, and as the fæces flowed out, isolated bubbles of gas or air would make themselves evident by the surface of the fæces breaking and showing cavities, exactly like those seen in Gruyere cheese. There were two large concretions similar to the first ones, but not quite so large and somewhat softer in consistence. The bowel was carefully washed out, closed, and returned as at the first operation. The quantity of fæces found above the concretions was very great indeed; several basins were filled with it, and it was black and mortary in consistence, and with little or no fœtor. Before opening the intestines I measured the circumference with a strip of sterilised bandage, and subsequently, on measuring the strip, I found it to have been a little over sixteen inches. As it seemed to me from this repeated formation of concretions that there might possibly be some strange condition of colic inefficiency, I decided to make a cæcal fistula, so that the bowels could act through it while the colon regained its natural state. I made a small incision over the cæcum, and stitched the wall of that viscus to the parietal peritoneum, with a view to complete the fistula when adhesions had taken place later on. I may mention that this step was of no benefit to the patient; owing to the absence of obstruction below it was impossible to get the fistula to act. On this occasion the convalescence of the patient was by no means as quick or as satisfactory as after the first operation. The temperature was frequently high, and the bowels were exceedingly hard to manage. Enemata had to be administered almost every day until 1st May, when the bowels acted naturally of themselves. The boy gradually became stronger, and the bowels became natural in action, and at the end of May the boy was apparently quite well and was discharged, the cæcal fistula having closed long before.

Since then the lad has remained in perfect health, and, though his bowels act regularly, he is occasionally given purgatives, but there has been no return of the constipation or vomiting, and the abdomen has no sign of distension. Some of his comrades at the school where he is, said that he was very fond of eating the fruit of the dog rose when he could get it; none of the seeds of this plant, however, were found in the concretions when they were examined. Microscopic examination of the mass proved it to be composed largely of vegetable fibre and short hairs, such as we find on the surface of many cereals, especially oatmeal.

The greater part of this paper was written some months ago, and when I had last heard of the boy he was apparently in perfect health. Quite recently, however—within the last three weeks—he was again brought under my notice, complaining of abdominal pain and distension, with constipation and occasional attacks of vomiting. On examination I found the abdomen distended, but nothing like as much as on the previous occasions. He had not lost flesh and seemed in fairly good condition. The rectum, on examination, proved to be much dilated and packed with a great mass of hard fæces. Although I was told that several enemata had been tried and proved useless, I immediately put the boy under an anæsthetic, and placed him in the lithotomy position. With the help of a Clover's crutch I then forcibly dilated the sphincter ani, and by means of a lithotomy scoop I removed piece after piece of the mass, until about six inches of the bowel had been cleared, and then, by means of a powerful irrigator, I washed away an immense quantity of semi-liquid matter, with the result that the boy's symptoms were completely relieved. Next day he felt and looked perfectly well, and shortly after was discharged from hospital, with, of course, strict directions as to the regulation of the bowels by enemata, &c.

It is well to note that this last attack differed from the previous ones mentioned, inasmuch as they followed on a number of other attacks of a similar character, each worse than the previous one. Again, in the last attack the obstruction was found to be altogether in the rectum, while on the previous occasions the rectum was quite empty, and the obstruction was found at the operations to be produced by a kind of

huge ball valve in the sigmoid flexure. I believe, however, that each time the same train of phenomena must have been in process, and that the rectum must have been the original seat of obstruction in each case, but that after a time it was followed by a formation of the hard, ball-like mass, owing, possibly, to some kind of reversed peristalsis. The masses were found to be quite freely movable up and down in the bowel above a certain point, where they completely blocked the gut; and I cannot help thinking that if the patient had been left to suffer a repetition of attacks, as in the previous instances, a similar ball-like mass would have been formed.

The emptiness of the rectum on the first and second occasions must, I believe, have been a result of the numerous enemata which were administered in the latter stages of the trouble before the boy's admission to hospital.

In clearing out the rectum on the last occasion the mass was found to be partly composed of wool and coarse vegetable fibrous material; some pieces of common twine and rag were found almost unaltered. It was only in the rectum that these foreign bodies were found. When asked what he had taken to produce these troubles, the boy confessed to having eaten rags and blanket wool. He also now acknowledged having done the same some time before each of the previous attacks, although he had always denied it up to this.

MR. T. MYLES considered the paper very instructive, as showing the difficulty of diagnosing abdominal tumours, and said that in a somewhat similar case he had seen good results obtained from olive oil injections, followed by the use of electricity, which produced free vomiting and purging.

MR. CROLY thought palliative treatment by injections might have been given a more extended trial before resorting to colotomy. He thought the second operation unnecessary, and there was nothing to indicate that it had been advantageous.

MR. M'ARDIE quite agreed with Mr. Lentaigue in the necessity for early operation in such cases ; nothing was gained by delay, and it was sound surgery to operate and remove the concretion from above. He was particularly pleased with the fulness of detail with which the paper was presented.

MR. MITCHELL (Belfast) congratulated the author of the paper on finding a hypertrophied colon. In one of his cases the colon was so much attenuated that the tissue could not hold the sutures, the wound opened, and the boy died.

MR. ORMSBY gave an instance of a patient of his who ate her hair, nibbling off portions until she produced a mass of matted hair in her stomach, which he excised.

MR. DOYLE drew attention to the tendency of alimentary concretions to simulate malignant disease of the bladder. A patient of his, treated for malignant growth of the bladder, was found after death to have a healthy bladder, the trouble having been caused by an immense accumulation of charcoal in the rectum and descending colon.

MR. CHANCE instanced the case of a boy who, from eating straw, formed a mass in his ileum about the size of a banana, which necessitated operation.

MR. LENTAIGNE, in reply, thought that any further use of palliative remedies would have done away with all prospect of success. The operation to which he supposed Mr. Croly objected—the formation of a cæcal fistula—was not attended with any benefit, but having performed it he thought it but right to mention it. If Mr. Croly meant that the second laparotomy was unnecessary, he could only say that he was quite satisfied that if Mr. Croly had seen the boy before the second operation he would not now say that that operation was unnecessary, and, undoubtedly, it had saved the boy's life. He thought that even if the real condition had been recognised, it was doubtful whether effective relief could have been given without operation, although, of course, every effort would have been made, and, with the help of an anæsthetic, it might probably have succeeded. As it was, however, the trouble was not recognised even the second time, as the obstruction was thought to be probably due to adhesions.