

## Original Articles.

## A CASE OF CHYLOUS CYST OF THE ABDOMEN.\*

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JOSEPH P., aged eleven, patient of Dr. Robert A. Reid, Newtonville, one of six children, of healthy parents, was noticed in the summer of 1903 to have a fullness in the abdomen. This fullness was especially prominent over the navel and over the right side. The patient suffered somewhat from nervous symptoms and at times had acute indigestion. His mother said it seemed as if something were pressing on the large intestine.

Dr. Reid referred this patient to me in October, 1904, with the opinion that fluid of some character was present in the abdomen, but not free in the peritoneal cavity. In the first week of October, the patient had had nausea and vomiting which lasted a number of hours. With the nausea and vomiting there was diarrhea, but there was no pain. A year before the patient began to have what seemed to be "falling spells," and the family thought that it was chorea. He would hold his throat and say that he could not get his breath. These attacks, however, proved to be of trivial nervous nature, and they disappeared. In June of the present year he showed signs of abdominal distention. He was easily fatigued and short of breath.

On physical examination I found a rather thin, cachectic boy with a very prominent abdomen. He was extremely emaciated; the ribs were prominent; and over the epigastrium on both sides the cage of the thorax was much dilated. The fluid pushed out in all directions the costal margins. The abdomen was much distended and contained fluid. Repeated and careful examinations seemed to show fluid filling the abdominal cavity and perfectly free. The temperature was 100°.

I made a diagnosis of tubercular peritonitis, advised operation in the near future, and gave a guarded prognosis. On Oct. 21, 1904, I opened the abdomen, making a small incision between the umbilicus and pubes. As I dissected through the abdominal layers I spoke of the changes which would be seen in the peritoneum, saying that it would be thickened, opaque, pearly, with miliary nodules. I went straight into the peritoneal cavity, however, finding none of these changes, and came upon a white, fragile-walled cyst covered with small blood vessels, most of which ran transversely. The ascending colon and caput ceci were out of sight to the right. The tumor filled the peritoneal cavity. The incision was then enlarged sufficiently to admit the hand. The cyst was then seen to be retro-peritoneal, extending up under the liver and to the right. It seemed at first to be a hydronephrosis, for in close approximation with the upper part of it I could feel the right kidney.

Having determined to attempt the enucleation of this cyst, I began by tying across its vascular peritoneal covering in sections, with the Cleveland needle. The cyst was then easily separable. Separation, however, ruptured here and there the thin-walled sac, allowing a milky fluid, suggesting chylous cyst of the

mesentery, to escape. I proceeded very deliberately to divide all attachments in sections with the needle, and to cut between the sutures. The cyst was emptied through an incision in its wall, and the contents (eight pints) escaped into a basin. The collapsed sac was then carefully separated from all attachments, the dissection being made with blunt curved scissors and gauze. The ascending colon, hepatic flexure of colon, and vertical portion of the duodenum were successively separated. At no place was there any mesentery, or any omentum. No mesenteric vessels whatever were either seen or divided. A considerable area of attachments was left after the separation had been carried down to the very base, which was the anterior surface of the right kidney. It seemed as if the cyst were in reality renal. Although the attachments were more dense and less easily separated here than elsewhere, there was no real connection between the cyst and the kidney. The blood vessels here were small; even in the very depths of the dissection it was unnecessary to apply ligatures or snaps. The cyst was, in fact, retro-peritoneal; but it involved the actual structure of no organs whatsoever. Nor were the essential attachments of any organ involved. Ligation of the whole anterior covering of the tumor did not compromise in the least the blood supply of the intestine. Of this I am positive, for I was on the lookout for the mesenteric blood supply of the colon, so often destroyed in operations upon the pylorus. The visceral boundaries of the cyst above were the base of the gall bladder and the parts about the foramen of Winslow. To the left were the second (vertical) portion of the duodenum and the angle of the hepatic flexure of the colon and caput ceci, as well as the usual reflexion of the peritoneum from the loin. Posteriorly were the right kidney, the lumbar and iliac muscles. From this attachment the anterior cyst wall had become stretched until it filled and was in contact with the whole peritoneal cavity. The actual visceral attachments, left bare and raw by the separation, were the structures mentioned. This raw surface was immediately closed and covered by the falling into normal position of the duodenum and colon.

No dilated lymph vessels were seen. In fact, nothing whatever abnormal was detected. Whether the cyst was a dilatation of the receptaculum chyli or one of its tributaries, I could not make out. After the removal of the sac there was no escape of fluid and no evidence of a dilated lymph or other vessel. The base of the tumor did not reach into the space occupied by the receptaculum, nor was it as high as this reservoir.

The gross appearances of the tumor suggested at once a chylous cyst. It did not in any way, however, involve the mesentery. Indeed, it was remote from the mesentery.

After the removal of this cyst the boy made a rapid and very satisfactory recovery. Dr. Reid reports that he is gaining in flesh and strength every day, and that he is getting fat and rosy. On Feb. 1, 1905, the father wrote: "I am glad to report that our son Joseph is back in school again, and able to do anything and everything other boys of his age do."

Dr. W. F. Whitney's report is as follows:

The specimen consisted of a thin-walled sac which must have contained about a litre of fluid. Upon examination it showed one very smooth, fibrous looking surface, the other slightly rougher.

Microscopic examination showed one wall to be composed of rather loose fibrous tissue in which were numerous relatively large blood vessels, many of them filled with blood. Next to this came a zone of denser fibrous tissue in which were bundles of what seemed to be smooth, muscular fibre, and these were also

\* Read before the Obstetrical Society of Boston, Oct. 25, 1904.

found lying directly on the other surface on which, in one or two places, a few scattered endothelial or epithelial cells were found.

The contents received from this consisted of 500 cc. of a milky fluid, the specific gravity, 1.020, and abundant albumin. On testing with osmic acid a slight blackish discoloration was noticed. After destroying with sulphuric acid and centrifuging, a curd-like layer was thrown to the top of the tube. On testing this with osmic acid a very marked black precipitate was formed showing the presence of free fat.

Microscopic examination of the fluid showed a finely granular compound in which were numerous large granular corpuscles.

Diagnosis; Chylous cyst.

The diagnosis in this case was extremely interesting to me. It illustrated what I have been preaching and practicing for a good many years, namely, that one must not be too sure in assuming that a case is a grave one or a hopeless one, on the strength of his diagnosis. I never felt more firmly convinced of the truth of my opinion than I did in this case. The chances seemed to me a hundred to one that this was tubercular peritonitis. Whatever one's belief and experience may be as to the practical treatment of tubercular peritonitis — whether by incision, aspiration, or by purely medical methods — a chylous cyst like that in the present case certainly does not admit of any relief except by surgical means. One who does not believe in surgical measures in these cases must be very sure of the truth of his opinion if that opinion is adverse to operation. Time and again I have operated in cases of what I could not but believe to be hopeless disease, and have found an easily remedied condition of things, but a condition which if left to itself would have been necessarily fatal. Not that I would recommend exploratory operation for the sake of diagnosis; but I would raise my voice against the assumption that any human opinion is necessarily correct, especially if that opinion condemns a patient to inevitable death. One naturally believes that there are cases in which his diagnosis cannot be wrong. There are such cases, and the case here reported seemed one of them. I could not believe that my diagnosis was wrong in this instance. Is there not, therefore, in all cases — no matter how hopeless they may seem — some possibility of relief by surgical measures? These lines of thought lead one to the argument which has done more harm than good: "Without operation there is no hope, *ergo* operate." The difficulty lies in the definition of the hopeless case. There are, of course, cases in which the evidence is too strong to give the slightest support to an exploration, — for instance, cases of abdominal distention and masses secondary to cancer of the breast. But even in a case in which, after removal of cancer of the breast, the abdomen is filled with fluid and with solid masses, has one the right to assume that there is a metastasis from the breast? I think the chances of there being an ovarian tumor — a condition of things which surgery might remedy — are quite as good as in the case reported in this paper. There is certainly one chance in a hundred that a curable

abdominal tumor may be coincident with a cured mammary cancer.

There are, of course, many cases in which even the most radical opinions do not permit an exploration. Take, for instance, a case of pylorotomy for cancer of the stomach in which, after two years of extraordinary improvement and a gain of a hundred pounds in weight there is a recurrence reaching to the scar of the abdominal wound, — in which the whole area is a mass of unmistakable cancer. In such a case the liveliest imagination does not suggest a possibility of cure, especially if microscopic examination of the presenting masses confirms the diagnosis.

Chylous ascites I have seen, and chylous mesenteric cysts. A case of the latter lesion I saw operated upon by Dr. Odlin of Melrose. In this case the cysts were so tense as to suggest the diagnosis of uterine fibroid. The sac was situated in the mesentery. Its walls, like the walls of this one, were fragile, and were unavoidably ruptured during enucleation. They were easily separated with the fingers.

In the case of chylous ascites the source of the fluid was evidently in the lacteals, for they were everywhere distinctly visible, distended with white fluid. The effusion was evidently caused by some obstruction to the lymph vessels.

I once removed a cyst from the left upper quadrant of the abdomen in a child,<sup>1</sup> a patient of Dr. Bowers of Clinton. This cyst was recalled to my mind by the one here described. It filled the abdomen; it was easily separated down to, and including its deepest attachments. It contained, however, a clear fluid. The situation of the tumor in close relation to the pancreas, with Dr. Whitney's report, led to its classification among the pancreatic tumors, and it was reported as a pancreatic cyst. The child has now grown to vigorous manhood, so Dr. Bowers reported to me recently.

The effect of a case like the present upon a conservative mind is, I think, to throw healthy doubt upon the infallibility of one's opinion, to give a strong hope in serious cases and a glimpse of encouragement in the apparently hopeless.

#### THE ACTIVE TREATMENT OF GONORRHEA IN ITS EARLY STAGES.

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THERE should be no need of argument in favor of the active treatment of gonorrhea. It is our duty to afford patients suffering with this disease the most efficient relief possible, and not to palliate symptoms in hope that the disease will run a self-limited course, leaving the patient, meanwhile, to the chance of complications and of chronic disorders. The writer believes thoroughly that gonorrhea is amenable to treatment, that all save the rarest cases may be entirely cured, that treatment should be active, and that it should be instituted as early as possible.

<sup>1</sup> BOSTON MEDICAL AND SURGICAL JOURNAL of March 21, 1895: "A Case of Pancreatic Cyst Treated by Drainage."