

ANURIA FOLLOWING SALPINGO-OOPHORECTOMY.

BY

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I WISH to put on record a case of anuria of thirty hours' standing, following double salpingo-oophorectomy, relieved by a secondary laparotomy. I have not had the opportunity of looking over the literature on this subject. I would like to preface my remarks by the statement that two or three weeks before this I removed from a girl, sixteen years of age, an intraligamentous cyst of the left side as large as my head. When I opened the abdomen I could not find the uterus. I was a little in doubt at first as to whether I was dealing with an intraligamentous cyst or a pregnant uterus. I finally found the uterus pushed far over to the right side and deep down in the pelvis and then the diagnosis was verified. The cyst was very large; it pulled out the broad ligament with it, and, as I have said, pushed the uterus far over to the right side. The peritoneum over this cyst was a quarter of an inch thick. I tied off the tube near the uterus; also the ligamentum infundibulopelvicum; I made an incision at the summit of the peritoneum along the anterior wall, and enucleated the cyst, without removing any of the peritoneum. After my dissection there was left a space as large as the cyst I had removed. I was extremely careful not to injure the ureter. I sewed the peritoneal edges, ventrally fixed the uterus, packed the broad ligament cavity with gauze through a small unsewed opening, drained through the abdomen, and removed the gauze gradually until the fourth day. Patient made a good recovery.

The case is interesting because of the danger of injuring the ureter; but I dissected close to the tumor and did not injure the ureter. I found the same condition, but much slighter, on the other side.

About three weeks ago I had another case of double intraligamentous cyst. The one on the right side was not quite

as large as that on the left. The latter was probably as large as a baby's head. The peculiarity of the cyst was that it extended so far out to the brim of the pelvis that I had to consider the ureter in its removal. I did the operation in the same way, but unfortunately was not able to get out the cyst on the left side, nor the one on the right side, although it was much smaller, without taking away some of the peritoneum on the posterior wall of the broad ligament. The denuded area was then covered by peritoneum, and I made the closure on both sides with continued catgut suture. After removing the tubovarian cyst, which was intraligamentous on both sides, I ventrally fixed the uterus. I had enucleated the cysts on both sides with the fingers, keeping close to the cyst wall. I catheterized the patient's bladder after operation, and obtained only a few drops of urine, but no blood. I was informed, by telephone, the next day that the patient had not passed a single drop of urine. I saw her that afternoon, and in the twenty-four hours she had not passed any urine. There was no elevation of temperature, although the pulse was a little accelerated and quite tense. Since there was no urine in the bladder the idea struck me that in operating I might have cut the ureters. We catheterized both ureters and not a drop of urine came out. The left catheter passed in an inch less than the right, but neither passed more than 4-5 inches. I decided to do a secondary laparotomy to relieve the constriction of the ureters. I made a diagnosis of compression or kinking of the ureters due to the large area which was denuded of peritoneum on both sides, and which had to be sewed by peritoneal sutures. I made a vaginal incision in the cul-de-sac of Douglas, and found that the peritoneal cavity was free of urine. I found no urine in the abdominal cavity. Before this, however, we had again catheterized both ureters and I attempted through the posterior incision to feel how far the catheters went and what caused the constriction. But I could feel nothing at all. The patient was put in the Trendelenburg position, the abdominal sutures were opened through the first primary incision, and the peritoneal cavity was found clean. I then began to loosen the continued catgut suture on the right side and on the left side, and as soon as I did so out came urine from both ureteral catheters.

(Here Dr. Bandler went to the blackboard and demonstrated the site of the ureteral obstruction.)

If this (indicating) represents on either side the denuded area in the broad ligament from which the cyst was shelled out, and this (indicating) represents the highest point at which the ligature was put about the ligamentum infundibulo-pelvicum to tie the ovarian artery, I saw on this side at about this point (indicating) a stricture about the size of my little finger, which appeared to come up in this way (indicating), and on the other side there was exactly the same stricture. These proved to be the ureters and I must have nicked the ureter on the left side in cutting the peritoneal suture, for, on the left side a fine stream of urine came out into the abdominal cavity. As soon as tension was relieved, I covered the little hole in the ureter by passing a suture of the finest silk from the peritoneum through the ureter wall twice. It was my desire not to let leakage occur from the left ureter, so I had the patient put down in the level position and covering the exposed area with gauze, I had one of my assistants manipulate the catheters in the ureters while the patient was in that position. I could then see in the abdominal cavity how far these catheters went, but they only passed as far as this place (indicating), on the left side and no farther. I could see the tip of the catheter at the point I show you on this diagram, but had to be gentle in my manipulations on account of fear of perforation. I put my finger on the tip of the catheter at the place of kinking, depressed it, and under that impulse the catheter passed right up to the pelvis of the kidney. I then sewed up the peritoneum with interrupted sutures, in such a manner as not to compress either ureter, left the catheter in place twenty-four hours, and the patient made an uneventful recovery.

The only explanation I can offer as to this condition is that these ureters developed a kink in each one, probably as a result of the fact that the peritoneal sutures covered such a large denuded area as to exert a considerable amount of pressure; second, that the uterus, having been ventrally fixed, lifted up the uterine end of the broad ligament in such a way as to produce a kinking or twisting. I consider this kinking of the ureters due to a congenital anomaly, perhaps long ureters, for the reason that after all sutures were cut, and the uterus was freed from its adhesion to the abdominal wall, the catheter passed up the ureter only as far as the S-shaped curve.

DISCUSSION.

DR. LONGYEAR.—Did you pack these cavities?

DR. BANDLER.—I did not. These tumors did not extend so deeply as the first mentioned, but developed more toward the wall of the pelvis.

In this connection, I would like to mention another case which I had about five days ago. The diagnosis was one of double pyosalpinx. On examination I found on the left side a larger tumor than the house surgeon had signified to me, and at times, in making my examination, I could feel this tumor, while at other times it would disappear. I could not get it between my fingers. I made a diagnosis of double pyosalpinx and ovarian tumor in the left side. I removed both tubes and both ovaries and then found I had to deal with a large cystic retroperitoneal tumor, with the sigmoid flexure partially coming over it in the direction indicated in the diagram. At first, the thought occurred to me that it might be a retroperitoneal congenital tumor, possibly a dermoid. I incised the peritoneum over it, which was easily done, and loosened it to enucleate the tumor. I found the tumor was covered with fat which resembled very much a fatty capsule. As I dissected over the tumor, the thought occurred to me that I was dealing with a congenitally displaced kidney. I palpated for the left kidney and found none. The right kidney was found to be present. Not having any reason to doubt the efficacy of the secreting power of the displaced kidney, even though enlarged, I left it in place. The next day, in introducing the ureteral catheter, it passed up to the kidney pelvis on the right side and I found it was secreting. I also introduced a catheter on the left side and it went in six inches less than it did on the right side, and not a drop of urine came away. (Subsequently this kidney was found to be secreting, but slowly.) I now consider it a congenitally displaced cystic kidney, with a curve in the ureter, inasmuch as this kidney is secreting slowly. The patient naturally refuses, at the present time, consent to an operation for the removal of this kidney; but if she does consent because of some future trouble, it will be a simple thing to take it out. The patient is twenty-eight years of age, married, and has had one child. So far as I could determine, this kidney has never given any evidence of disturbance or annoyance. The right kidney is functioning well, but the other displaced one doubtless has never secreted actively.