

the uterus, ovaries and tubes are adherent to the sigmoid tumor, the case will not necessarily be hopeless. We have had permanent cures after resection of two separated sections of adherent small intestine as well as after resection of part of the wall of the bladder, and on several occasions we have coincidentally removed the uterus with the ovaries and tubes because of its involvement in such growths.

Benign tumors of the sigmoid give far greater latitude for operation than malignant growths. Diverticulitis and tuberculosis are, however, extremely liable to be complicated with intestinal or bladder fistulæ, which adds greatly to the difficulty of removal.

The most important technical feature to be considered in the removal of tumors of the large intestine, concerns mobilization. The large intestine has a long mesentery in all of its parts, although in certain situations, such as the ascending and descending colon, and iliac sigmoid, the outer leaf is very short and acts as a supporting peritoneal ligament. As this outer attachment contains no important structures, we have merely to incise it, lift the colon from its bed and draw it to the midline on the inner leaf of its mesentery which contains the nerves, blood vessels and lymphatics. In this simple way, the resection is made with ease. In mobilizing the sigmoid it should be remembered that the left ureter is adherent to the peritoneum which forms the inner leaf of the sigmoid mesentery just after it crosses the common iliac artery, and it should be identified and separated at an early stage of the operation.

The next step in the operation concerns securing the blood vessels at their origin, especially in malignant disease. By raising the loosened sigmoid one can see the vessels where they rise from the inferior mesenteric on its inner mesenteric leaf, and catch and tie them. If necessary the inferior mesenteric itself may be caught and tied at its origin from the abdominal aorta. After dividing the vessels the entire mesosigmoid with the fat and gland-bearing fascia can be lifted cleanly from the posterior abdominal wall and removed with the intestinal growth.

If the patient is in good condition, the bowel not seriously damaged and both segments well covered with peritoneum, we practice primary resection and make an immediate end-to-end anastomosis. If the peritoneum is partly absent, as in the iliac sigmoid, a long lateral anastomosis is made not less than four inches in length, or occasionally an end-to-side union is made. As long as a large opening is secured the clinical results of these methods are equally good.

Occasionally a suture anastomosis looks unreliable, as though leakage might occur. If so, the intestine at the site of the union should be attached by a few sutures to the peritoneum in the bottom of the ab-