Sigmoidocervical Fistula Complicating Diverticulitis:
Report of a Case and Review of the Literature*

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Many complications of diverticular disease of the colon have been described. Fistula-tract formation between the involved part of the colon and adjacent structures has many variations; such tracts can be sigmoidovesical, sigmoidovaginal, sigmoidouterine, sigmoidouterovesical, sigmoidourethral, cecovaginal, sigmoidovesicovaginal, and tubosigmoidal. Sigmoidocervical fistulas complicating diverticulitis are very rare. Careful review of the literature reveals only four documented cases in addition to ours.

Report of a Case

An afebrile 75-year-old Caucasian woman, weighing 102 pounds, was admitted to the hospital in August 1972 because of a brown, thick, sticky discharge from the vagina. For several weeks she had been aware of passing flatus, but was unsure of whether it came from the vagina or the urethra. She had had a supravaginal hysterectomy for fibroid uterus in 1958; right oophorectomy for a benign ovarian tumor had been performed at the same time. One year before the present admission, a clinical diagnosis of diverticulitis had been made on the basis of chronic constipation and pain in the left lower quadrant. Barium-enema studies substantiated the diagnosis. She had done very well on a low-residue diet until the present admission.

Examination disclosed left-lower-quadrant and suprapubic tenderness, but no mass could be detected. Vaginal examination revealed a cervical stump with no drainage. Sigmoidoscopic examination for a distance of 22 cm disclosed no sinus tract opening or neoplastic change. There were external hemorrhoids. Barium-enema studies disclosed extensive diverticular disease of the sigmoid colon, but no fistulous tract could be identified. The patient was referred to the Urology Department, where a cystoscopic examination with cystogram showed no abnormality. No bacterial growth was found in the urine. On August 25, 1972, after the usual bowel preparation, laparotomy was performed. The involved segment of sigmoid colon was adherent to the vault of the vagina and bladder in an inflammatory mass. En-bloc resection of the sigmoid, dome of the bladder, and the cervix with the vault of the vagina was accomplished with an immediate end-to-end anastomosis (sigmoid colon to rectum) in two layers. The bladder and vagina were closed in layers. The abdomen was closed without leaving a drain in the pelvis or complementary colostomy. The patient was discharged on September 15, 1972. The wound was well healed.

Diagnosis: Chronic diverticulitis of the sigmoid colon with a nonspecific colocolocervical fistula (Figs. 1–7).

Comment

It has been reported that fistulas are most often caused by diverticulitis of the sigmoid colon, carcinoma, regional enteritis, and irradiation sigmoiditis after treatment for carcinoma of the cervix or ovary, in that order.

The incidence of fistula formation in diverticulitis is 5 to 16 per cent in most reported series. The fistulas communicate...
Fig. 1. Low-power view of sigmoidocervical fistula tract extending from the base of the diverticulum at the colonic site to the cervix uteri (hematoxylin and eosin; ×7).

Fig. 2. Higher magnification of right upper portion of Figure 1, showing opening of fistula into base of diverticulum (hematoxylin and eosin; ×73, reduced from ×87).