Management of Chronic Ulcerative Colitis and Rectovaginal Fistula by Simultaneous Ileal Pouch Construction and Fistula Closure

Report of a Case

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Persistent rectovaginal fistulas occurring with ulcerative colitis are unusual manifestations that complicate surgical or medical treatment of the primary disease. Prior to the development of ileal pouch procedures, many cases were traditionally managed with a total colectomy and permanent ileostomy. The authors are aware of no previous study using concurrent fistula repair combined with ileal pouch construction to manage this complex problem. The successful simultaneous repair of a chronic rectovaginal fistula with ileal pouch reconstruction in a patient with intractable ulcerative colitis is reported. [Key words: Ulcerative colitis; Fistula; Ileal pouch]

ANORECTAL COMPLICATIONS of ulcerative colitis can pose difficult management problems and, if unresolved, lead to further disability. With chronic active disease, the anorectal region is the most frequent site of associated problems such as abscess, fissure, or fistula formation. Rectal or anovaginal fistulas are unusual manifestations of ulcerative colitis and have been difficult to manage successfully. Most patients eventually require proctocolectomy and permanent ileostomy. Few studies are available that address management of this problem or recent advances in treatment options.

The present report details the successful use of ileal pouch reconstruction, rectal mucosectomy, and ileal pouch-anal anastomosis to treat severe chronic ulcerative colitis associated with rectovaginal fistula formation, and reviews management of this unusual problem.

Report of a Case

A 37-year-old woman presented with a 13-year history of chronic ulcerative colitis with symptoms controlled by 20 mg of prednisone daily and sulfasalazine. Four months prior to presentation she developed a spontaneous rectovaginal fistula. Colonoscopy showed extensive pseudopolyposis, normal terminal ileum, and diffuse colonic involvement with severe ulcerative colitis. The right colon was also markedly narrowed along with extensive pseudopolypos formation. Biopsies of the colon were consistent with ulcerative colitis. The rectovaginal fistula was located in the anterior distal anorectal canal at the dentate line. The fistula orifice was approximately 4 to 5 mm in diameter (Fig. 1).

A total colectomy and rectal mucosectomy were performed with the rectum transected several centimeters above the levator ani muscles. A frozen section evaluation of the colon made prior to pouch reconstruction was consistent with ulcerative colitis. A quadruple loop (W-shaped) ileal reservoir was constructed as described by Nicholls and Pezim and Harms et al. Using this technique, a 220 cc pouch was constructed as determined by intraoperative measurements before completion of the ileoanal anastomosis (Fig. 2). The rectal fistulous tract was carefully excised and closed transanally by reapproximating attenuated septal fibers and anal sphincters. The vaginal side of the fistula was closed per vagina with a small advancement flap. The ileal pouch outlet was anastomosed to the dentate line and a proximal loop ileostomy was performed. Final pathology of the resected colon was confirmed as chronic quiescent ulcerative colitis (Figs. 3 and 4). Three months after reconstruction and fistula repair the diverting ileostomy was taken down and intestinal continuity restored. Good preservation

Received for publication March 18, 1987.
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FIG. 1. Barium enema demonstrating fistulous tract between distal rectum and vagina.

FIG. 2. Sagittal view of completed quadruple limb ileal pouch engaged into anal canal for ileoanal anastomosis distal to fistula closure.