Symposium

Anorectal Problems:
Surgical Incisions for Complicated Anal Fistulas

WILLIAM G. FRIEND, M.D.

From the Department of Surgery, The Swedish Hospital Medical Center, Seattle, Washington

The usual surgical approach to anal fistula is fistulotomy or fistulectomy. Both of these procedures are effective, and seldom is recurrent inflammation or postoperative morbidity a problem. However, in patients with extensive perianal disease from complicated horseshoe fistulas, the surgical incisions themselves may result in altered structure and function of the anorectum, as described below.

This article describes a different concept in the surgical approach to complicated

Fig. 1. Inflammation of the posterior anal space may extend in six directions.

(Address reprint requests to Dr. Friend, 801 Broadway, Seattle, Washington 98122.)
anal fistulas. Instead of excising inflamed tissue or incising complicated fistula tracts, anal fistula may be eliminated simply by providing adequate drainage around the anus.

Figure 1 shows the routes by which inflammation spreads from the posterior anal space or Minor’s triangle. The source of this inflammation is usually an inflamed anal crypt at or near the posterior midline, as depicted in the drawing, but it may arise from any other anal crypt and secondarily involve the posterior anal space. It is evident from this drawing that a circular incision that is used to unroof a deep horseshoe tract is essentially the same incision used in the perineal part of an abdominopерineal resection. This latter incision is designed to destroy the anorectum surgically and so accounts for many of the postoperative complications seen after operations for extensive fistulas.

An alternative surgical approach, designed to eliminate the complications of the surgical incisions themselves, is depicted in Figure 2. The offending anal crypt is incised by a simple radial fistulotomy incision including a partial sphincterotomy as necessary. In patients with extensive disease, this primary incision will be made in the posterior midline in nearly every instance. Through this incision the possible extensions within the posterior anal space (Fig. 1) are probed gently with a curved hemostat to determine the complexity of the fistula. Special care is taken to identify a cephalad extension, which may lead to a deep horseshoe tract (Fig. 1, F). Having probed a lateral extension, a second incision is made 60 degrees from the initial incision regardless of where the external openings of the fistula may occur. This second incision is carried deeply to the level of the fistulous tract but the medial border of this incision does not extend into the internal sphincter muscle. The fistula tract itself is then enlarged, first by spreading the hemostat, then by digital manipulation, until the tract closes only loosely about the examining finger, as shown in Figure 3. Further extension of the fistula is then determined through the second incision and the process is repeated using as many as six incisions. Any grossly purulent or necrotic material is removed from the bed of the tract, but otherwise no tissue is deliberately excised.