Anoplasty for Anal Stenosis

73

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Indications

Symptomatic fibrotic constriction of the anal canal not responsive to simple dilatation

Preoperative Preparation

Preoperative saline enema

Pitfalls and Danger Points

Fecal incontinence
Slough of flap
Inappropriate selection of patients

Operative Strategy

Some patients have a tubular stricture with fibrosis involving mucosa, anal sphincters, and anoderm. This condition, frequently associated with inflammatory bowel disease, is not susceptible to local surgery. In other cases of anal stenosis, elevating the anoderm and mucosa in the proper plane frees these tissues from the underlying muscle and permits formation of sliding pedicle flaps to resurface the denuded anal canal subsequent to dilating the stenosis.

Fecal incontinence is avoided by dilating the anal canal gradually to two or three fingerbreadths and performing, when necessary, a lateral internal sphincterotomy. Patients with mild forms of anal stenosis may respond to a simple internal sphincterotomy if there is no loss of anoderm.

Documentation Basics

Coding for anorectal procedures is complex. Consult the most recent edition of the AMA's *Current Procedural Terminology* book for details (see references at the end). In general, it is important to document:

- Findings
- Nature of flap
- Sphincterotomy or not?

Operative Technique

Sliding Mucosal Flap

Incision

With the patient under local or general anesthesia, in the prone position, and with the buttocks retracted laterally by means of adhesive tape, make an incision at 12 o'clock. This incision should extend from the dentate line outward into the anoderm for about 1.5 cm and internally into the rectal mucosa for about 1.5 cm. The linear incision is then about 3 cm in length. Elevate the skin and mucosal flaps for about 1.0–1.5 cm to the right and to the left of the primary incision. Gently dilate the anus (Fig. 73.1).

Internal Sphincterotomy

Insert the bivalved Parks or a Hill-Ferguson retractor into the anal canal after gently dilating the anus. Identify the groove between the external and internal sphincter muscles. If necessary, incise the distal portion of the internal sphincter muscle, no higher than the dentate line (Fig. 73.2). This should permit dilatation of the anus to a width of two or three fingerbreadths.

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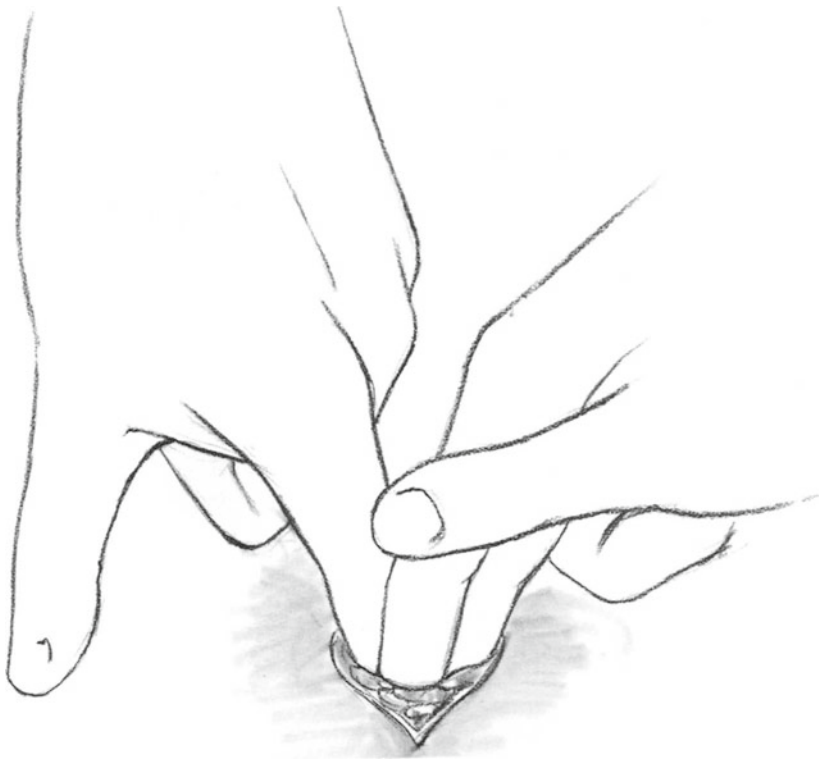

Fig. 73.1

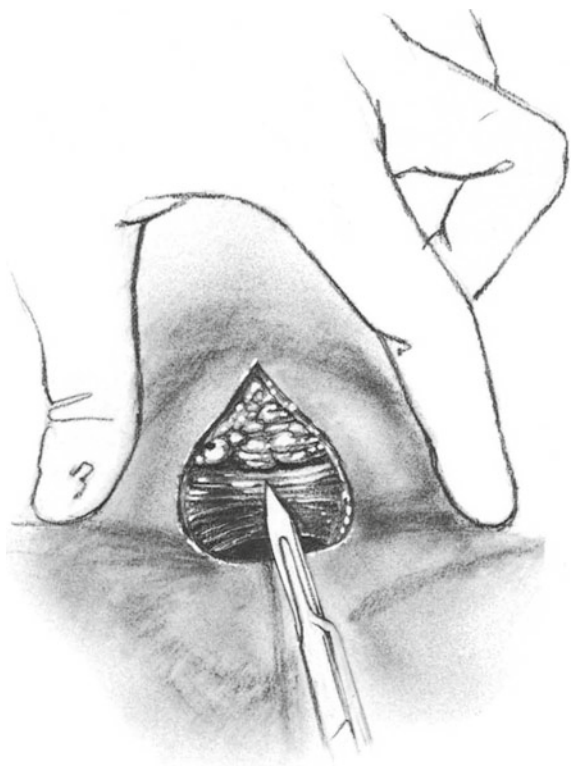

Fig. 73.2

Advancing the Mucosa

Completely elevate the flap of rectal mucosa. Then advance the mucosa so it can be sutured circumferentially to the sphincter muscle (Fig. 73.3). This suture line should fix the rectal mucosa near the normal location of the dentate line. Advancing the mucosa too far results in an ectropion with annoying chronic mucus secretion in the perianal region. Use fine chromic catgut or PG for the suture material. It is not necessary to insert sutures into the perianal skin. In a few cases of severe stenosis, it may be necessary to repeat this process and create a mucosal flap at 6 o'clock (Figs. 73.4 and 73.5).

Hemostasis should be complete following the use of accurate electrocautery and fine ligatures. Insert a small Gelfoam pack into the anal canal.

Sliding Anoderm Flap

Incision

After gently dilating the anus so a small Hill-Ferguson speculum can be inserted into the anal canal, make a vertical incision at the posterior commissure, beginning at the dentate line and extending upward in the rectal mucosa for a distance of about 1.5 cm. Then make a Y extension of this incision on

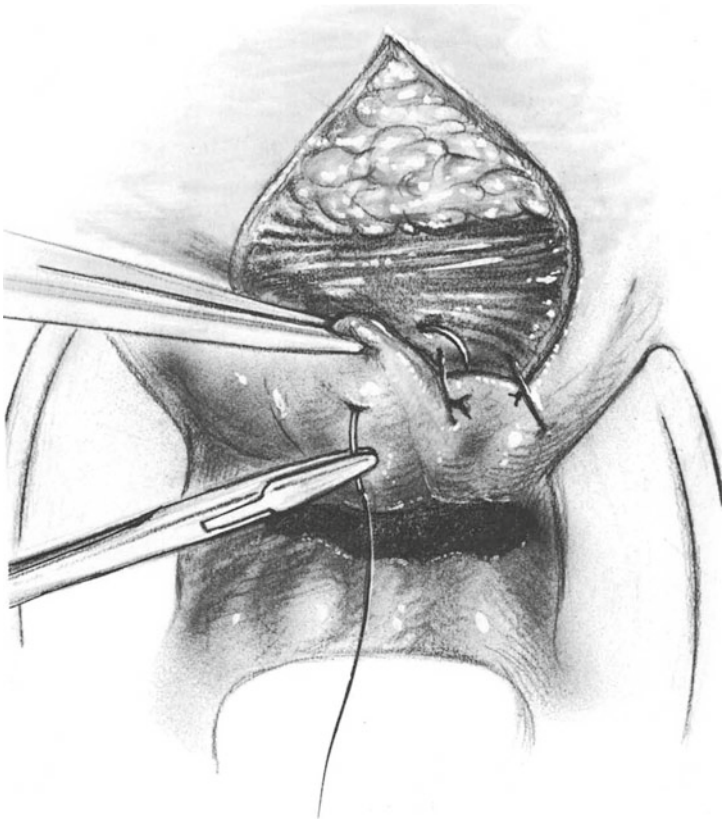

Fig. 73.3

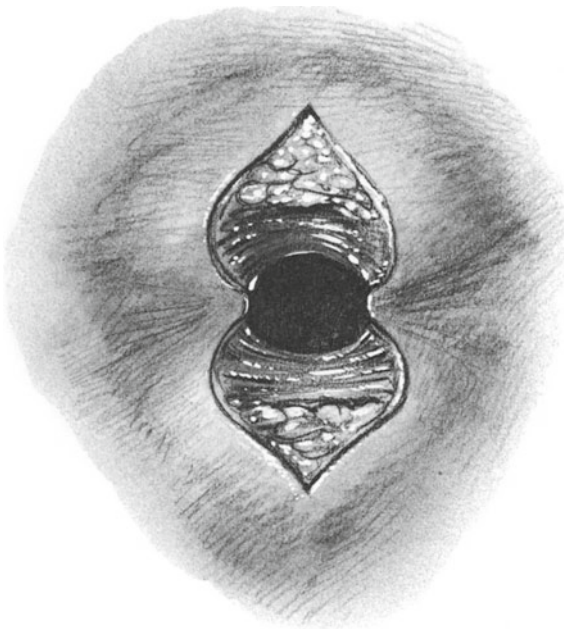

Fig. 73.4

to the anoderm as in Fig. 73.6. Be certain the two limbs of the incision in the anoderm are separated by an angle of at least 90° (angle *A* in Fig. 73.7a). Now by sharp dissection, gently elevate the skin and mucosal flaps for a distance of about 1–2 cm. Take special care not to injure the delicate anoderm during the dissection. When the dissection has been completed, it is possible to advance point *A* on the anoderm to point *B* on the mucosa (Fig. 73.7b) without tension.

Internal Sphincterotomy

In most cases enlarging the anal canal requires division of the distal portion of the internal sphincter muscle. This may be performed through the same incision at the posterior commissure. Insert a sharp scalpel blade in the groove between the internal and external sphincter muscles. Divide the distal 1.0–1.5 cm of the internal sphincter. Then dilate the anal canal to width of two or three fingerbreadths.

Advancing the Anoderm

Using continuous sutures of 5-0 atraumatic Vicryl, advance the flap of anoderm so point *A* meets point *B* (Figs. 73.7b and 73.8) and suture the anoderm to the mucosa with a continuous suture that catches a bit of the underlying sphincter muscle. When the suture line has been completed, the original Y incision in the posterior commissure resembles a V (Figs. 73.7b and 73.9). Insert a small Gelfoam pack into the anal canal.

Postoperative Care

Remove the gauze dressings from the anal wound. It is not necessary to mobilize the Gelfoam because it tends to dissolve in sitz baths, which the patient should start two or three times daily on the day following the operation.

A regular diet is prescribed.

Mineral oil (45 ml) is taken nightly for the first 2–3 days. Thereafter a bulk laxative, such as Metamucil, is prescribed for the remainder of the postoperative period.

Discontinue all intravenous fluids in the recovery room if there has been no postanesthesia complication. This practice reduces the incidence of postoperative urinary retention.

Complications

Urinary retention

Hematoma

Anal ulcer and wound infection (rare)

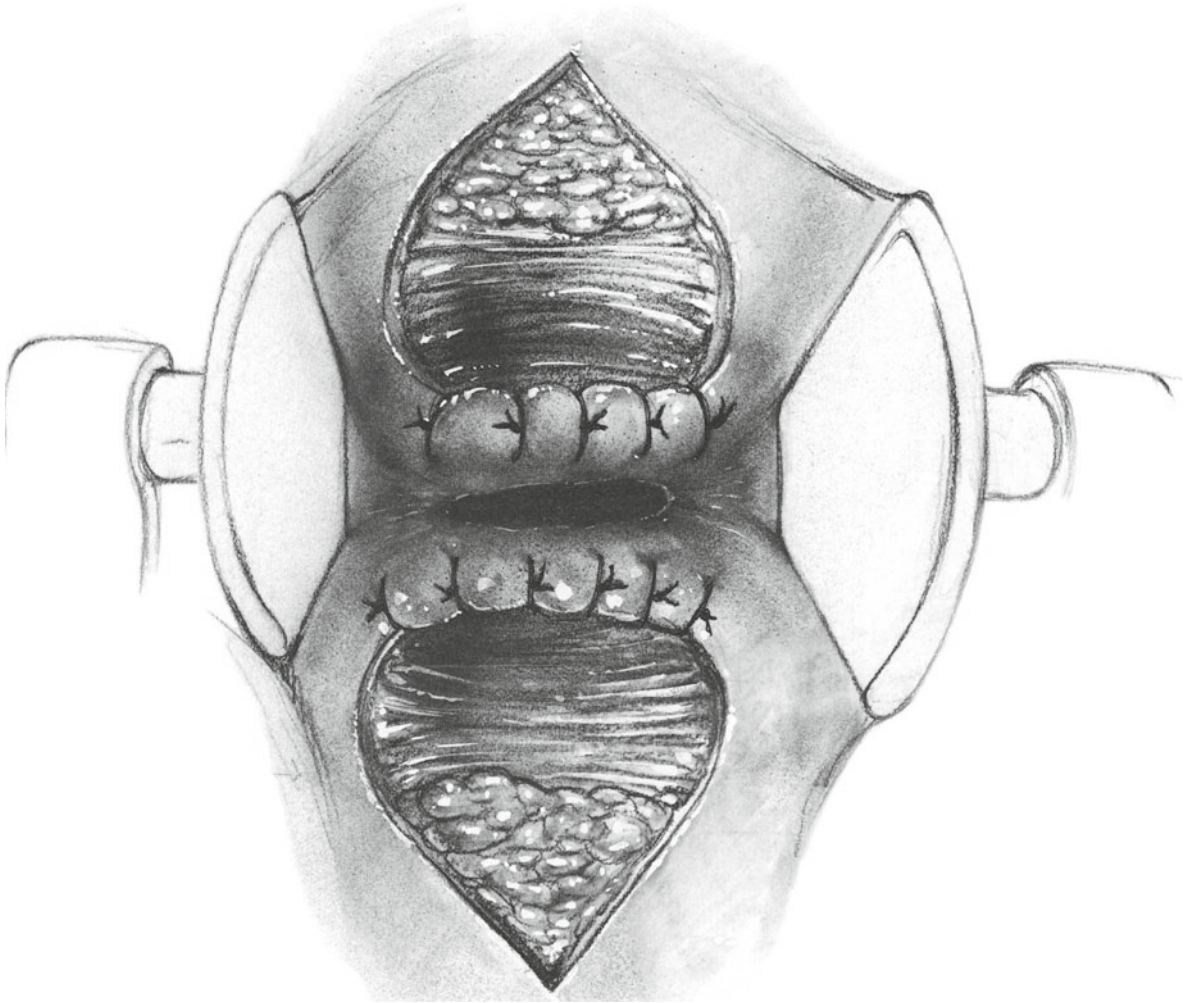

Fig. 73.5

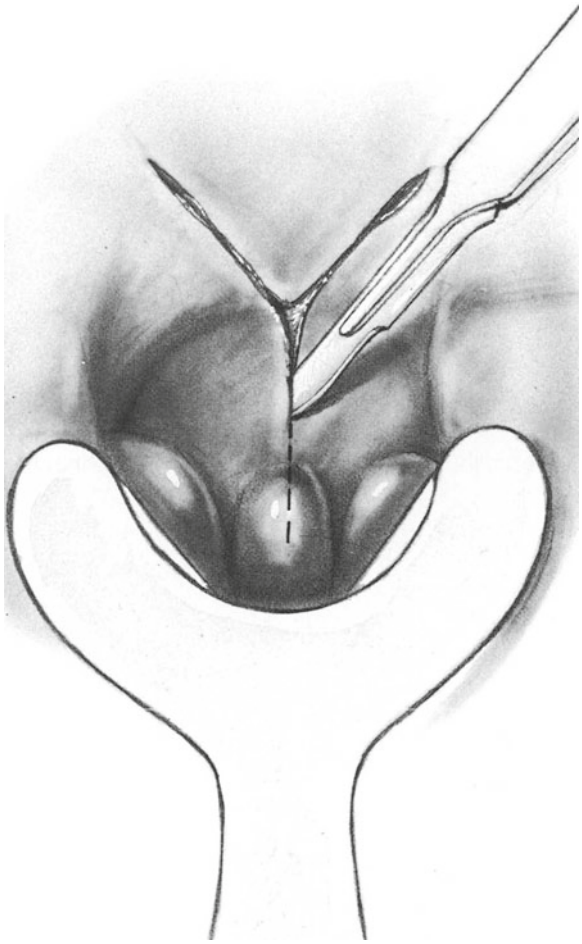

Fig. 73.6

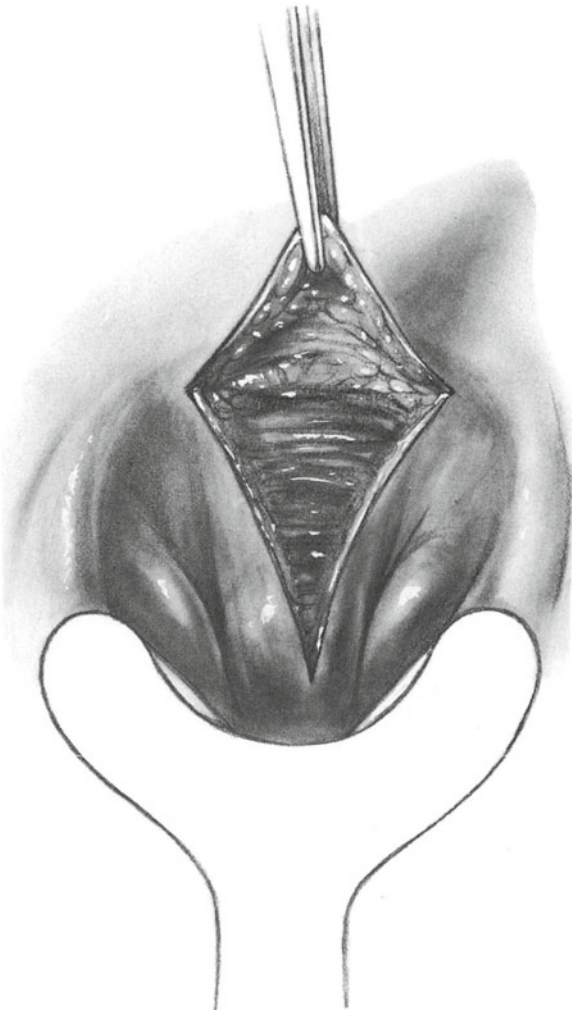

Fig. 73.8

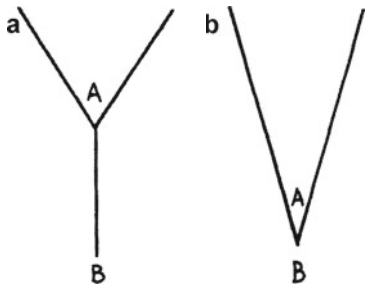

Fig. 73.7

Fig. 73.9

Further Reading

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