Thiersch Operation for Rectal Prolapse

SURGICAL LEGACY TECHNIQUE

INDICATIONS

The Thiersch operation is indicated in poor-risk patients who have prolapse of the full thickness of rectum (see Chapter 56). Other perineal operations, including the Delorme procedure, are excellent alternatives in poor-risk patients and have largely supplanted this legacy procedure.

PREOPERATIVE PREPARATION

Sigmoidoscopy (barium colon enema) is performed. Because many patients with rectal prolapse suffer from severe constipation, cleanse the colon over a period of a few days with cathartics and enemas. Initiate an antibiotic bowel preparation 18 hours prior to scheduled operation, as for colon resection (see Chapter 42).

PITFALLS AND DANGER POINTS

Tying the encircling band too tight so it causes obstruction
Wound infection
Injury to vagina or rectum
Fecal impaction

OPERATIVE STRATEGY

Selecting Proper Suture or Banding Material

Lomas and Cooperman (1972) recommended that the anal canal be encircled by a four-ply layer of polypropylene mesh. The band is 1.5 cm in width, so the likelihood it would cut through the tissues is minimized. Labow and associates (1980) used a Dacron-impregnated Silastic sheet (Dow Corning No. 501-7) because it has the advantage of elasticity.

Achieving Proper Tension of the Encircling Band

Although some surgeons advocate that the encircling band be adjusted to fit snugly around a Hegar dilator, we have not found this technique satisfactory. Achieve proper tension by inserting an index finger into the anal canal while the assistant adjusts the encircling band so it fits snugly around the finger. If the band is too loose, prolapse is not prevented.

Fabricating the Encircling Band of Mesh

Although Lomas and Cooperman preferred Marlex
and subsequent drawings illustrate Lomas and Cooperman's technique of using a tight roll of Marlex; we now use a 1.5 cm strip elasticized Silastic. Except for the nature of the mesh, the surgical technique is unchanged.

**Incision and Position**

This operation may be done with the patient in the prone jackknife or the lithotomy position, under general or regional anesthesia. We prefer the prone position. Make a 2 cm radial incision at 10 o'clock starting at the lateral border of the anal sphincter muscle and continue laterally. Make a similar incision at 4 o'clock. Make each incision about 2.5 cm deep.

**Inserting the Mesh Band**

Insert a large curved Kelly hemostat or a large right-angle clamp into the incision at 4 o'clock and gently pass the instrument around the external sphincter muscles so it emerges from the incision at 10 o'clock. Insert one end of the mesh strip into the jaws of the hemostat and draw the mesh through the upper incision and extract it from the incision at 4 o'clock. Then pass the hemostat through the 10 o'clock incision around the other half of the circumference of the anal canal until it emerges from the 4 o'clock incision. Insert the end of the mesh into the jaws of the hemostat and draw the hemostat back along this path (Fig. 63–2) so it delivers the end of the mesh band into the posterior incision. At this time the entire anal canal has been encircled by the band of mesh, and both ends protrude through the posterior incision. During this manipulation be careful not to penetrate the vagina or the anterior rectal wall. Also, do not permit the mesh to become twisted during its passage around the anal canal. Keep the band flat.

**Adjusting Tension**

Apply a second sterile glove on top of the previous glove on the left hand. Insert the left index finger into the anal canal. Apply a hemostat to each end of the encircling band. Ask the assistant to increase the tension gradually by overlapping the two ends of mesh. When the band feels snug around the index finger, ask the assistant to insert a 2-0 Prolene suture to maintain this tension. After the suture has been inserted, recheck the tension of the band. Then remove the index finger and remove the contaminated glove. Insert several additional 2-0 Prolene interrupted sutures or a row of 55 mm linear staples to approximate the two ends of the mesh and ampu-