Diseases of the Colon & Rectum

Letters to the Editor

Muscle Interposition in Patients with Fistulas Between the Rectum and Urethra or Vagina

To the Editor—We have read with great interest the article by Zmora *et al.*[1] concerning gracilis muscle interposition for surgical repair of a rectovaginal or rectourethral fistula. In the past, several techniques have been described for the treatment of these fistulas, often with rather disappointing results. It has been suggested that interposition of healthy, well-vascularized tissue may be the key to rectovaginal fistula healing. Zmora *et al.*[1] performed gracilis muscle interposition in nine patients with a rectovaginal or rectourethral fistula. All patients underwent fecal diversion before or at the time of the procedure. In seven patients, the fistula healed after gracilis muscle interposition at a median follow-up time of 14 months after stoma closure. In a recent study[2] conducted in our institution, we encountered a rather disappointing low overall healing rate of 62 percent in 26 females who underwent puborectal sling interposition for the treatment of their rectovaginal fistula. The median duration of follow-up was 14 months. In all but one patient this procedure was performed without covering ileostomy.

The question is whether such a covering ileostomy should be created in all patients undergoing rectovaginal fistula repair. It has been reported that a successful outcome can be achieved without the use of a protecting stoma.[3–5] It is difficult to determine whether fecal diversion ameliorates the outcome, because fecal diversion often is used in the most difficult cases. Another aspect of muscle interposition is the risk of postoperative dyspareunia. In our study, 57 percent of the females without painful intercourse before the operation reported painful intercourse after the procedure. It is not clear whether Zmora *et al.*[1] encountered this side effect of muscle interposition. Because postoperative dyspareunia has a substantial influence on quality of life, more studies are warranted to investigate the incidence of dyspareunia after muscle interposition.

REFERENCES

1. Zmora O, Tulchinsky H, Gur E, Goldman G, Klausner JM, Rabau M. Gracilis muscle transposition for fistulas between the rectum and urethra or vagina. Dis Colon Rectum 2006;49:1316–21.
2. Oom DM, Gosselink MP, Van Dijl VR, Zimmerman DD, Schouten WR. Puborectal sling interposition for the treatment of rectovaginal fistulas. Tech Coloproctol 2006;10:125–30.
3. Lowry AC, Thorson AG, Rothenberger DA, Goldberg SM. Repair of simple rectovaginal fistulas. Influence of previous repairs. Dis Colon Rectum 1988;31:676–8.
4. Rothenberger DA, Christenson CE, Balcos EG, *et al.* Endorectal advancement flap for treatment of simple rectovaginal fistula. Dis Colon Rectum 1982;25:297–300.
5. Watson SJ, Phillips RK. Non-inflammatory rectovaginal fistula. Br J Surg 1995;82:1641–3

Daniëlla M. J. Oom
Martijn P. Gosselink, M.D.
W. Rudolph Schouten, M.D., Ph.D.
Rotterdam, The Netherlands

DOI: 10.1007/s10350-006-0840-7
Published online: 5 February 2007

The Author Replies

To the Editor—We suggest that a diverting stoma should accompany gracilis muscle interposition for repair of fistulas as described.[1] Gorenstein and colleagues[2] performed a diverting loop ileostomy simultaneously with the flap procedure for repair of rectovaginal fistulas after restorative proctocolec-

Dis Colon Rectum 2007; 50: 548–549

tomy. The ileostomy was closed in all patients at three months after examination under anesthesia demonstrated complete healing of the fistula. Zmora *et al.*[3] reported success rates of 83 percent. Fecal diversion was performed before performing the gracilis transposition for repair of iatrogenic rectourethral fistulas, usually by a laparoscopic approach. Moreover, even for other repair techniques success rates are high when performing fecal diversion. Sher *et al.*[4] reported a success rate of 93 percent for the repair of rectovaginal fistulas in patients with Crohn's disease, by a transvaginal approach. Studies reporting highly successful results when fecal diversion was not performed refer to simple or noninflammatory fistulas.[5–7]

Unfortunately, we could not assess the risk of postoperative dyspareunia after repair of rectovaginal fistulas by using the gracilis flap technique in our patients.

REFERENCES

1. Zmora O, Tulchinsky H, Gur E, Goldman G, Klausner JM, Rabau M. Gracilis muscle transposition for fistulas between the rectum and urethra or vagina. Dis Colon Rectum 2006;49:1316–21.
2. Gorenstein L, Boyd JB, Ross TM. Gracilis muscle repair of rectovaginal fistula after restorative proctocolectomy. Dis Colon Rectum 2006;31:730–4.
3. Zmora O, Potenti FM, Wexner SD, *et al.* Gracilis muscle transposition for iatrogenic rectourethral fistula. Ann Surg 2003;237:483–7.
4. Sher ME, Bauer JJ, Gelernt I. Surgical repair of rectovaginal fistulas in patients with Crohn's disease: transvaginal approach. Dis Colon Rectum 1991;34:641–8.
5. Lowry AC, Thorson AG, Rothenberger DA, Goldberg SM. Repair of simple rectovaginal fistulas. Influence of previous repairs. Dis Colon Rectum 1988;31:676–8.
6. Rothenberger DA, Christenson CE, Balcos EG, *et al.* Endorectal advancement flap for treatment of simple rectovaginal fistula. Dis Colon Rectum 1982;25:297–300.
7. Watson SJ, Phillips RK. Non-inflammatory rectovaginal fistula. Br J Surg 1995;82:1641–3.

Osnat Zmora, M.D.
Tel Aviv, Israel

DOI: 10.1007/s10350-006-0841-6
Published online: 9 February 2007