

SURGICAL MANAGEMENT OF URINARY INCONTINENCE ASSOCIATED WITH RECTO-VESICAL FISTULAS: THE TRANSANAL RECTAL FLAP APPROACH

Synopsis of Video

Urinary incontinence associated with recto-urinary fistulas, although uncommon, is a devastating complication of lower urinary tract surgery. The anatomic location of the fistula renders their repair significantly challenging. Over the years, various surgical techniques have been proposed including transabdominal, perineal, and transanal sphincteric, posterior sagittal, transrectal (York Mason) approaches. As an alternative to the more invasive, yet popular York Mason technique, we describe repair of recto-urinary fistulas with an incisionless transanal approach.

Two patients who developed rectourinary fistulas after radical prostatectomy had their lesion confirmed by radiographic imaging endoscopy and subsequently repaired using the incisionless transanal approach. The operative technique is the following: Cystoscopy is performed and the fistula is identified and canulated with a 5 French Pollack ureteral catheter. A 22 French Foley catheter is then left draining the urinary bladder. After being placed in the prone, Jackknife position, a Parks (3 blades) self-retaining retractor is assembled, dilating the anus, stretching the sphincteric muscles and thus avoiding their incision. The orifice of the previously catheterized fistula being clearly delineated, an inverted "U" anterior mucosal rectal flap is developed after the rectal wall has been infiltrated with 1 % lidocaine and epinephrine. Over a guide wire, a 8 French urethral Foley is inserted in the fistulous tract and aided by antero-posterior traction, the fistulous tract is incised until the Foley balloon is reached. Cautious resection of scar tissue between the urinary and rectal walls allows for a tension-free closure of the urinary and rectal layers. A three layer closure is then performed using a 3-zero vicryl suture, the first layer incorporating the urinary wall, the second the rectal wall and the third, the previously dissected anterior flap. No perirectal drain is left in place and after removal of the Parks retractor, the anal canal regains its anatomic caliber immediately. The bladder remains continuously drained for 3 weeks with a # 22 Fr Foley until a cystogram is obtained to confirm resolution of the fistula.

The aforementioned procedure led to the successful closure of the fistulas in our 2 patients. Post-operative stay was approximately 24 hours. Analgesic requirements were minimal. Cystogram done 3 weeks after the intervention confirmed the fistula closure. In both cases, no infection or fecal incontinence were noted.

The incisionless transanal technique allows excellent visualization and easy repair of recto-urinary fistulas without the need to transect the anal sphincteric muscles. The technique is simple, non-invasive, safe, and effectively cures this morbid condition.