

NOVEL RECTUS CROSSOVER FOR ENHANCED CONTINENCE OF CATHETERIZABLE URINARY DIVERSION

Synopsis of Video

The video documents our novel technique we employ to enhance stomal continence achieved with cutaneous urinary diversion. We now utilize a rectus crossover through which we pass our catheterizable limb.

Hypothesis / aims of study

To enhance continence achieved with cutaneous urinary diversion, we now incorporate a novel rectus crossover through which we pass our catheterizable limb. We demonstrate the procedure and analyse the results in our initial 39 patients.

Study design, materials and methods

Between October, 2005 and September, 2008, we performed 39 urinary diversion procedures in conjunction with bladder augmentation or supravescical diversion, for a variety of indications. Our preferred method incorporates an ileocolonic segment, including the ileocecal valve. Continence has, historically, not been ideal with this technique and we have sought further improvement. To enhance continence of the catheterizable limb, it is passed between crossed segments of the rectus muscle. This novel technique is safe, feasible, and preliminarily advantageous

Results

39 patients underwent diversion. Average age 53.5 years (range 21-83). 8 patients had failed prior attempts at continent diversion, 7 with Indiana pouch, 1 with ileal neobladder. Patients had undergone diversion for pelvic malignancy (16), neurogenic bladder (13), sequelae of minimally invasive prostate therapies (3), refractory bladder pain syndrome (4), refractory urethral stricture disease (3). 4 patients were lost to follow-up. Post-surgical complications included superficial stomal stenosis (4) and ureteroileal anastomotic stricture following cystectomy (1). One patient developed a false passage above the fascia that required operative revision of the superficial segment. Two patients experienced perineal fistula, one of which was diverted for sequelae of infected sphincter and male sling and the other for strictures following pelvic radiation. One patient had a prolonged ileus immediately post-operatively. 5 patients reported some degree of stomal incontinence. 1 with rare incontinence at large bladder volumes, 1 rare incontinence with instability, 1 leaves a catheter indwelling overnight, 1 with rare nocturnal incontinence, 1 incontinence not specified.

Interpretation of results

31 of 35 patients not lost to follow-up are dry (94% daytime, 88% nighttime). By intent to treat criteria, assuming all 4 patients lost to follow-up have some degree of incontinence would leave 79% dry both day and night. This compares favorably to recent series of Indiana pouch creations with 96% daytime continence and 73% with nighttime continence.

Concluding message

Continent diversion with rectus crossover appears to enhance continence of the catheterizable limb with seemingly no significant increase in risk of adverse outcome. The data is immature and further follow-up with larger series of patients is warranted before a clinical recommendation can be made.

<i>Specify source of funding or grant</i>	None.
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	No
<i>This study did not require ethics committee approval because</i>	This is a subtle variation of surgical technique within the parameters of an established surgical procedure that is standard of care.
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes