



USE OF VAGINAL FLAPS IN URETHRAL RECONSTRUCTION FOLLOWING COMPLETE URETHRAL LOSS AS A RESULT OF OBSTETRIC INJURY:CASE REPORT

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INTRODUCTION

Complete urethral loss is a devastating consequence of prolonged second stage of labour when the fetal head compresses against the anterior vaginal wall leading to ischemia and pressure necrosis of bladder base and urethra. The resulting injury is a field injury with a large defect surrounded by damaged, ischemic tissue which is often associated with stress urinary incontinence (SUI) due to weakening of the sphincter mechanism.

CASE REPORT:

We present a case of a 43 year old female with continuous urinary leakage following obstructed labour. Patient had previously undergone transvaginal surgery with primary closure of urethrovaginal fistula without usage of interposition flaps. However patient developed incontinence again in immediate postoperative period.



Pre op photograph showing a distal and another proximal fistula through which foleys catheter has been inserted



Intraoperative photograph with martius flap interposition and pubovaginal sling

She presented in our department with continuous incontinence. Per vaginal examination showed complete urethral loss with 2 openings in the region of proximal urethra 1 cm from each other. A U shaped vaginal flap was created which was rotated dorsally so as to form the ventral wall of the neourethra. An pubovaginal sling using autologous rectus sheath was fashioned and placed on the proximal part of the neourethra. The flap was further buttressed with a martius interposition flap as a second layer cover. The catheter was removed after 2 weeks. Following catheter removal, patient was continent and had satisfactory voiding.

DISCUSSION: Complete urethral loss as a consequence of obstructed labour is a challenging problem due to extensive tissue ischaemia, scarring and lack of sufficient local tissue for additional buttressing. Urethral reconstruction in these patients can be done using local vaginal flaps (as in our case) or other tissue flaps like a bladder flap¹. Often these patients have associated SUI which needs to be addressed simultaneously.

The rationale for doing the sling surgery at the same sitting is to avoid dissection in the same ischemic field during the second procedure which can cause iatrogenic fistulae². Autologous slings are preferable over synthetic slings as post-birth trauma patients usually have local ischemia that increases the risk of urethral erosion when using synthetic materials².

In a comparison of pubovaginal slings using rectus fascia versus anterior vaginal wall, usage of anterior vaginal wall sling can result in decreased sexual function due to vaginal shortening. Even though harvesting of rectus sheath is thought to cause additional morbidity, our patient had short post operative inpatient stay of 5 days and no wound infection occurred. We would like to highlight the fact that concurrent sling procedure along with fistula repair can be done successfully in such cases of complete urethral loss thereby avoiding second anti-incontinence procedure.

REFERENCES

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