

EXTRAVESICAL MESH WRAPPING, IN IDIOPATHIC AND DIABETIC PATIENTS WITH IN HIGH CAPACITY HYPOTONIC-ATONIC NEUROGENIC BLADDER

Introduction and Objective:

The description and the results of new technique extravescical mesh wrapping in high capacity idiopathic and diabetic patients with hypotonic-atonic neurogenic bladder

Material and Methods:

10 patients (median age 40.2) underwent this procedure. The patients evaluated from 200-2011.

The pre-operative evaluation of the patients consisted of patients history, physical examination and urodynamic studies.

Patients with neurogenic bladder may present with incontinence, difficult micturition, decrease in urine flow or inability to urinate, urinary retention. 3 patients were using sterile intermittent catheterisation at the time of prevention and the 7 patients presented with urinary retention.

4 patients were male and 6 of them were female. 3 patients with idiopathic neurogenic and 7 patients were diabetic neurogenic bladder. The average capacity was 1050ml (800-1600ml).

Post voiding residual urine was 550ml (250-650ml).

Operation Technique

The case is 55 years old, female with diabetic neurogenic bladder. Bladder capacity was 950ml. Voiding cystourethrography showed no vesicoureteral reflux. Urodynamic finding was flaccid neuropathic bladder. The surgery was started supine position. Phannestiel in scion was perform. The bladder was reached blunt dissection. The bladder was released the surrounding tissues. Then bilateral lower end of ureters was released from surrounding tissues. Suspensions of the bilateral lower end of the ureters performed seriously. The bladder filled with 950 ml saline then, bladder capacity adjusted to 250ml. Bladder fixation sutures performed. First 3 fixation sutures (2/0 Prolene) were applied to appropriate tissues on the posterior and posterior-lateral walls of the bladder, paying attention to where the ureter enters the bladder. And Then bladder lateral walls were throw with 2 cm interval 3 pieces of fixation sutures in the lateral pubovesical ligament bilaterally. Anterior fixation of the mesh to the transverse perineal ligament performed. Finally, a fixation suture is applied towards the pubic ligament on the anterior wall of the bladder. The avoid ureter obstruction mesh was cutted in triangular shape according to ureter position. The fixation sutures passed from the mesh respectively. The bladder is completely wrapped with mesh and bladder capacity adjusted to the 250ml.

Results:

Median follow-up was 12 months. None of patients developed urinary retention, mesh infection, obstruction and irritation during the post-operation period. Post-operatively urethral catheter remained for 2 months. Sterile intermittent catheterization 4 times daily was started, after 4 months number of sterile intermittent catheterization was decreased to 1-2 times daily. Patients with no post micturition residual urine followed without sterile intermittent catheterisation.

Conclusions:

This new procedure is indicate for patients with high capacity, idiopathic and diabetic patients with hypotonic-atonic neurogenic bladder. Longer follow up in a larger population to assess the reliability of this novel technique would be advisable.

Disclosures

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