Goodwin cup patch to treat a lady with contracted bladder and incontinence

Azzawi M. Hadi
Department of surgery Collage of Medicine Tikrit University

Case Report

Thirty years old lady developed painless urine retention and some sort of sensory loss and weakness of the lower limbs soon after thyroid surgery 6 years ago. She was kept on Foleys catheter for drainage. MRI suggest multiple area of demyelization Fig (1). Cystoscopy done for her which show large bladder capacity with fine trabiculation. Cystometry show flaccid bladder paralysis with no sensation in the bladder even over 340cc.fig (2) After two years of clean intermittent catheterization(CIC) she had recurrent infection and hydronephrosis then suprapubic cystostomy done for her. Four years later she start to feel pain in her bladder when she close the suprapubic catheter which was removed and a trial of medical treatment (oxybutinine 5mg bid and imipramine 50mg bid) was started, she develops sever frequency and incontinence. Cystogram done for her shows small contracted bladder and develops sever pain at 75cc fig.(3). The decision to do augmentation cystoplasty was taken in the form of Goodwin cup patch. The patient had a very smooth post operative time and discharged home on oral antibiotics and daily bladder wash, her bladder capacity on discharge was 300cc when she start to feel pain. the catheter removed at day 15 post operative she had good emptying of the pouch and good sphincter control.

Discussion

Thyroid surgery induced spinal cord ischemia could be the possible cause for this sudden and reversible neurological deficit, which may be developed because of hypotension or neck over extension during the procedure. The affected part could be the sacral part of the spinal cord and this explain the flaccid bladder and sensory loss of parts of the lower limb.

The decision to do suprapubic cystostomy converted the flaccid bladder into small contracted bladder. The patient had better to be kept on clean intermittent catheterization (CIC) procedure with increase the frequency and treat the infection (1).

Augmentation cystoplasty is a surgical procedure used in adults and children who lack adequate bladder capacity or detrusor compliance. Decreased bladder capacity or abnormal compliance may manifest as debilitating urgency, frequency, incontinence, recurrent urinary tract infections (UTIs), pyelonephritis, or progressive renal insufficiency.(2)

The application of a segment of native tissue to the bladder, most frequently an intestinal segment, was first used in the 1890s in humans. Any patient with marked reduction in bladder capacity or compliance may be a candidate for augmentation cystoplasty.

Augmentation cystoplasty is a safe and effective method for indicated patients, which significantly enhances their quality of life.(2) Intestinal segments commonly are used in augmentation cystoplasty. Ileum, sigmoid, and stomach all have been used, and studies show all these segments to be reliable(4, 5, 6). However, viable alternatives for bladder augmentation include the use of a dilated ureter (either naturally dilated or balloon dilated) and autoaugmentation(6,7, 8).

References


Tikrit Medical Journal 2007; 13(1):141-143
Goodwin cup patch to treat a lady with contracted bladder and incontinence (( a case report ))


Fig (1) MRI of D7 level shows suspected area of demyelination at the spinal cord

Fig (2): cystometrogram that shows very low detrosur pressure which was equal to the abdominal pressure and flat EMG wave(A) and the numerical values in ( B ).
Goodwin cup patch to treat a lady with contracted bladder and incontinence (( a case report ))

Fig (3) cystogram (A) preoperative (75ml) and (B) postoperative (300ml)