MALE BULBAR URETHRAL CLOSURE FOR URINARY INCONTINENCE IN THE ARTIFICIAL URINARY SPHINCTER ERA.

Hypothesis / aims of study

Bulbar urethral closure is an established treatment for intractable urinary incontinence in patients unfit or unwilling to undergo urinary diversion. It renders future surgical bladder access difficult and is viewed as a last resort, making it an infrequently performed procedure. Therefore little has been published to date of the outcome of this procedure in male patients and particularly in those with a failed or eroded artificial urinary sphincter (AUS). It was our aim to critically evaluate our series of male patients undergoing bulbar urethral closure over the last 5 years.

Study design, materials and methods

14 male patients that underwent urethral closure between 2006 and 2011 were identified by searching the theatre database. A retrospective case note analysis was undertaken to evaluate this procedure. Specific attention was paid to the indications for urethral closure, any complications arising from the procedure and the need for subsequent treatment.

Results

Of the 14 patients that underwent urethral closure, 11 had an underlying neurological disorder (Spinal Injury = 5, Spina Bifida = 6,) 3 patients had an iatrogenic cause for their urodynamic stress incontinence (radical prostatectomy (RP) = 2 and abdominoperineal resection = 1). 6 patients had undergone an augmentation cystoplasty. An AUS had been previously inserted into 7 patients at least once, but had either eroded or become infected. No patient had any perioperative complication and after a median follow up of 38 months (range 6 – 55), two patients underwent a repeat urethral closure for urethral leakage (both patients had a prior eroded AUS following RP). Both of these patients were found to have extremely high pressure uninhibited detrusor contractions on urodynamic testing. These two patients are also maintained on anticholinergic therapy and one patient has annual intravesical botulinum toxin injection. All 14 patients are now dry urethrally.

Interpretation of results

Urethral closure is a low morbidity and effective procedure. The outcome however may be jeopardised by patients with high detrusor pressures as a result of detrusor overactivity / decreased bladder compliance.

Concluding message

We recommend urodynamics prior to urethral closure to identify and appropriately manage patients with uninhibited high pressure detrusor contractions.

Specify source of funding or grant	No Funding or Grant
Is this a clinical trial?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Νο
This study did not require ethics committee approval because	Retrospective study of outcome of our routine practice
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	No