454

patki P[1], hamid R [1], bycroft J[1], shah J[1]
1. Dept. of neurourology spinal research centre RNOH

LONG TERM EFFICACY OF AMS 800 ARTIFICIAL URINARY SPHINCTER IN MALE PATIENTS WITH URODYNAMIC STRESS INCONTINENCE DUE TO SPINAL CORD INJURY AND TRANSVERSE MYELITIS.

Hypothesis / aims of study

Artificial urinary sphincter (A.U.S) is a successful method of maintaining continence in neurogenic urodynamic stress incontinence (U.S.I). We present our experience with AMS 800 artificial urinary sphincter in eight male S.C.I patients and one transverse myelitis patient

Study design, materials and methods

Eight males with S.C.I (4 thoracic, 3 lumbar, 1 cervical) and one male with T6 transverse myelitis, mean age 38.2 years (range 27 – 47 years), with neurogenic U.S.I, underwent AMS 800 A.U.S implantation with the urethral cuff around the bulbar urethra. The mean follow up was 66 months (range 3-132mths) with a mean time since injury of 13.8 years (range 6 – 26 years). Seven were complete and two were incomplete S.C.I. Three patients had neurogenic detrusor over activity, four had acontractile bladders and two had poor compliance. Mean bladder capacity was 413 ml (range 200-510 ml). Three patients managed their bladder with intermittent self catheterisation (I.S.C.) and two voided on urge with condom sheath. One patient had a sacral anterior root stimulator implant (S.A.R.S.I), two had supra-pubic catheters (S.P.C) and one had an indwelling urethral catheter (I.D.U.C) for bladder drainage.

Results

All implants were activated successfully with no intra or postoperative complications. At activation all reported total urinary continence with seven out of nine implants currently working well . Of these, one patient continues to get minimal stress leakage. Two implants were removed due to infection and one due to erosion after a mean period of 2 years (range 0.2-4 years). The eroded bulbar urethral cuff was successfully replaced with the cuff placed around the bladder neck. Two patients had one successful mechanical revision each, for pump and cuff dysfunction, after 1 and 3 years post operatively. One patient with I.D.U.C, two with S.P.C and one voiding on urge have changed their bladder management to I.S.C postoperatively

Interpretation of results

Urinary incontinence with neuropathic bladder dysfunction in S.C.I and Transverse myelitis patients can be successfully managed with AMS 800 artificial urinary sphincter implantation. Mechanical revisions are often required but are effective. However the rate of infection is higher than seen in able bodied population. Bladder neck cuff placement may prove to be a better option than bulbar urethral cuff in SCI patients.

Concluding message

AUS is a viable option of long term treatment of incontinence in SCI and transverse myelitis patients.