LONG TERM RESULTS OF THE ADJUSTABLE CONTINENCE THERAPY (ACT®) FOR RECURRENT FEMALE STRESS URINARY INCONTINENCE

Hypothesis / aims of study
The Adjustable Continence Therapy (ACT®) is a minimally invasive treatment for females with Stress Urinary Incontinence resulting from Intrinsic Sphincter Deficiency (ISD). This study represents the term results of our first series of patients.

Study design, materials and methods
The ACT® devices consist of two silicone balloons sited on either side of the proximal urethra under the bladder neck, each attached to a titanium port buried in the labia allowing post operative titration of the balloons. Female patients who had failed previous pelvic surgery underwent urodynamic assessment; daily pads usage and Incontinence Quality of Life (I-QoL) questionnaire measures prior to implantation of ACT balloons and evaluated post operatively at 1, 3, 6 and 12 months then annually thereafter. Patients were also asked to record their overall impression and percentage of improvement post operatively based on the Patient Global Impression Index (PGI) and Visual Analogue Score (VAS). In addition, complications were recorded.

Results
Sixty females (mean age 67.2 years) have undergone ACT implantation. Mean follow up was 58 months (range 12-77 months). At last follow-up, mean pad usage improved from 5.9 at baseline to 0.7 and IQOL improved from 29.2-79.6 with 66% patients completely dry based on VAS. Global assessment indicated 82% were significantly improved, 8% were moderately improved and 10% remained unchanged. Postoperative complications necessitating device removal included migration seen in 8% of patients and urethral erosion in 3.5% of patients. Additionally, 4% balloons were explanted due to device failure. In total, 12 balloons were removed in 11 patients with only 3 patients requiring bilateral removal.

Interpretation of results
Results give us an explicit view of ACT effects in ISD patients. Particularly interesting is the high level of significantly improved patients with the low percentage of post-operative complications.

Concluding message
The relative ease of insertion and the ability to tailor this therapy to individual patient’s needs makes this a very attractive option for the challenging treatment of recurrent stress urinary incontinence due to ISD

References