107

Dooher M[1], McWilliam F[1], Stewart L[1], Alhasso A[1]
1. *Western General Hospital, Edinburgh, Scotland*

'WORTH IT'S PAD WEIGHT IN GOLD' – ASSESSMENT OF THE OUTCOMES OF SURGICAL MANAGEMENT OF POST PROSTATECTOMY INCONTINENCE.

Hypothesis / aims of study
Post Prostatectomy incontinence has been shown to have a huge impact on quality of life. The primary objective of the study aimed to look at the relative success of male sling and AUS surgeries in the management of post-prostatectomy incontinence within a tertiary centre. Secondary objectives included a sub-group analysis of those who underwent revision surgery and adjuvant radiotherapy.

Study design, materials and methods
Using updated logbooks of two consultant urologists, the hospital computer database and medical notes, all patient files were reviewed. Information gathered included type of prostate surgery, pre-operative video-urodynamic testing, pre-operative 24hr pad weight/pad use and type of incontinence surgery performed.(1) Pre-operative PSA, pathological grading and margin rates were recorded, as well as recording the patients who had adjuvant radiotherapy prior to their incontinence surgery. All details were recorded on a departmental proforma. These patients were then asked to complete an updated ICIQ-UI questionnaire, a questionnaire using PGI-I and PGI-S questions and a 24hr pad weight test if applicable.

Results
There were 86 patients who underwent either insertion of AdVance Male Sling or Artificial Urinary Sphincter (AMS 800/Flow secure) between 2008 and 2014, 26 patients undergoing a sling procedure and 60 patients undergoing insertion of an AUS, with 10 of these patients having had a revision procedure. 59 patients completed the updated questionnaires with an average length of follow-up of 50months post-operatively. Pre-operatively, patients who underwent sling procedure used an average of 3 pads per day with an average 24hr pad weight of 126grams. Postoperatively, the average number of pads used was 2.5 with the average 24hr pad weight of 14grams. 71% of patients who underwent a sling procedure were completely dry and not requiring the use of any pads. For the patients who underwent an AUS, the average number of pads used preoperatively was 4.6 per day and the average 24hr pad weight test was 637grams. Post operatively, the number of pads used per day was reduced to 1.7 per day and the 24hr pad weight had significantly reduced to an average of 49grams. 63% of patients post AUS were completely dry and not requiring the use of an incontinence pads. The average ICIQ-UI post operatively was 5 in the sling group and 7 in the AUS group. Using the PGI-I questionnaire, 90% of patients who underwent the sling procedure perceived their symptoms to be improved (76% very much better, 14% much better) while 86% of patients who underwent an AUS noted a global improvement in symptoms (69.4% very much better, 16.6% much better). When questioned, 96.5% (57/59) patients would recommend the operation to a friend who needed a similar procedure.

Interpretation of results
Laparoscopic Radical Prostatectomies have been carried out within out Unit since 2007 with ever increasing numbers per year. In 2013/2014, there were 187 laparoscopic prostatectomies carried out within the department. Despite being a high volume centre, the rate of incontinence remains low (<5%). 61.7% of patients in the study had intermediate risk prostate cancer, while 27.7% and 10.6% had low risk and high risk disease respectively. The agreed cut-off value of 24hr pad weight for sling versus sphincter in our cohort was 200grams which is comparable to most other studies. (2) The overall results for continence, symptom score and validated self-assessment are all encouraging and again compare favourably with similar published studies. A separate subgroup within the AUS cohort included those with the insertion of the Flowsecure system (single system with pressure balloon) and the comparable results with AMS 800. Of the 10 patients who underwent revision surgery, 8 of them had a revision AUS inserted while 2 had failed sling insertion and went on to have an AUS inserted. (3) Surprisingly, none of these patients were in the similar cohort of patients who underwent adjuvant radiotherapy.

Concluding message
Despite the relatively small number of patients, the results of both AdVance male sling and AUS insertion are favourable in term of complete continence rates, reduction in 24-hr pad weight and global improvement in symptoms. The rates of revision surgery are low and do not relate to previous adjuvant radiotherapy as other studies have suggested. Further assessment is required in a larger group of patients and in the comparison of the type of AUS inserted.

References
1. Arificial Urinary Sphincter for post prostatectomy incontinence: A review. James M.H. and McCammon K. International Journal of Urology 2014:21(6):536-543
2. The male sling for post prostatectomy uinary incontinence: a review of contemporary designs and outcomes. Blayne et al. BJUI 2012;102:328-344
3. Surgery for stress urinary incontinence due to presumed sphincter deficiency after prostate surgery: Intervention Review. The Cochrane Library. Silva et al. Online Sept 2014

Disclosures
Funding: Nil **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** It was a retrospective review of outcomes and post-operative analysis using validated assessment tools. **Helsinki:** Yes **Informed Consent:** Yes