

OBJECTIVE AND SUBJECTIVE OUTCOMES FOLLOWING TREATMENT OF POST PROSTATECTOMY INCONTINENCE (PPI): COMPARISON OF THREE DIFFERENT SURGICAL APPROACHES.

Hypothesis / aims of study

Treatment of male Urodynamic Stress Urinary Incontinence (SUI) after prostate surgery is primarily focused on minimizing urinary leakage. However, the overall impact of PPI therapy on patients' quality of life may be more important than leakage outcomes.

Study design, materials and methods

We compared three commonly performed surgical procedures for PPI – Adjustable Continence Therapy system (ProACT); the ARGUS male adjustable sling (ARGUS) and the Artificial Urinary Sphincter (AUS). Patients implanted with one of these devices between 2003 and 2006 were invited for a follow up visit. Subjective and objective success rates based on Quality of Life questionnaires and pad use were the primary outcome measures. In addition, we compared uroflows (QMax); Post void residual Volume (PVR); 20 minute pad testing as well as operating time between each of the three groups.

Results

All patients had a minimum of 12 month follow up. Patients in all groups were comparable by age and severity of incontinence at baseline. Twenty minute pad tests at follow up showed dry rates of 71% (ProACT), 70% (ARGUS) and 75% (AUS). The only observed statistically significant difference was a lower Qmax of Argus patients compared to those implanted with ProACT or AUS.

	ProACT (n=38)	Argus (n=20)	AUS (n=20)
Mean Age	72.1	72.8	67.7
Previous Surgeries%	2.6	50	50
Operating Time (mins)	18	39	63
Mean Follow Up (Months)	30.9	14.9	28.1
Satisfaction (1-10)	8.03	9.0	8.75
IQoL (Follow Up)	80.1	83.4	82.6
Pad Use (Baseline)	5.8	8.25	10.4
Pad Use (Follow Up)	1.1	1.4	1.6
QMax (Follow Up)	17.1	8.6	23.6
PVR (Follow Up)	19.4	5.0	7.9
20Min Pad Test (Follow Up)	3.8	2.0	5.47

Interpretation of results

The ACT embodies the least invasive procedure. All three methods resulted in a comparable QOL scores and incontinence status. Whilst all procedures can be used as a second line therapy, in this series, more patients underwent AUS and ARGUS as a secondary procedure. It is not known whether the lower flow rates demonstrated by the ARGUS patients will have further implications. Treatment selection must be made according to condition of the patient, surgical history after prostatectomy, irradiation status dexterity and eventually costs to achieve optimal results.

Concluding message

Personal goals of patients undergoing operations for PPI are yet to be explored, but there may be willingness to trade a slightly lower success rate in favor of a less surgically invasive treatment procedure.

Specify source of funding or grant	none
Is this a clinical trial?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	No
This study did not require ethics committee approval because	Not necessary
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes