

## EIGHT YEARS OF SINGLE CENTER EXPERIENCE IN SURGICAL MANAGEMENT OF MALE STRESS URINARY INCONTINENCE: 556 IMPLANTATIONS FROM THE PATIENT'S PERSPECTIVE

### Hypothesis / aims of study

Male Stress Urinary Incontinence (SUI) is a devastating adverse outcome following prostate surgery and is associated with significant alteration in patient quality of life whilst being a frustrating problem for the urologist. When conservative therapies fail to alleviate SUI arising from post prostatectomy incontinence (PPI) our patients are usually offered one of the following treatments: bulking agents either with or without stem cell injections, ProACT, various sling insertions (ARGUS, ADVANCE, INVANCE, others) or artificial urinary sphincter (AMS 800, Flow Secure). Our department performs most of these procedures on a routine basis. To our knowledge there is no publication that has analyzed the objective and subjective outcomes of different procedures performed in one department when evaluated by an external assessor.

### Study design, materials and methods

Between February 1999 and December 2008, 556 PPI procedures in 365 patients for were performed in our department. All patients were included into a 30 minute telephone survey performed by external staff (not members of our department). Of these, 255 patients could be reached by phone and were willing to participate in the survey, 62 were unavailable by phone, 14 were deceased and 34 were lost to follow up. The mean age of the patients included in the survey was  $69.3 \pm 5.52$  years. A total of 430 operations were performed on those included into the survey. Of these, 146 had no prior anti incontinence procedures, excluding use of bulking agents (40 out of 255), 65 had one, 30 had two, 10 had three, 2 had four, 1 had five and 1 had seven operations. Preoperative evaluation included pads used per day and this was obtained in 246 patients. Overall pad count at baseline was  $6.29 \pm 4.05$  (median: 4,5) [0-20]. Patients were differentiated as follows into 3 groups depending on severity of incontinence: 51 cases of mild (0-2 pads/day), 99 cases of moderate (>2-5 pads/day) and 96 cases of severe (> 5 pads/day) incontinence.

	Mild (n=51)	Moderate (n= 99)	Severe (n= 96)
AMS (n=50)	6 (12%)	19 (38%)	25 (50%)
ARGUS (n=50)	8 (16%)	25 (50%)	17 (34%)
Pro ACT (n=138)	35 (25%)	53 (38%)	50 (36%)
Others (n=8)	2 (25%)	2 (25%)	4 (50%)

The choice of treatment was multifactorial and was determined by pad usage as well as pelvic irradiation history, prior urethral or bladder neck conditions and the number and type of previous surgeries.

### Results

Time between device implantation and follow up telephone survey was a mean of  $2.87 \pm 1.62$  years with a median time of 2,71 years [0,09 – 7,44]. Patients were asked about their pad use per day and to compare it to their pad use before their treatment. Pad use per day was reported as  $1.63 \pm 1.56$  pads/day with a median of 1 [0 – 20]. Two hundred and two (79.2%) patients had mild incontinence, of these 68 (26.7%) used no pads at all and 119 (46.7%) used only one daily "safety pad". Forty two (16.47%) patients reported "moderate" incontinence and 11 (4.3%) severe incontinence

The overall reduction of pads/ day from pre op to survey was 84.6% [87% for Artificial Urinary Sphincter, 84% for ARGUS, 80% for Pro ACT and 73% "others"]

The overall satisfaction rate was  $2.04 \pm 1.03$ . Of these, 123 (48,62%) patients were "very satisfied"; 56 (22.13%) "satisfied"; 38 (15.02%) were "contented" 13 (5.14%) "dissatisfied" and 23 (9.1%) were "disappointed."

In total, 205 (80.4%) patients said their operation met their expectation with 50 (19.6%) considering it as disappointing. Of 255 interviewed patients, 213 (83.5%) would undergo the same procedure again with 42 (16.5%) not wishing to do so. When ask if they would recommend their operation to other patients suffering from stress urinary incontinence 230 (90.2%) approved and 25 (9.8%) disagreed.

Interestingly, 19 patients would recommend the operation but would not undergo it again themselves and 2 patients would undergo the operation again but would not recommend it to others.

When asked about the difference of incontinence compared to before the operation 222 (87.1%) regarded it as "better, 24 (9.4%) "same and 9 (3.5%) as "worse".

In table 2 satisfaction rate is related to pads/ day before operation, pads/day at time of survey and number of pads/day:

Satisfaction rate	pads/d pre op	pads/d survey	change pads/d
1,00	6,79	0,60	6,19
2,00	5,29	1,45	3,83
3,00	5,78	1,64	4,14
4,00	5,64	3,09	2,55
5,00	5,90	6,39	-0,49

### Interpretation of results

The use of an independent observer in conducting the telephone study prevents a major bias; namely the patient who may try to please the surgeon by giving a more positive feedback than their reality might suggest. Patients who reported the highest pad use at baseline seemed to be the most satisfied following their surgery.

### Concluding

message

By offering the whole armamentarium of male incontinence surgery in our practise, we can achieve an excellent satisfaction rate, even in a complex group of patients with a high rate of preceding surgeries. An adequate diagnosis and detailed history taking is of paramount importance in ensuring the most appropriate surgical treatment choice.

<b><i>Specify source of funding or grant</i></b>	<b>None</b>
<b><i>Is this a clinical trial?</i></b>	<b>No</b>
<b><i>What were the subjects in the study?</i></b>	<b>HUMAN</b>
<b><i>Was this study approved by an ethics committee?</i></b>	<b>No</b>
<b><i>This study did not require ethics committee approval because</i></b>	<b>This was an audit of information routinely collected by the department. Patients consent to the use of their deidentified information for auditing purposes when they consent to surgery.</b>
<b><i>Was the Declaration of Helsinki followed?</i></b>	<b>Yes</b>
<b><i>Was informed consent obtained from the patients?</i></b>	<b>Yes</b>