

## WET AND WAITING: DELAYS IN TREATING MEN WITH POST PROSTATECTOMY INCONTINENCE

### Hypothesis / aims of study

The surgical management of prostate cancer is aimed at men with localised disease and a life expectancy of over 10 years with the intent of curing the disease. Modern surgical practice aims to balance cure with maintaining both erectile function and continence, to prevent leaving men wet and impotent but cancer-free. Up to 1/3 of men may remain incontinent even after robotic assisted radical prostatectomy(1), and the Prostate Cancer Outcomes Study found 28% men continued to use pads to stay dry 2 years after radical prostatectomy(2). Given the availability and efficacy of surgery for male stress incontinence, men with ongoing urinary leakage should have a timely referral for further management of this condition. This study aimed to evaluate the length of time patients with incontinence after radical prostatectomy are waiting for treatment of their urinary leakage.

### Study design, materials and methods

Consecutive patients undergoing primary artificial urinary sphincter (AUS) insertion for stress incontinence after radical prostatectomy in a single centre between 1<sup>st</sup> January 2010 and 31<sup>st</sup> December 2014 were identified using departmental records. Retrospective review of electronic patient records was undertaken. All patients had a urodynamic diagnosis of urodynamic stress incontinence, confirming the clinical diagnosis of post prostatectomy stress incontinence. Procedures were performed by one of three surgeons within our centre, and all patients underwent implantation of an AMS 800 system. Patients were routinely reviewed at 3 months post-operatively to assess the success of the procedure.

Primary outcome measures were defined as the time intervals to 1) first assessment by a functional urologist and 2) definitive surgical intervention. Secondary outcome measures included post operative continence, as well as rates of infection, erosion, device failure and explanation/renewal of the device.

### Results

<b>Table 1: Patient Demographics</b>	
Mean age in years	67 (50-75)
Original procedure	(N)
Radical retropubic prostatectomy	15
Laparoscopic radical prostatectomy	35
Robotic assisted radical prostatectomy	1
Staging at time of radical prostatectomy (pT)	(N)
2A	3
2B	2
2C	28
3A	12
3B	5
4	1
Adjuvant therapy prior to continence surgery	(N)
None	44
Hormones	2
Radiotherapy	5

51 patients underwent primary AUS insertion for post prostatectomy stress urinary incontinence during the defined 5 year period. Patient demographics are displayed in table 1.

### *Primary outcomes*

The mean time between radical prostatectomy and the first assessment by a functional urologist was 2.55 years (range 0.54 – 11.46), with the mean time between radical prostatectomy and surgical intervention for incontinence being 3.22 years (0.78 – 12.08). Over 40% of patients had an interval of over 3 years between their procedures.

### *Secondary outcomes*

#### *Continence*

Continence was assessed by the use of urine collection methods. 43 patients were using incontinence pads pre-operatively, with mean pads per day 4.3 (range 1-9), which improved to 0.5 post-operatively. Of these patients, 79.1% were using no pads at all or a safety pad. The other 8 patients had pre-operative urinary leakage which was severe enough to necessitate sheath drainage. 6 patients were using 0 pads post operatively, 1 patient was using a safety pad, and 1 patient was still using a sheath. Overall 80.4% of patients undergoing AUS insertion in this time period were completely dry or using only a safety pad post-operatively.

Only 1 device has subsequently become infected, giving an infection rate of 1.96%. Both this and 1 other device developed a urethral erosion (3.92%). 7 patients experienced mechanical failure of the device (13.73%). A total of 12 patients underwent removal or replacement of the device (single element or full device), meaning that 76.47% patients still have their original device in situ.

### Interpretation of results

The mean waiting times indicate men are spending a number of years dealing with incontinence following their original prostate surgery. Only 2 patients had incontinence surgery within 1 year of their prostatectomy, and only 13 patients within 2 years (25.49%). Once patients are seen by a specialist in functional urology, they are waiting less than a year on average before receiving definitive surgery (mean 247 days). Observed delays at this stage were due to identification and treatment of contraindications to sphincter implantation (bladder neck stenosis, urethral stricture), or initial investigations suggesting other pathologies as main cause of urinary symptoms. We have demonstrated good outcomes following AUS insertion, with low rates of infection and erosion.

### Concluding message

The majority of men with post prostatectomy incontinence are waiting over 2 years to be assessed by a functional specialist and receive treatment for their condition. This condition affects a significant proportion of men undergoing surgery for prostate cancer, and we need to improve waiting times to reduce the distress of living with urinary incontinence. We must ensure timely referral by cancer specialists if conservative measures have failed in the initial post-operative period.

### References

1. Cozzi G et al. Robotic prostatectomy: an update on functional and oncological outcomes. *Eur J Cancer* 2013;7:355
2. Potosky AL et al. Health outcomes after prostatectomy or radiotherapy for prostate cancer: results from the Prostate Cancer Outcomes Study. *J Natl Cancer Inst* 2000 Oct;92(19):1582-92

### Disclosures

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