# ARTIFICIAL URINARY SPHINCTER VS MALE PERINEAL SLING FOR TREATMENT OF POST PROSTATECTOMY STRESS URINARY INCONTINENCE: WHAT DO PATIENTS CHOOSE?

## Hypothesis / aims of study

Currently there are two surgical procedures to treat post prostatectomy stress urinary incontinence (SUI), artificial urinary sphincter (AUS) and male sling (MS). In a large incontinence referral center we sought to determine the patient and physician reasons for choosing an AUS or MS and compare the surgeon's primary recommendation to the actual procedure chosen by the patient.

# Study design, materials and methods

The charts of 133 consecutive men with who underwent their first surgical procedure to correct stress urinary incontinence during a time period (April 2004 – Feb. 2007) when both AUS (AMS 800) and MS (InVance sling) were being preformed were reviewed. Secondary procedures and revisions are not included. Patients were informed of the well established long-term satisfaction rates for AUS as well as the available, shorter-term data on MS. After evaluation, the surgeon made a recommendation to the patient for the preferred operation for the patient's condition: high grade SUI (gravitational or pad test >400 gms/24 hrs) - AUS; moderate grade SUI (pad test 100-400 gms/24 hrs) - AUS or MS; mild SUI (pad test < 100 gms/24 hrs) or recurrent uncontrolled stricture - MS. Based on surgeon's recommendation, expected outcomes, and other factors related to surgery and the devices themselves, patients chose the procedure they wanted. Surgeon's preferred procedure and patient choice were compared and reasons for patient choice were determined.

## Results

A total of 84 MS (63%) and 49 AUS (37%) were preformed. There was no difference in the mean age (68.0 vs. 67.5, p=0.73) or time from surgery/radiation causing incontinence until treatment (55.1 vs. 48.8 months, p=0.46) Surgeon recommendation as preferred procedure was AUS in 63(47%), MS in 46 (35%), and either in 24 (18%). When AUS was recommended, 47/63 men (75%) choose AUS while 16 (25%) choose MS. Of those going against the AUS recommendation 13 (81%) did not want a mechanical device and 3 (19%) said they would prefer to try a non-mechanical procedure first. When the urologist had no preference, 22/24 (92%) chose MS and 2 (8%) chose AUS. The two choosing AUS wanted the more proven, definitive procedure. All 22 of those choosing MS did not want a mechanical device. No patient went against the physician recommendation for MS; 21 (88%) of whom stated that their incontinence was not severe enough to warrant an AUS (and mechanical device was not wanted) and 3 (12%) who had stricture disease and were at high risk for an AUS complication.

#### Interpretation of results

When faced with a choice of AUS or MS, most, but not all (82%) adhere to urologist recommendation. When faced with no urologist preference 92% choose MS. The primary reason for not choosing an AUS when it is preferred by the urologist was the desire to avoid a mechanical device.

## Concluding message

The choice of two surgical options for the treatment of male SUI is beneficial to the patient. Most patients adhere to the urologist recommendation. Those who choose MS over the proven long term efficacy of an AUS do so to avoid a mechanical device, especially in cases of mild incontinence.

#### <u>References</u>

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HUMAN SUBJECTS: This study was approved by the Institutional Review Board, NYU School of Medicine (approved by IRB as a chart review exempt from individual patient consent) and followed the Declaration of Helsinki Informed consent was not obtained from the patients.