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A TRANSOBTURATOR APPROACH FOR A SLING TO TREAT MALE URINARY INCONTINENCE *Peter Rehder*, Jasmin Bektic, Georg Bartsch, Christian Gozzi, Innsbruck, Austria*

INTRODUCTION AND OBJECTIVE: To evaluate a novel approach of implanting a sling in men by means of the transobturator approach for the treatment of stress urinary incontinence (SUI).

METHODS: A total of 18 men had their SUI treated with a sling using the transobturator approach at a single site. Each patient reported the number of pads used at pre-operative baseline and at a post-operative time point, which varied from 26 days to 17 months after the procedure. They also completed a non-validated satisfaction questionnaire. The primary etiologies in these SUI patients were radical prostatectomy (16/18), TUNA, TURP x3 (1/18), and radical cystectomy (1/18).

RESULTS: The 18 patients were successfully implanted with a sling utilizing the transobturator approach. All (100%) of the patients reported a decrease in pad use at the post-operative time point. The table below presents patient characteristics in terms of the number of pads per day at baseline and at follow-up. All patients were asked to complete a non-validated questionnaire which asked their overall satisfaction (very satisfied to very dissatisfied) with the procedure and their results. Of the 18 patients treated, 16 were asked to complete the questionnaire, 13/16 provided responses: seven (44%) patients reported being "very satisfied", two (13%) reported being "satisfied", three (19%) reported "neutral", one (6%) patient reported being dissatisfied (patient had no pre-op sphincter function); three (19%) patients' responses were not available. One device related event was reported: 1-2 weeks following the procedure, one patient lifted a heavy object and returned to baseline incontinence.

CONCLUSIONS: The transobturator approach is a viable procedure when using the appropriate tools. Initial results demonstrate the approach to be successful in treating urinary incontinence in men via decreased pad usage and overall patient satisfaction.

No. of Wet Pads per Day

No. of Pads Used Daily	No. of Patients Reporting Pad Use at Baseline	No. of Patients Reporting Pad Use at Follow-Up
0	--	6 (33%)
1-2	1 (6%)	6 (33%)
3-4	4 (25%)	6 (33%)
5-6	9 (50%)	--
7-8	3 (17%)	--
9-10	1 (6%)	--

Source of Funding: None

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THE NECESSITY OF THE SECOND CUFF IN THE AMS 800 DOUBLE CUFF SYSTEM TO PROVIDE SATISFACTORY CONTINENCE - STUDY ON A DYNAMIC AND STATIC MODEL *Thomas Leippold*, Florian Marti, Nadine Blunschi, Bert Müller, Hubert John, Zurich, Switzerland*

INTRODUCTION AND OBJECTIVE: The indication to implant a double cuff system is recommended for patients with artificial urinary sphincter suffering from persistent urinary incontinence, and patients with significant stress urinary incontinence after radical prostatectomy. We developed a model to examine the necessity of a second cuff in case of static and dynamic (sudden increase) pressure.

METHODS: The experiments are based on explanted human urethrae according to local ethical guidelines. The static bladder pressure is simulated by a cylindrical tank, the dynamic one by a mechanical testing machine simulating Valsalva and coughing by a standardized pressure increase. The pressure is directed to a connected urethra. The intravesical leakpoint pressure is defined as the lowest intravesical pressure necessary for leakage. For compression, 2 AMS 800 cuffs (cuff 1 and 2) are placed on the urethra. Both cuffs are connected by a tube to a water tank that causes outflow resistance pressure. The urethral leakpoint pressure causes water loss, when urethral outflow resistance pressure of the cuffs is reduced, or, when the intravesical pressure rises and exceeds the outflow resistance pressure. Experiments are made by closing the urethra with one

ore two cuffs. In the dynamic state, we use a device to preserve the shape of the urethra, i.e., no inflation near cuff 1 can take place.

RESULTS: The static state: The urethral leakpoint pressure of cuff 2 shows a 15 cmH₂O lower urethral leak point pressure than cuff 1. The urethral leakpoint pressure of both cuffs is the same as of cuff 2, occluding before cuff 1. The dynamic state: When the urethra is forced to preserve its shape, a second cuff does not improve the situation. If the urethra is rather soft and can be inflated, a 30 to 40 cmH₂O higher intravesical leakpoint pressure is necessary to cause incontinence with two cuffs.

CONCLUSIONS: The static state: Persistent incontinence: According to the measurements, there is no reason to leave the first cuff in place, when the second, newly implanted cuff provides a lower urethral leakpoint pressure. Significant incontinence: There is no difference between implanting one or two cuffs to ensure continence, provided that both cuffs have the same urethral leakpoint pressure. The reason for the difference lies in the inhomogeneity of the tissue alongside the urethra. The dynamic state: The implantation of a second cuff is profitable if the urethra has a limited induration due to previous surgery and can inflate near the sphincter position.

Source of Funding: Promedics, Nidau, Switzerland, provided an AMS 800 artificial urinary sphincter for research purpose.

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LONG-TERM FOLLOW-UP OF SINGLE VERSUS DOUBLE CUFF ARTIFICIAL URINARY SPHINCTER INSERTION FOR POST-PROSTATECTOMY STRESS URINARY INCONTINENCE *Robert C O'Connor*, Milwaukee, WI; Mark B Lyon, Chicago, IL; Michael L Guralnick, Milwaukee, WI; Gregory T Bales, Chicago, IL*

INTRODUCTION AND OBJECTIVE: Our previously reported

RESULTS: comparing early outcomes of single versus double cuff artificial urinary sphincters (AUS) demonstrated a statistically significant dry rate with comparable complications in favor of the double cuff. We report longer-term outcomes comparing single versus double cuff AUS placement in men for post-prostatectomy stress urinary incontinence.

METHODS: Retrospective analysis of the original 56 men (28 single cuff and 28 double cuff) was attempted. Continence, quality of life, and complications were assessed using the Incontinence Impact Questionnaire Short Form (IIQ-7), postoperative pad use, personal/family interview and chart review. Results: Updated data were available for 45 men (24 single cuff and 21 double cuff). Daily pad use decreased from 7.7 to 1.3 in patients treated with a single-cuff and 7.8 to 1.4 in men with a double-cuff AUS ($p = 0.79$). The IIQ-7 scores improved from 14.8 to 4.1 after single-cuff placement and 16.3 to 6.4 after double-cuff placement ($p = 0.43$). With an average follow-up of 71.1 months, patients with a single cuff AUS reported three complications requiring component revision and four complications necessitating removal. Men receiving double cuff implants underwent six revisions and four AUS removals secondary to complications with a mean follow-up of 55.0 months.

CONCLUSIONS: Despite our earlier findings, no significant difference in continence or quality of life was seen with long-term follow-up of single versus double cuff AUS patients. Furthermore, men receiving double cuff implants may be at higher risk of complications requiring additional surgery.

Source of Funding: None

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COMPARISON BETWEEN CHANGE IN 24-HOUR PAD WEIGHT, AUA SYMPTOM SCORE, ICIQ-SF SCORE, AND PGI-I SCORE IN PATIENT EVALUATION AFTER MALE PERINEAL SLING *Christian O Twiss, Melissa C Fischer*, Victor W Nitti, New York, NY*

INTRODUCTION AND OBJECTIVE: The optimal method of patient evaluation after anti-incontinence surgery is controversial. We assessed the utility of 3 patient self-assessment instruments, namely, the AUA symptom score (AUASS), the ICIQ-SF score (ICIQ), and the PGI-I score (PGI-I) by correlating them with an objective outcome, the change in 24-hour pad weight, after a male perineal sling.

METHODS: 22 men with urodynamically confirmed stress incontinence underwent a male perineal sling. Patients were evaluated pre- and postoperatively with a 24-hour pad test, the AUASS and the ICIQ. AUASS was divided into voiding and storage subscores (VS, SS). Patients also completed the PGI-I postoperatively. Postoperative changes in study