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Letter to the Editor

Re: Paul Abrams, Lynda D. Constable, David Cooper, et al. Outcomes of a Noninferiority Randomised Controlled Trial of Surgery for Men with Urodynamic Stress Incontinence After Prostate Surgery (MASTER). Eur Urol 2021;79:812–23

At present, an artificial urinary sphincter (AUS) is still considered the gold standard for treating incontinence after radical prostatectomy, although no randomized controlled trial has compared the AUS to male slings to determine which device is the preferred choice [1]. Abrams and colleagues [2] recently reported on the MASTER trial, which tried to answer this question. Extensive experience with the AUS has accumulated, which is not the case for the male sling. However, since its introduction in 2007, the technique has been optimized and adjustable slings have become available [3]. In the MASTER trial a more passive type of sling (advanced) was used, a non-adjustable sling, that has been available since 2007. The results of the MASTER trial should therefore be interpreted in view of the knowledge that existed nearly a decade ago.

Despite their clear and thoughtful MASTERpiece of work, we have some doubts about whether the results of Abrams et al are an adequate representation of urinary continence after implantation of a device.

First, the MASTER trial did not use strict selection criteria. The current indication for male sling surgery is stress incontinence after radical prostatectomy and caution is advised before considering sling implantation for patients with neurological disorders or after transurethral resection of the prostate (TURP) or radiotherapy. In the MASTER trial, more than 25% of the patients had a history of radiotherapy or of TURP or neurological disorders, which could result in selection bias and underestimation of the effect of the AUS or male sling.

Second, a 24-h pad test is still the gold standard for assessing incontinence according to the International Continence Society. At baseline, only 84% of the patients completed a 24-h pad test and after 12 mo the percentage was considerably lower: only 50 patients (26%) in the male sling group and 44 patients (23%) in the AUS group completed a 24-h pad test. If a 24-h pad test had been assessed for all patients, the incidence of urinary incontinence after surgery could have been measured more objectively.

Third, both AUS and male sling procedures require specialist surgical skills. In the MASTER trial, inexperienced urologists were allowed to perform male sling surgery after a short learning curve. A recent study in our center indicates that the rate of adverse events is low when the procedure is performed by an experienced surgeon [4]. In addition, we observed in our study that use of a compressive, adjustable Argus-T transobturator male sling meant that 64.8% of the patients did not report urinary loss after 1 yr and 53.3% were still completely dry after 5 yr.

Lastly, it is known that in the long term, mechanical failure of the reservoir or pump of an AUS can occur and is observed in up to 13.8% of patients, resulting in a requirement for reimplantation of the device [5]. To the best of our knowledge, long-term device failure is not an issue in patients with male slings [4]. In conclusion, the MASTER trial has significant added value in male incontinence surgery but the results regarding male sling implantation should be interpreted with caution.

Conflicts of interest: The authors have nothing to disclose.

References

[1] Kretschmer A, Nitti V. Surgical treatment of male postprostatectomy incontinence: current concepts. Eur Urol Focus 2017;3:364–76.
[2] Abrams P, Constable LD, Cooper D , et al. Outcomes of a noninferiority randomised controlled trial of surgery for men with urodynamic stress incontinence after prostate surgery (MASTER). Eur Urol 2021;79:812–23.
[3] Rehder P, Gozzi C. Transobturator sling suspension for male urinary incontinence including post-radical prostatectomy. Eur Urol 2007;52:860–6.
[4] Casteleijn NF, Cornel EB. Argus-T adjustable male sling: a follow-up study on urinary incontinence and patient's satisfaction. Neurourol Urodyn. In press. https://doi.org/10.1002/nau.24619.

https://doi.org/10.1016/j.eururo.2021.03.012

[5] Kretschmer A, Husch T, Thomsen F, et al. Targeting moderate and severe male stress urinary incontinence with adjustable male slings and the perineal artificial urinary sphincter: focus on perioperative complications and device explantations. Int Neurourol J 2017;21:109–15.

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