Letter to the Editor

Surgical treatment of male stress urinary incontinence: a knot still to be unravelled

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In the interesting pilot study by Shaw *et al.*, interviews and surveys were administered to patients undergoing stress urinary incontinence (SUI) surgery along with clinical assessment to explore the reasons that led the patients to undergo surgery (1). Aim of the study was to assess the applicability of their method of data collection to a larger cohort of patients for better understanding the motivational drive that attracts patients to surgery and, ultimately, better understand how to improve shared decision making and reduce the well-known undertreatment that affects post-surgical SUI. According to the reported data, the most important factors that pull patients to surgery are the previous degree of activity and the counselling with their urologist. Conversely, post-surgery sexual activity was frequently considered as less important. Moreover, when it came to choosing between the two devices, the artificial urinary sphincter (AUS) and the male sling, the decision was based not only on the likelihood of achieving continence (which was the most crucial factor for most patients) but also on factors such as the possibility of future surgery, the risk of complications, and the perception that the AUS was unnatural and complicated to use.

The article primarily explores the reasons driving patients to incontinence surgery and then factors guiding their decision between AUS and fixed male sling. Regarding the first aspect, anti-incontinence surgery is performed in a very small percentage of patients while, as reported in recent epidemiological studies, post-surgical SUI in men is highly prevalent (2). A systematic and adequate care of post-surgical SUI still represents an unmet clinical need. As highlighted by the authors, clinicians play an important role in patients' decision to undergo SUI surgery and on the type of surgery. Indeed, in patient's perspective, reiterate interventions after oncological surgery could be poorly tolerated and poorly accepted. Patients frequently choose the sling instead of AUS for the lower probability of reintervention. In our opinion the crucial role of counselling must be stressed: patients complaining of urinary incontinence (UI) should be carefully informed on the available options and on pros and cons of each approach. Moreover, we would like to highlight the importance of patient's reported outcome (3). Often clinicians may underestimate the severity of the UI and the impact of UI in everyday patients' life. Careful evaluation of patient's feelings, preferences and expectations is of outmost importance.

On the other hand, several patients preferred AUS implantation over sling surgery for the higher chance of being "dry" after surgery. The probability of being free from pads represents an important motivation for most of the patients. According to the available literature, no solid proof is available demonstrating a better chance of being "dry" with AUS when compared to slings. Indeed, even if several reports suggest that AUS is superior to fixed male slings for the treatment of moderate male SUI (4), only one high-quality study is available. Abrams *et al.* in the

non-inferiority MASTER study (5), observed no significant differences in dry rated between the AUS and the fixed male sling Advance™ (Minnetonka, MN, USA). In fact, using a strict definition of "dryness" (any self-reported urinary leakage), dry rate was low in both groups (87% *vs.* 84.2% still incontinent after treatment). Moreover, patient's satisfaction exceeded 70% in both groups without any statistically significant difference between the two groups. Clinicians should carefully counsel patients highlighting the lack of good evidence supporting one device over the other (6). When selecting the type of surgery patients' preferences and expectations should be considered and shared decision making is probably the key to patients' satisfaction.

Recently, the introduction of different slings such as single incision or adjustable slings open new insights in the management of men UI. The ATOMS™ device (Feldkirch, Austria) has shown extremely favourable outcomes even in long term large cohort of patients (7). Moreover, observational comparative studies such as the Esquinas *et al*. study suggest that both subjective and objective continence outcomes may be comparable between the male sling ATOMS and the AUS (8). For the time being, well-designed randomized clinical trials are needed to improve surgical management of male UI.

In the near future, the introduction of new technology and the lack of good evidence will probably further complicate patients' decision making. Additionally, another aspect to consider is that, in practical terms, elevated costs and restrictions tied to insurance and health system coverage could significantly impact clinical choices. Only a few centers can provide all the available options, thereby mitigating the selection bias resulting from the unavailability of all treatments. Considering all these aspects, Shaw *et al.*'s study certainly opens to a new approach to patients and if confirmed in larger cohorts may improve patients reported outcomes after UI surgery. However, it is important to remember that most of stress UI cases in men represent a consequence of radical prostatectomy (RP) (9-11). Concentrating on strategies to improve functional outcomes after RP is probably the best solution to the problem.

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