Commentary on “Comparison of adjustable continence therapy periurethral balloons and artificial urinary sphincter in female patients with stress urinary incontinence due to intrinsic sphincter deficiency”

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This was a single-centre retrospective study that compared outcomes of Adjustable Continence Therapy (ACT) periurethral balloons with the artificial urinary sphincter AMS 800 in the treatment of stress urinary incontinence (SUI) due to sphincter deficiency in women. The inclusion criterion was all women who underwent surgical treatment for SUI due to intrinsic sphincter deficiency from 2007 to 2017. Intrinsic sphincter deficiency was defined as the combination of a low urethral closure pressure (<40 cm H₂O), loss of urethral mobility and a negative Marshall/Bonney test (urine leakage on straining or coughing not corrected by urethral support). The AMS 800 was considered as the standard treatment in these patients during the study period. Of note, the ACT balloons became available in this particular centre in 2011 and was used in the following cases: moderate incontinence (subjectively defined as pad test <200 g/24 h), patients >80 years and/or morbidly obese and/or lacking manual dexterity limiting the ability to operate the sphincter pump and/or with a history of previous pelvic irradiation therapy and/or who refused implantation of an artificial urinary sphincter. The primary endpoint was the functional outcome categorised as cure (complete continence, i.e. no pads used), improved (decrease in number of pads per day or in urine leakage assessed through pad test) or failure (no decrease in number

of pads per day or urine leakage assessed through pad test). In this study, 25 patients underwent ACT implantation and 36 had AMS 800 implantation. Of note, patients in the latter group were younger, had less comorbidity and a higher rate of intraoperative complications; however, rates of postoperative complications were similar between groups. Overall, the authors concluded that results were in favour of the AMS 800 group.

A strength of this retrospective study is that it is one of the first to compare two different techniques of intrinsic sphincter deficiency management in female patients and the first to compare these two specific devices. There are, however, several limitations to this study: It is nonrandomised, and could thus lead to an obvious selection bias with different patient characteristics between groups. The small sample size may lead to lack of statistical power, hence preventing multivariate analyses. Finally, as there is a lack of consensus regarding the definition of intrinsic sphincter deficiency, the definition the authors used may be a matter of debate.

Compliance with ethical standards

Conflicts of interest None.

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