

Apart from neurogenic urinary incontinence, most cases of male incontinence are iatrogenic after prostate surgery. Despite technical improvements in radical prostatectomy, urinary incontinence still represents a complication in 5 to 30% of cases. The gold standard treatment is the artificial sphincter that since its development in 1973, has experienced several modifications evolving from the AMS 800 model of 1987. Different models of artificial sphincter were developed like Flow Secure, Zephyr and Aroyo, that required multiple changes in their design. All the models, however, still lack long-term results in larger patient series. More recently, guidelines and consensus reports have been produced to standardize the preoperative evaluation and troubleshooting of artificial urinary sphincters after surgery in these patients (1). However despite being in the market for over 40 years, artificial urinary sphincter remains a difficult operation that is not without complications such as mechanical failure, urethral erosion or atrophy.

The cost of the prosthesis as well as the need for manipulation to open and close the device lead to the development of alternative surgical techniques for post-prostatectomy incontinence. Suburethral meshes, whose action is based in the reposition of the bulbar urethra, and compressive urethral systems are two examples of alternative therapeutic approaches. The Advance transobturator mesh gave good results in mild to moderate incontinence at 24 months of follow-up (2). The Atoms compressive system was also associated with promising results particularly in the small subset of patients who received radiotherapy but long-term results are needed (3). Similar results were reported with other systems like Remeex re-adjustable system, Argus or Virtue. The different criteria used for categorizing the severity of incontinence and for definition of success, however, makes it difficult to compare the results of various techniques.

Preoperative work-up and selection of the best procedure for every patient are determinant for the success of surgery. Urethral and cervico-urethral anastomotic pathology should be ruled out as well as any abnormality in the filling phase of micturition. At present, quantification of the degree of incontinence remains a challenge. Since the number of pads used is not a reliable measure, other methods have been developed including measurement of Valsalva leak point pressure and pad test weight as well as endoscopic assessment of the urethral coaptive zone after perineal bulbar relocation. However, as yet, there are no clearly defined cut-off points to recommend one surgical technique over another.

Further studies are warranted to determine the optimum case selection protocol for every surgical procedure, the most appropriate management of incontinence after radiotherapy and the best criteria for defining post-operative success.

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2. Bauer RM, Kretschmer A, Stief CG, Füllhase C. AdVance and AdVance XP slings for the treatment of post-prostatectomy incontinence. *World J Urol* 2015; 33(1):145-50.
3. Mühlstädt S, Friedl A, Mohammed N, Schumann A, et al. Five-year experience with the adjustable transobturator male system for the treatment of male stress urinary incontinence: a single-center evaluation. *World J Urol* 2016; May 7.