FUNCTIONAL OUTCOMES AND HEALTH RELATED QUALITY OF LIFE AFTER ARTIFICIAL URINARY SPHINCTER IMPLANTATION: EVALUATION WITH VALIDATED QUESTIONNAIRES

Hypothesis / aims of study
Urinary incontinence is, unfortunately, a complication of several urologic procedures. This complication ranges from 4 to 31% in robot assisted radical prostatectomy [1] and from 7 to 40% in radical retropubic prostatectomy [2]. A Cochrane review conducted in 2014 documented that patients treated with AUS (artificial urinary sphincter), in comparison with those treated with injectable devices, are more likely to be continent (OR 8.89) [3]. The aim of our study was to assess efficacy and safety and quality of life outcomes of a series of patients who underwent AMS 800 placement in a single academic urologic clinic.

Study design, materials and methods
We prospectively collected and retrospectively evaluated the data regarding 37 consecutive patients undergoing AMS 800 artificial sphincter placement from 2001 to 2015. Pre and post operative SUI was evaluated using the daily pad use (PPD) and the Italian validated International Consultation on Incontinence Questionnaire - short form (ICIQ-SF), whereas health related quality of life and subjective satisfaction of the patients was evaluated with the Italian validated Patient Global Impression of Improvement (PGI-I) questionnaire. Moreover, to assess the degree of personal satisfaction, patients were asked to rate on a scale from 0 to 100 their improvement and satisfaction after surgery and if they would recommend the procedure to a friend.

Results
Mean age of the patient at time of procedure was 68.8 ± 5.3 years; 29/37 pts underwent RRP and 8 (21.6%) were treated with adjuvant radiotherapy. Median preoperative PPD used was 4 (IQR 3-5); after a median follow up of 4 years (range: 1-15), median PPD used was 1. With regard to ICIQ-SF questionnaire, 4 patients (12.5%) responded that they never lose urine and 22 (68.76%) only during exercise and / or sneezing. Median PGI-I score was 1, documenting a better HRLQoL after AMS positioning; with regard to the answer regarding improvement after surgery, median score was 90, while median score concerning satisfaction was 99. When we asked, "would you recommend the post to a friend? ", only 1 patient replied no. Moreover, correlation coefficient between ICIQ-SF score and number of aids used was 0.77, whereas between PGI-I and the number of diapers was of 0.60.

Interpretation of results
Our monocentric study has shown that, at median follow-up of 48 months, patients who underwent AMS 800 placement, showed good results in terms of urinary continence, quality of life and degree of satisfaction.

To our knowledge our study is one of the few available in the literature that used validated questionnaires as like ICIQ-SF nad PGI-I for the quality of life assessment

Concluding message
In our experience, at a median follow-up of 48 months, the Artificial Urinary Sphincter type AMS 800 ensures good results in terms of urinary continence and a satisfactory quality of life. The majority of patients continue to wear a small pad to purely precautionary purposes, since the diaper is often dry to the exchange. The chances of urine leakage occur in conjunction with physical activity, coughing or sneezing. Our patients are happy and satisfied with the intervention, and would recommend to their friends.

References

Disclosures
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