

Concomitant Implantation of an AUS and a Penile Prosthesis – a single center experience



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Introduction

Introduction. Prostatic surgery, especially if indicated for a malignant condition, might lead to serious complications such as urinary incontinence and erectile dysfunction, in severe forms. For both complications, the medical industry offers implants, which imposed themselves as the ultimate treatment for the respective condition. Data from the literature suggests that performing concomitant implantation of the two devices leads to higher complications rate while the total operative time is longer. Our study aims to review our experience with simultaneous implant of both devices, with a focus on possible interactions between them.

Material and Methods. We did a retrospective study on patients' files operated in our clinic who had a simultaneous implant of both an artificial urinary sphincter and a penile prosthesis. We evaluated the condition which led to prostatic surgery, the type of prostatic surgery, the type of implants used and all the follow up data available, including the ICIQ-SF and IIEF-5 symptom scores. At least one year follow up was required as an inclusion criterion. A t test statistical analysis was performed on the data obtained from the symptom scores. Social continence was defined as the use of only one incontinence pad per day.

Results. A total of 19 men were included in our study. The follow up ranges from 1 to 4 years. In all cases, we used three piece artificial urinary sphincter from AMS or Rigicon. Three cases opted for a semirigid penile prosthesis while other 16 had a three piece inflatable penile implant (AMS, Rigicon, Promedon). All the procedures were carried out through a penoscrotal incision. Three patients underwent TURP for BPH, nine patients had a robotic radical prostatectomy, two patients had a laparoscopic radical prostatectomy and five underwent open radical prostatectomy. Social continence was achieved in all cases, along with a significant improvement of the IIEF-5 score, which increased from 8.69 ± 2.72 to 24 ± 0.89 ($p < 0.001$). The ICIQ-SF score went down from 19.56 ± 1.15 to 3.31 ± 1.30 ($p < 0.001$). Concomitant conditions were not considered due to the limited number of patients.

Interpretation of results. We believe that each of the two interventions has its own, well-known complications, and performing both at the same time does not add more complication risks while reducing the cumulative surgical time. Our study is limited by the small series of patients and relatively short follow up period.

Conclusions. Despite some studies in the literature suggesting that simultaneous implantation of an artificial urinary sphincter and a penile prosthesis leads to a higher rate of complications, notably revision or explantation of the penile implant, our experience shows that concomitant implantation of the two devices has similar results compared to implantation of only one device.

Methods

We did a retrospective study on patients' files operated in our clinic who had a simultaneous implant of both an artificial urinary sphincter and a penile prosthesis. We evaluated the condition which led to prostatic surgery, the type of prostatic surgery, the type of implants used and all the follow up data available, including the ICIQ-SF and IIEF-5 symptom scores. At least one year follow up was required as an inclusion criterion. A t test statistical analysis was performed on the data obtained from the symptom scores. Social continence was defined as the use of only one incontinence pad per day.

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References

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