

ARTIFICIAL URINARY SPHINCTER IMPLANTATION IN COMPLEX CASES

Hypothesis / aims of study

The implantation of artificial urinary sphincter systems (AUS) in patients with complex voiding disorders, therefore multiple previous surgeries and a progressive oncologic disease is often regarded as complicated. Respecting the estimated life expectancy for this patient group and the considering the costs there are only a few such surgeries performed.

We want to present the results of 7 complex cases treated with an AMS® 800 to point out that the quality of life can dramatically improve for the remaining time and the operating expense in general is lower than assumed.

Study design, materials and methods

Retrospective analysis of 7 patients with complex voiding disorders: 5 patients with progressive prostate cancer, 1 patient with progressive bladder cancer and 1 patient with a conus-cauda syndrome following a trauma. 4/7 of our patients had received an external beam radiation therapy (EBRT); in 3/7 case the construction of an orthotopic neobladder was necessary and 5/7 patients were in a palliative situation. In all patients several periods of urinary retention with the need of surgical intervention (UTI) as well as recurrent infections of the urinary tract occurred. For correcting a recurring obstruction we decided for implantation of a prostatic stent in 6/7 cases before implanting an AMS 800®. The patient with the conus-cauda syndrome was treated with sphincterotomy and bladder augmentation before the Implantation.

Results

Mean Follow up was 16.2 months (range 1.2-40.9). Surgery time average 60.4 minutes (range 38-90). Neither during surgery nor in postoperative follow up complications occurred, 1 patient had to be treated twice for urinary stones within the prostatic stent. After activating the system all patients were completely dry and micturition was possible spontaneous with a Qmax of range of 21-30ml/s without storage. Quality of life improved considerably and a normal social life for patients was again made possible.

Interpretation of results

In complex cases of voiding disorders caused by storage as well as sphincter difficulties it is possible to achieve excellent results both clinically and functionally using an AMS 800® system. In cases of obstruction the implantation of a prostatic stent can successfully be performed at the same time. The surgery is not as complex as assumed in general and the quality of life can be improved dramatically.

Concluding message

In attention to ensure a "normal" voiding function by optionally creating a low pressure reservoir and if necessary correcting an obstruction, even complex problems can be successfully treated by implanting an AUS.

<i>Specify source of funding or grant</i>	no source of funding
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	No
<i>This study did not require ethics committee approval because</i>	AMS Sphincter implantation is an established method in SUI surgery as well as Prostate Stent implantation, the abstract is highlighting 7 complex case reports
<i>Was the Declaration of Helsinki followed?</i>	No
<i>This study did not follow the Declaration of Helsinki in the sense that</i>	the abstract is not a study but highlighting 7 complex case reports.
<i>Was informed consent obtained from the patients?</i>	Yes