

ADVANCE SLING: THE “REPOSITIONING TEST”, AN IMPORTANT TOOL FOR PREOPERATIVE PATIENT SELECTION

Hypothesis / aims of study

The AdVance sling (American Medical Systems, Minnetonka, Minnesota, USA), offers a safe and effective treatment option for patients with male stress urinary incontinence (SIU) after prostate surgery. However, reported failure rates are between 20 and 45%. Preoperative patient selection seems to be very important to achieve good success rates.

The aim of the study was to evaluate the efficacy of the “repositioning test” for preoperative evaluation of the sphincter region. With the “repositioning test” sling function can be simulated by assessing the sphincter region with and without manual repositioning of the urethra. In case of still existing good residual sphincter function and mobile posterior urethra, sphincter closes concentric by itself during reposition. In addition, during reposition and active sphincter closure the functional sphincter elongates >1cm (zone of coaptation) and duration of active sphincter closure time improves – positive “Repositioning Test”.

Study design, materials and methods

In a single-centre prospective study, before sling implantation the “Repositioning Test” was performed in 65 consecutive patients with mild to severe SUI after radical prostatectomy. In addition, before sling implantation and 3 and 6 months postoperatively, 1-h pad test and daily pad use were assessed. Cure was defined as 0 pads/day. All other patients were defined as “not cured”. The association between the postoperative outcome and the “repositioning test” was evaluated.

Results

53 patients (81.5%) had a positive and 12 patients (18.5%) a negative “repositioning test”. After 6 months, patients with positive “repositioning test” had a cure rate of 83% (44 patients) and 17% (9 patients) were not cured. Patients with negative test had a cure rate of 25% (2 patients) and 75% (9 patients) were not cured. Results were stable over the time. A positive “repositioning test” correlated significantly with cure in the outcome ($p < 0,001$).

Interpretation of results

Patients with positive „repositioning test“ have a significant better chance for successful AdVance® sling implantation. Therefore, the „repositioning test“ is a very important tool for preoperative patient selection.

Concluding message

Preoperative patients selection is necessary to achieve good results with the Advance sling. With the “repositioning test” optimal patients can be selected. In addition, the „repositioning test“ is easy to learn and easy to perform and non-invasive.

Specify source of funding or grant	No funding or grant
Is this a clinical trial?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes
Specify Name of Ethics Committee	Ethics Committee of the Ludwig-Maximilian-University
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes