

COMPARISON OF 3 DIFFERENT INCONTINENCE DEVICES: CLINICAL OUTCOME OF PRO ACT®, ARGUS® AND AMS 800® AFTER 3 YEARS OF FU

Hypothesis / aims of study

Objective was to evaluate the clinical outcome of three different devices for the treatment of male stress urinary incontinence (SUI) after a minimum of three years of follow up (FU): a comparison of Pro ACT® balloons, the ARGUS® adjustable sling or the AMS 800® artificial sphincter.

Study design, materials and methods

Retrospective analyses of 57 patients after implantation of either (I) Pro ACT® balloons (n=21), (II) an ARGUS® adjustable sling (n=18) or (III) an AMS 800® artificial sphincter (n=18) in 2008 for SUI at our department. All three groups were analyzed for a: reoperation rate b: satisfaction after 3 years of FU c: recommendation of the device to others d: daily pad use and e: change of treatment for SUI

Results

Mean FU in all three groups was 3.74 years (FU I: 3.69, FU II: 3.72, FU III: 3.80). Reoperation rate was with 22.2% (4/18) the same in group III as in group II. The reoperation rate in group I was with 33.3% (8/21) higher than in the other two Groups. Pro ACT® Balloon-adjustments were not counted as reoperation; only the change of balloons, cuffs, pumps or slings was counted. In the ARGUS® group no sling adjustments were necessary during the FU. Satisfaction was evaluated with a visual analog scale (VAS): 1=most satisfied and 5=not satisfied at all. At date of last FU patients were most satisfied after implantation of an AMS 800® sphincter (group III, VAS mean: 2.0). The ARGUS® sling was judged with mean 2.6 (group II) and Pro ACT® balloons with 2.9 (group I). Asked, if patients would recommend the implanted device to others, 88.8% would do so for the AMS 800®, 83.3% for the ARGUS® sling and 90% for the Pro ACT® balloons, respectively. Dry rates, measured by daily pad use at the date of last FU, were most satisfying in the group with the artificial sphincter, followed by the ARGUS® group: mean pad use of 0.75/d (range: 0-4) in group III and 0.83/d (range: 0-3) in group II. Patients with Pro ACT® balloons showed a mean daily pad use of 1.08/d (range: 0-5). Voiding was not a problem in all groups: only 4 patients in the ARGUS® group and 2 in the AMS 800® group showed insignificant amounts of residual volume (< 50ml). Patients in group I in 76.1% still were treated for SUI with Pro ACT® balloons at date of last FU, 3 (14%) were changed for an AMS 800® and 2 (9.5%) for an ATOMS® sling. In group II only 2 Patients (11%) needed a change for an AMS 800® while 16 patients (89%) still were treated with the ARGUS® sling. In group III all patients (100%) still have their AMS 800® system.

Interpretation of results

After a FU of more than 3 years the reoperation rate of Pro ACT® balloons shows to be higher than with the ARGUS® sling or the AMS 800®. Satisfaction and dry rate showed to be best with the AMS 800®, but the differences were statistically not significant. However, in all groups more than 80% would recommend their operation to friends.

Concluding message

Reoperations seem to have no effect on patient's satisfaction or recommendation of the method. Even after failed balloons or sling a second line implantation of an artificial sphincter represented no problem.

Disclosures

Funding: No source of funding **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** It's a retrospective analysis of 3 standard operations for SUI **Helsinki:** Yes **Informed Consent:** No