OUTCOMES OF ROBOTIC SACROCOLPOPEXY IN DENMARK 2012-2016

Hypothesis / aims of study
Vaginal prolapse after hysterectomy can be a surgical challenge especially if it includes the apical compartment of the vaginal wall (vaginal vault). Robotic sacrocolpopexy (RSC) is a minimal invasive surgical method attaching the vaginal vault (including the anterior and posterior compartments) to the sacral promontory using a synthetic Y-shaped mesh.

Primary outcome was to review the subjective and objective outcome after RSC in Denmark. Secondary outcome was type of complications, re-operation because of complications, and re-operation due to recurrence of prolapse.

Study design, materials and methods
We retrospectively reviewed 41 RSC surgeries that were performed for vaginal vault prolapse after total hysterectomy at our institution from 2012 to 2016. Subjective symptom score used was retrieved from our national database (Dugabase) (frequency of prolapse (0-4) + QoL (1-10)). We used the POP-Q system for objective prolapse quantification (1). All patients had implanted a synthetic macro-pore polypropylene Y-shaped mesh, attached from the vaginal wall to the sacral promontory. Patient charts were reviewed regarding symptom score pre- and post-operatively, complication rates and re-operation rates (2).

Results
41 women were operated. Mean age was 64.8 years (SD 8.6), mean BMI was 25.8 kg/m2 (SD 2.9). Median subjective symptom score decreased from 13 (2-14) to 0 (0-11) after the first 3 months. The frequency of prolapse > 2 before RSC in anterior, apical and posterior compartments were 88%, 100% and 73%, and 3 months after RSC 28%, 3% and 23% respectively. Rate of perioperative complications included vaginotomy 7%, bladder lesion 7%, wound infection 3% and subcutaneous emphysema 7%. The median length of postoperative follow-up was 12 months (3-51). At the latest follow-up visit, objective prolapse > 2 in the anterior, apical and posterior compartment were 28%, 3% and 8% respectively. During follow-up 7 patients underwent surgical re-treatment for recurrent prolapse: anterior compartment 2%, posterior 5%, anterior+posterior 7% and anterior+apical+posterior 2%. Mesh exposure rate at follow-up was 17%, and 5% was re-operated due to mesh exposure. 1 had a cystoscopy after 10 days because of macroscopic hematuria; however, the bladder hematoma was treated without further intervention than catherization. 1 was lost to follow-up.

Interpretation of results
To our knowledge, this is the first report from a Nordic country regarding results from robotic sacrocolpopexy. Subjective symptom score decreased in all patients after RSC as well as a significant improvement in objective outcome after 3 months. No major complications were observed.

Concluding message
Robotic sacrocolpopexy is a safe and effective procedure with a significant improvement in subjective and objective outcome.

References

Disclosures
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