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SEXUAL FUNCTION AFTER IMPLANTATION OF PARTIALLY ABSORBABLE TRANSVAGINAL MESHES

Hypothesis / aims of study
Transvaginal meshes are part of the armamentarium to treat pelvic organ prolapse if surgical intervention is necessary. Due to a potential risk of de novo dyspareunia, transvaginal meshes are mainly used in postmenopausal women and in case of recurrent prolapse. Partially absorbable meshes as used in our study are based on a highly flexible macroporous polypropylene of which half is being absorbed within 84 days. These meshes might impact sexual experiencing less than conventional meshes.

We hypothesized that there is no worsening of the vita sexualis after compared to prior to the implantation of a partially absorbable transvaginal mesh.

Study design, materials and methods
We conducted a prospective single-arm multicentre post-marketing study with intraindividual comparison. Patients with pelvic organ prolapse stage 2 or higher (according to ICS-POPQ) were operated with an anterior and/or posterior or total transvaginal mesh implant. Before and 12 months after mesh implantation patients filled in the validated German version of the Female Sexual Function Index Questionnaire (FSFI-d) and the validated German version of the Australian Pelvic Floor Questionnaire (PFQ). 12 months after surgery patients were also asked about their level of satisfaction with the surgical outcome by a Visual Analog Scale (VAS), the Patient Global Impression question (PGI) and the question whether they would have done that operation again.

A paired t-test was used for statistical analysis. To reach statistical power we aimed to include 125 patients. Due to the withdrawal of the study product from the market we stopped recruitment after inclusion of 11 patients.

Results
Postoperative FSFI-d total score shows not only non-inferiority but even superiority compared to the baseline. FSFI-d subscore pain also disproves non-inferiority and shows a tendency towards superiority. PFQ subscores (bladder, bowel, prolapse and sexuality) are all improved after 12 months. Patient satisfaction (VAS, PGI) is high and all patients who answered the question would have the operation done again.

Figure 1: FSFI total score (the higher the score the less sexual problems):

The non-inferiority margin of -3.3 (- - -) is not crossed, so non-inferiority can be rejected (p=0.00055). Because the 95% confidence interval ( _ _ ) does not cross the zero point (......), statistically there is even superiority (p=0.0171).
Interpretation of results
Patient satisfaction with study procedure and material is high. Sexual function is better after mesh implantation than before surgery. Function of all pelvic floor compartments is improved.

Concluding message
Implantation of transvaginal meshes does not seem to worsen sexual life. In contrary, our study implies a tendency towards improvement in sexual function after mesh-supported surgery for pelvic organ prolapse.

Disclosures
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