443

Bergmans M<sup>1</sup>, Wetzels L<sup>1</sup>, Hasaart T<sup>2</sup> 1. Laurentius hospital Roermond, 2. Catharina hospital Eindhoven

# RETROSPECTIVE ANALYSIS OF EFFICACY AND SAFETY OF PELVIC ORGAN PROLAPSE REPAIR WITH TRANSOBTURATOR ANTERIOR AND/OR POSTERIOR POLYPROPYLENE MESH IMPLANTATION.

### Hypothesis / aims of study

Estimation of safety, effectivity and patient satisfaction of prolapse surgery using mesh techniques for correction of the anterior or posterior vaginal wall by means of transobturator anterior prolapse repair and/or posterior repair with polypropylene mesh.

# Study design, materials and methods

There were 103 patients included who underwent prolapse surgery with mesh techniques for repair of anterior and/or posterior vaginal wall prolapse. Results were retrospectively analysed by means of medical chart review. Data collected included demographics, pre- and post-operative symptomatology and POPQ scores. Furthermore an inquiry was sent to all between 3 months and 2 years after mesh surgery with questions on patterns of micturition and defaecation after surgery, dyspareunia, recurrent prolapse and patients satisfaction with the end result. Response on the inquiry was 83% (86 patiens) after a mean interval of 10.8 months (range 3 months to 2 years). Results

The mean age of the population was 64 years (range 33-87). Previous prolapse surgery was performed in 42 cases (41%) and hysterectomy in 25 (24%). The mean POPQ in this group was 2.8 (1-4). Patients without previous vaginal surgery had a mean POPQ of 3.5 (2-4). During operation prolene meshes were placed in the anterior vaginal wall in 46 patients, in the posterior wall in 33 and in both in 24. In 19 cases (18%) the mesh technology was combined with other types of surgery (colporrhaphia 10, vaginal hysterectomy 15, TOT 4). The mean POPQ score after surgery was 0.2 (0-3). Operative complications were: bladder perforation 2, hematoma 3 and infection 1. After a middle-long follow up period 8 mesh erosions were found (7.8%) and 7 cases of prolaps recidive (6.8%). Five of the recidives were of the opposite vaginal wall or vagina top. In 2 cases the mesh itself got loose. Voidance problems occurred in 54 patients before operation. After surgery no change occurred in 6 patients (11%) and reduction of complaints was present in 18 (33%). In the remaining 30 patients (56%) voidance problems were absent. After surgery previous defaecation problems (51) persisted in 6 patients (12%), were absent in 25 (49%), improved in 8 (16%) and worsened in 12 patients (24%). The effect of surgery was evaluated. Of the 86 women 39 did not have intercourse, 39 said that coitus was satisfactory and 8 complained of dyspareunia and vaginal dryness.

The overall result of the surgical procedure was scored by the patient with a figure between 0 and 5. The mean score of patient satisfaction was 4.5 (range 0-5) and the mean score of effectivity 4.4 (range 0-5).

## Interpretation of results

Of the 54 patients with voidance problems before operation 18 had reduction of complaints and 30 were cured after surgery. Detail analysis showed that previous urgency (51) was cured in 28 cases (55% of the subgroup) while 8 patients (7.8% of the total population) experienced urgency de novo. Previous stressincontinence (28) was cured in 23 cases (82% of the subgroup), but also 18 new cases were found (17% of total population), in which anterior and posterior wall surgery were equally represented. Previous defaecation problems (51) were cured in 25 (49% of the subgroup), improved in 8 (16% of the subgroup), but worsened in 12 patients (24% of the subgroup). Although surgery cured or alleviated preexisting urgency and stress urinary incontinence in the majority of patients, de novo urinary continence problems occurred in a substantial amount of patients (up to 25%). De novo defaecation problems were not present.

# Concluding message

Prolapse surgery with prolene meshes is save and effective with a high score of patient satisfaction during a middlelong period of follow-up. Prolapse surgery with prolene meshes has a substantial risk of the occurrence of de novo urinary incontinence mainly of the stress type.

#### FUNDING: none CLINICAL TRIAL REGISTRATION: trials registry.

This clinical trial has not yet been registered in a public clinical

HUMAN SUBJECTS: This study did not need ethical approval because it concerned evaluation of clinical work. Approval of the ethical committe was therefore not necessary. All women gave informed consent. but followed the Declaration of Helsinki Informed consent was obtained from the patients.