



## 132. Voiding after prolapse surgery: what is it like? – Preliminary study

Vereeck Sascha, Neels Hedwig, Pacquée Stefaan, De Wachter Stefan, Jacquemyn Yves

University of Antwerp, Belgium  
University of Sydney, Australia



### Introduction

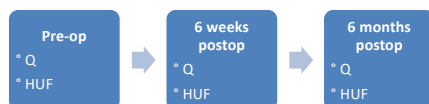
The aim of our observational cohort study was to assess the feasibility of performing a prospective study to determine the effect of prolapse surgery on voiding function and quality of life, measured by patient reported outcomes (PRO) and home-uroflowmetry.

### Methods and Materials

This is an ongoing prospective study of women undergoing prolapse surgery at a tertiary Gynaecology unit.

Interim analysis was performed.

All patients had a standardized interview, validated questionnaires (Pelvic Floor Distress Inventory-20 (PFDI-20), Pelvic Floor Impact Questionnaire-7 (PFIQ-7)), home-uroflowmetry and bladder diary for **3 consecutive days** preoperatively and at 6 weeks and 6 months postoperatively.



Primary outcomes were change in patient reported outcomes of voiding function and quality of life, based on Urinary Distress Inventory-6 (UDI-6) and Urinary Impact Questionnaire-7 (UIQ-7).

Change in symptoms of voiding dysfunction (VD), urinary incontinence (UI) and overactive bladder (OAB) were evaluated based on PFDI-20.

Change in voided volume, maximum flow rate (Qmax), average flow rate (Qave), voiding time and maximum urinary flow rate (MFR) centile as seen on home-uroflowmetry were assessed.

Statistical analysis was carried out with SPSS version 28.

**Table 1.** Table 1. Mean score based on PFDI-20 question 5, 6 and 19\*. Question 16, 17 and 18\*. Question 15 and 18\*. P-value of change in mean score pre-operatively compared with 6 weeks\* and 6 months<sup>o</sup> postoperatively.

PRO	Pre-op	6w post-op	6m post-op	P-value*	P-value <sup>o</sup>
VD*	2.45	0.09	0.82	<b>0.02</b>	0.12
UI*	2.64	1.73	1.55	0.20	0.19
OAB <sup>o</sup>	2.64	1.64	1.18	<b>0.09</b>	<b>0.03</b>

**Table 2.** Mean values as seen on home-uroflowmetry being used for 3 consecutive days.

	Pre-operatively	6 months Postoperatively	P-Value
Voided volume (ml)	346	299	0.21
Qmax (ml/s)	33	36	0.37
Qave (ml/s)	12	12	0.89
Voiding time (s)	21	18	0.40
MFR centile	42	55	<b>0.02</b>

### Results

Since inception (06/2020), 13 women have been included. Two were excluded (no questionnaires available), leaving 11.

Mean age and BMI at presentation were 57y and 28kg/m<sup>2</sup> respectively.

Surgical procedures performed included anterior repair (36%), posterior repair (9%), anterior and posterior repair (45%), uterosacral ligament suspension (9%) and sacrospinous fixation (18%).

No concomitant stress incontinence procedures were performed.

Mean UDI-6 and UIQ-7 score were pre-operatively 1.21 and 1.71 respectively. At 6 months post-operatively, scores significantly improved, 0.48 (p=0.006) and 1.29 (p=0.01) respectively.

While symptoms of VD significantly improved at 6 weeks postoperatively (P=0.02), there was no significant difference between pre-operative and 6 months postoperative values (P=0.12).

Symptoms of UI did not change significantly.

Symptoms of OAB were significantly reduced at 6 months postoperatively (p=0.03) (see Table 1).

On home-uroflowmetry, MFR centile was significantly increased 6 months postoperatively (p 0.02).

There was no significant difference in voided volume, Qmax, Qave and voiding time (see Table 2).

Most participants completed all aspects of the study.

### Discussion

**Prolapse repair does significantly improve patient reported outcomes of voiding function and quality of life.**

MFR centile was significantly improved as assessed by home-uroflowmetry.

The study appears feasible based on this preliminary data.

### Conclusions

More inclusions are ongoing.

Follow-up will be continued until 1 year postoperatively.

Additional analysis of the correlation between patient reported outcomes, voiding function, POPQ and 3D/4D translabial ultrasound findings will be performed.

### Disclosures

De Wachter Stefan is a shareholder of Minze Health.  
The other authors have no disclosures.

