

## POSTOPERATIVE PAIN AFTER TRANSVAGINAL REPAIR OF POP WITH OR WITHOUT MESH: A PROSPECTIVE STUDY OF 132 PATIENTS.

### Hypothesis / aims of study

to assess postoperative pain after POP surgery by vaginal approach with and without mesh. Because of large dissections, transobturator and transgluteal passages and the use of large nonabsorbable meshes, transvaginal mesh repair has been thought to induce deleterious postoperative pain. In order to get informative results we conducted this prospective study to compare postoperative pain in patients who underwent POP repair with or without mesh

### Study design, materials and methods

132 consecutive patients operated on for POP (POPQ  $\geq 2$ ) were enrolled. Surgical procedure was a traditional repair without mesh in 67 women (group 1) and a mesh repair in 65 women (group 2). Traditional repair included anterior colporrhaphy with fascial repair (n = 45), sacrospinous fixation (n = 45), posterior colporrhaphy with fascial repair (n = 57), levator ani myorrhaphy (n = 11) and perineorrhaphy (n = 49), with all patients having one or more procedures. Mesh repair was in all cases a Prolift® procedure: anterior mesh only (n = 13), posterior mesh only (n = 3), anterior and posterior mesh with uterus preservation (n = 34) or a total mesh in patients with concomitant or previous hysterectomy (n = 16). Overall 84 women had a concomitant transobturator suburethral sling – TVT-O® (38 patients in group 1 and 46 patients in group 2). Postoperative pain was prospectively assessed by autoadministered questionnaires including a verbal scale and an analog visual scale. Pain scores were recorded one day after surgery (D1), at discharge (Day 3-Day 6), at 1 month follow-up (M1) and at 3-6 months follow-up (M3-6). Statistical analysis was performed with comparisons based on the Student's test. Statistical significance was defined as a p value < 0.5.

### Results

Mean age was 66 years. Seventy five (56.8%) women were operated on under general anaesthesia and 57 (43.2%) under spinal anaesthesia. VAS scores were reported in table 1. At initial evaluation (Day 1 after surgery), there was no statistical difference in pain score between the 2 groups. At discharge, pain score was significantly higher in the mesh group (1.2 +/- 1.8 versus 0.5 +/- 0.9, p = 0.021). Pain score were low and similar in the 2 groups at 1 month and 3-6 months follow-up. When focusing on associated factors such as concurrent hysterectomy, transobturator sling, sacrospinous fixation or preoperative POPQ stage, the only variable that impacted the pain score was hysterectomy with a significant higher score at Day 1 (VAS 2.6 versus 1.2, p = 0.0016)

### Interpretation of results

Postoperative pain is limited after transvaginal repair of POP with only 18% of the patients reporting a pain score greater than 3 at initial assessment (D1) and only 4 patients (3.7%) with a residual pain at 3-6 months follow-up. In these 4 patients, VAS scores ranged between 4 and 6 and were attributable to a traditional repair in 2 cases (1 sacrospinous fixation with concomitant levator ani plication, 1 vaginal hysterectomy with concurrent anterior and posterior colporrhaphy with fascial repair), a total mesh repair in 1 case and an anterior and posterior mesh repair in 1 case.

### Concluding message

Pain score are low after both traditional or mesh repair by vaginal route. Pain is significantly higher at discharge after mesh repair but analysis failed to find any difference at 1 month and 3-6 months follow-up. As previously reported [1], our study supports the theory that Prolift procedure is a low-pain procedure allowing a short hospital stay and a quick return to normal life.

Table 1

VAS	Day 1	At discharge	M1	M3-M6
0-3	95	89	94	102
4-6	18	2	7	4
7-10	3	2	1	0
<i>n</i>	116	93	102	106

1 - Flam F.

Sedation and local anaesthesia for vaginal pelvic floor repair of genital prolapse using mesh. Int Urogynecol J, 2007 18: 1471-1475

### References

1. Flam F, Sedation and local anaesthesia for vaginal pelvic floor repair of genital prolapse using mesh. Int Urogynecol J, 2007; 18: 1471-1475

<b>Specify source of funding or grant</b>	<b>No disclosure</b>
<b>Is this a clinical trial?</b>	<b>Yes</b>
<b>Is this study registered in a public clinical trials registry?</b>	<b>No</b>
<b>What were the subjects in the study?</b>	<b>HUMAN</b>
<b>Was this study approved by an ethics committee?</b>	<b>No</b>

<i>This study did not require ethics committee approval because</i>	Autoadministred questionnaires (verbal scale and analog visual scale) with verbal consent obtained for all the patients. This is a postoperative assessment of pain after prolapse repair. Nevertheless, because this study included patients operated on with or without mesh (depending of the POPQ stage and the history and after rigourous patients counselling) we decided to obtain ethical approval and process is ongoing (CEROG France, research comittee in Obstetrics and Gynecology)
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes