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# EFFECT OF TRANSVAGINAL MESH SURGERY AND LAPAROSCOPIC SACROCOLPOPEXY ON BOWEL SYMPTOMS IN PELVIC ORGAN PROLAPSE PATIENTS

#### Hypothesis / aims of study

It is well known that pelvic organ prolapse (POP) patients show not only a sensation of vaginal bulging but also bowel symptoms. Several studies have shown that transvaginal surgery such as traditional posterior colporrhaphy and colpocleisis improved some component of bowel symptoms [1]. Synthetic polypropylene mesh is nowadays widely used either via a transabdominal or transvaginal route to reduce recurrence. However, little is known about the effect of inserted mesh in the posterior component via transabdominal and transvaginal route on bowel symptoms.

## Study design, materials and methods

The effect of inserted mesh in the posterior component via transabdominal and transvaginal route on bowel symptoms was examined in POP patients. The bowel symptoms were evaluated using a questionnaire following laparoscopic sacrocolpopexy (LSC) and transvaginal mesh (TVM) surgery.

This is an observational study for three hundred twenty-nine women who diagnosed POP. One hundred ninety women underwent LSC and one hundred thirty nine women underwent TVM surgery. The polypropylene mesh was inserted in a posterior component in all patients of LSC and TVM groups. In a LSC procedure, the posterior mesh is fixed to the levator ani muscle. In a TVM procedure, the trocar-guided TVM was performed using self-cut the polypropylene mesh. Bowel symptoms were evaluated at baseline, six, and twelve months postoperatively using the Colorectal-Anal Distress Inventory (CRADI). The CRADI, a subscale of the Pelvic Floor Distress Inventory (PFDI), contains 8 questions that evaluate the presence of bowel symptoms and related bother. Some symptoms among groups were analyzed using Wilcoxon's scores test and Wilcoxon's signed-rank test. A p value of ≤0.05 was considered statistically significant.

#### Results

There were no significant differences in age, BMI, and parity in both LSC and TVM groups. In LSC group, the all components of CRAD-8 except for pain with defecation were significantly improved at 6 and 12 months after the surgery compared with those obtained preoperatively. In the TVM group, the components including straining, anal incontinence-liquid, anal incontinence-flatus, fecal urgency, and rectal prolapse were significantly improved at 6 months after the surgery compared with those obtained preoperatively. All components were significantly improved at 12 months after the surgery compared to preoperatively. No statistically significant difference were observed in total score and each component of CARD-8 between the both groups.

## Interpretation of results

In both LSC and TVM groups, subjective bowel symptoms were significantly improved 12 months after the surgery compared to those preoperatively.

## Concluding message

The present data suggest that inserted mesh in the posterior component via either transabdominal and transvaginal route significantly improved bowel symptoms in POP patients.

## References

1. Segal S et al, Curr Bladder Dysfunct (2012) 7: 179-186.

## <u>Disclosures</u>

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