

## COMPARISON OF THE CLINICAL OUTCOME OF PELVIC ORGAN RECONSTRUCTION WITH TRANS-VAGINAL MESH AND SACROCOLPOPEXY FOR PELVIC ORGAN PROLAPSE

### Hypothesis / aims of study

In recent years, more and more mesh extrusion were discovered in the patients who underwent trans-vaginal mesh (TVM) for pelvic organ prolapse. Therefore, pelvic organ reconstruction with mesh via abdominal approach such as laparoscopic sacrocolpopexy (LSC) was favored for relatively less risk. Besides, according to literatures reviewed, LSC was considered having superior outcome to TVM [1]. Nevertheless, abdominal approach seemed more time-consuming so we tried to compare the efficacy and complications of these two different methods in a single medical center.

### Study design, materials and methods

This is a retrospective study and we enrolled the patients who received pelvic organ reconstruction surgery with TVM or LSC with Y-mesh from July, 2012 to August, 2015. Patients underwent concomitant sling surgery for stress urinary incontinence were all excluded. Total 145 patients were available to collect the complete parameters we tried to analyze. Among them, 101 patients underwent trans-vaginal mesh while 44 patients received LSC. Baseline characteristics, blood loss, operative time, length of hospital stay, POP-Q measurements, recurrence of pelvic organ prolapse and complications were collected and analyzed.

### Results

Patients were older ( $p<0.001$ ), had higher parity ( $p<0.001$ ) and needed less operative time ( $p<0.001$ ) in the TVM group. Blood loss and length of hospital stay were similar in both groups ( $p=0.386$  and  $p=0.066$ , respectively). LSC was significantly more time-consuming than TVM group ( $p<0.001$ ). Comparing the POP-Q parameters, Aa, Ba, C, Ap, Bp and D were remarkably improved after the pelvic organ reconstruction surgery in both groups (all  $p<0.001$ ). When it comes to complications, TVM group had more transient voiding dysfunction after the surgery whereas no patients suffered from this condition in LSC group ( $p<0.001$ ). Recurrence of pelvic organ prolapse were not different between the groups ( $p=0.652$ ). However, we found that more mesh extrusion in the LSC group ( $p=0.001$ ) and more extrusion occurred in the patients who had total hysterectomy during operation or previously. More patients had urgency and nocturia in TVM group ( $p=0.025$  and  $p=0.023$ , respectively). There were no major organ injury in both groups.

### Interpretation of results

Because TVM was theoretically less invasive so when discussing with patients about the choice of surgical methods, older patients preferred this kind of procedure. Both groups demonstrated satisfactory efficacy and similar recurrence. Although TVM group had more complications such as transient voiding dysfunction, urgency and nocturia, we thought that this might be because the patients were older in this group. Out of our expectation, there were more mesh extrusion in LSC group (N=7) so we examined the patients having mesh extrusion and found that among these patients, five had concomitant total hysterectomy and one had prior hysterectomy whereas only one preserved uterus so possibly subtotal hysterectomy or uterine preservation during pelvic reconstruction surgery is a better choice rather than total hysterectomy.

### Concluding message

Efficacy of these two different approaches were similar and the complications were little and acceptable. Mesh extrusion which was considered as a big problem seemed not a worrying complication in TVM group in our study. In conclusion, TVM and LSC could be one of the choic for pelvic organ prolapse and TVM was not inferior to LSC.

### References

1. Surgical management of pelvic organ prolapse in women. Cochrane Database Syst Rev. 2013;4:CD004014

### Disclosures

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