Obs & Gynae PWH

An evaluation of transvaginal mesh for advanced stage of pelvic organ prolapse (Abstract #623)

CU Medicine HONG KONG
香港中文大學醫學院 Faculty of Medicine The Chinese University of Hong Kong
40th Anniversary 四十週年

Symphorosa Shing Chee CHAN, Rachel Yau Kar CHEUNG, Osanna Yee Ki WAN
Dept. of Obstetrics and Gynaecology, The Chinese University of Hong Kong,
Prince of Wales Hospital, Shatin, New Territories, Hong Kong SAR

Hypothesis / aims of study

One of the risk factors of recurrence of pelvic organ prolapse after surgical repair is advanced stage of prolapse (stage III or IV). Short-term follow-up analyses suggest that transvaginal mesh has limited application for pelvic organ prolapse (POP) treatment. This study evaluated the intermediate and long-term outcomes of transvaginal mesh surgery.

Study design, materials and methods

This retrospective study included all women who underwent transvaginal mesh surgery in one urogynaecology centre. Inclusion criteria were women with stage III/IV POP, age ≥65 years, and (preferably) sexually inactive. Concomitant sacrospinous fixation and mid-urethral slings were offered for stage III/IV apical POP and urodynamic stress incontinence, respectively. Women were followed up for 5 years. Subjective recurrence was defined as reported prolapse symptoms. Objective recurrence was defined as stage II prolapse or above. Mesh complications and patient satisfaction were reviewed.

Results

Of 218 women who underwent transvaginal mesh surgery, 201 (92.2%) had ≥1 year of follow-up (mean, 55 ± 21 months). Among them, 132 (65.7%) had completed 5 years of follow-up.

Table 1. Demographic and outcome of women who had >1 year of follow-up *Present in mean (SD)

N = 201	Number (%)
Age at surgery (years)	71.8 (8.0)*
Stage of prolapse	
• Stage III	152 (75.6%)
• Stage IV	49 (24.4%)
Previous surgery	
• Surgical repair for prolapse	38 (18.9%)
• Hysterectomy	53 (26.4%)
• Continence surgery	9 (4.5%)
Concomitant continence surgery	58 (28.9%)
Follow-up (months)	55 (21)*
Objective recurrence	18 (9%)
Subjective recurrence	11 (5.5%)
Mesh erosion	17 (8.5%)
• Per vaginal spotting	7 (41%)
• Asymptomatic	10 (59%)
De novo stress UI	16 (8%)
• Received surgical treatment	4 (2%)
Chronic pain	0
Patient satisfaction	
• Satisfied	83 (41%)
• Very satisfied	114 (57%)

In all 201 women, the objective and subjective recurrence rates were 9% (n=18) and 5.5% (n=11), respectively. Among those with subjective recurrence, 4 (2%) and 7 (3.5%) had stage III and stage II prolapse, respectively. The median time of recurrence was 24 months. Two (1%) received surgical repair, another two had vaginal pessary and others had mild symptoms and opted for conservative management.

Mesh erosion occurred in 17 (8.5%) women; 7 had per vaginal spotting, others (59%) were asymptomatic. All of them received vaginal estrogen treatment but 7 (3.5%) of them with persistent mesh erosion received bedside surgical excision under local anaesthesia.

A total of 16 (8%) women had de novo stress urinary incontinence (SUI) symptoms after the surgery. Four women received transobturator tension-free transvaginal tape for de novo (n=2) or preoperative urodynamic stress incontinence who did not undergo concomitant surgery (n=2). While 25 (12%) women had mild de novo urgency urinary incontinence (UUI) and did not require any medical treatment; 57 (28.4%) women who had UUI symptoms before the surgery reported no UUI after the surgery. No women reported chronic pain. Overall, 41.3% and 56.7% reported 'satisfied' or 'very satisfied' with the operation.

Interpretation of results

This study showed an intermediate to long term follow-up of transvaginal mesh surgery for women with stage III/IV POP. There were low subjective and objective recurrence rates. The re-operation rate for recurrence of POP, mesh erosion, continence surgery for de novo SUI was 1%, 3.5% and 1%, respectively. Majority of women reported very satisfied with the operation.

Concluding message

With a mean of 55 months follow-up, transvaginal mesh surgery for stage III/IV POP had low subjective and objective recurrence rates. The total re-operation rate was 5.5%. Majority of women were satisfied with the operation. Based on the risk benefit profile, transvaginal mesh surgery may be suitable for women who have advanced stage of POP.

Disclosure

None