

Incidence and management of mesh related complications in women who received mesh related surgery for pelvic organ prolapse over 11 years in a tertiary unit

Introduction/ Hypothesis:

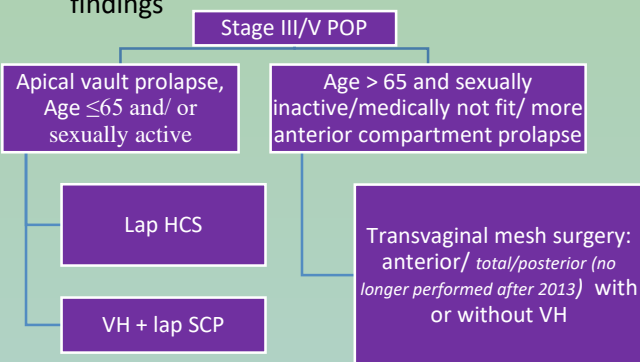
Mesh related complications have caused significant problem requiring surgical excision in more than 10% case, mostly in the Western population. Data in Asian countries is relatively limited.

Objective:

To review the incidence of mesh-related complications; subsequent management and surgical outcome, in women who received mesh related surgery in a tertiary unit in Hong Kong.

Study Design, materials and methods:

- Prospectively collected database
- Demographic data, symptoms and POPQ findings



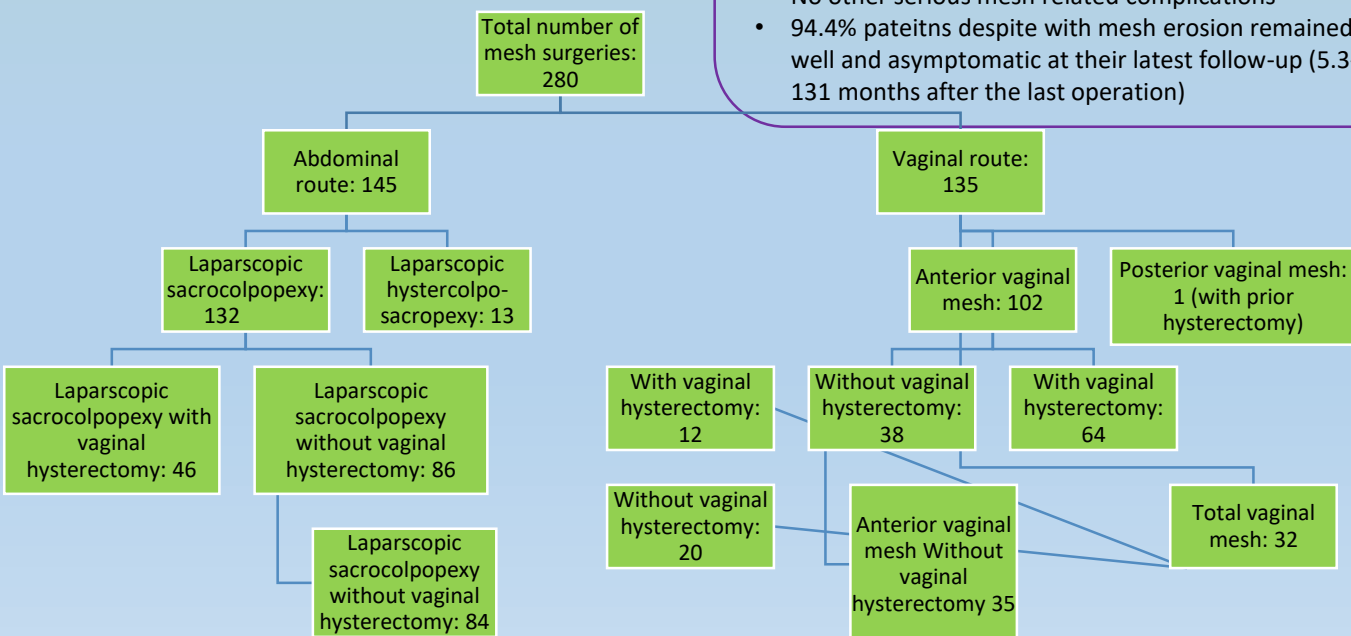
- Concomitant continence surgery if diagnosed urodynamic stress incontinence
- Operative and peri-operative information
- Followed-up in 3-4 months then annually
- FU: symptom of mesh exposure, PV examination
- Complications related directly to the insertion of mesh would be classified according to the Joint project of the International Continence Society and the International Urogynecological Association (ICS/IUGA)
- Subsequent management and outcome of women with mesh exposure would also be analysed
- Ethics approval was obtained from local institute and consent from patient was obtained.

Results:

- Total 280 mesh related surgery from 2005 to 2016
- Mean age: 62.9 ±10.3
- Concomitant continence operation: 26%
- 1 bladder injury during trocar insertion of AVM intraoperatively (4A S3 T1)
- 1 mesh infection with abscess formation at vulva, requiring re-operation and whole mesh removed (6D S3 T2)
- 3 lost-to-follow-up and 2 had operation done within 3 months and no follow-up data (275 for analysis)
- Mean FU: 36.6 months
- 19 (6.8%) cases of mesh related complications
 - 17 patients (6.1%) had mesh erosion
 - Mean duration from index operation to mesh erosion: 19.7 months ± 16.7 months
- All presented with on and off vaginal bleeding and only involved vaginal epithelium
- No dyspareunia or vaginal pain despite sexually active
- 64.7% (n=11) patients required surgical excisions
- 47% asymptomatic and opted not for operations
- All surgical excisions under LA except two
- 1 GA with cystoscopy confirming no mesh erosion to bladder
- Mean time between index operation to excisional operation for mesh erosion: 22.4 months ±19.4 month
- 55.6%, n=5 were successfully treated after the first excision and remained asymptomatic and no more mesh exposure
- Remaining 4 needed repeated excisions
- 66.6% no recurrence of mesh exposure
- 3 (33%) had mesh re-exposed but remained asymptomatic
- Overall rate of patient's satisfaction 98.2% feeling better at follow-up.

Interpretation of results:

- Major mesh related complication: vaginal mesh exposure but at a relatively lower trend than other reported figures.
- Occurrence higher in vaginal mesh surgery (n=17, 89.5%) than in lap SCP with p-value = 0.01.
- Only 1 case of mesh infection with abscess formation (0.36%)
- No other serious mesh related complications
- 94.4% patients despite with mesh erosion remained well and asymptomatic at their latest follow-up (5.3-131 months after the last operation)



Conclusion:

Mesh related complications are low and only around half of them required surgical treatment with good outcome. However, long term result of any further recurrence is needed.

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