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Introduction

- Vaginal mesh insertion for the treatment of pelvic organ prolapse or stress urinary incontinence.
- Associated with complications including mesh extrusion, exposure, pain, dyspareunia, discharge or generalised remote body symptoms.
- Pain either vaginal or remote body pain
- Nine designated specialist Mesh Complication Centres were created in the UK.



Hypothesis / aims of study

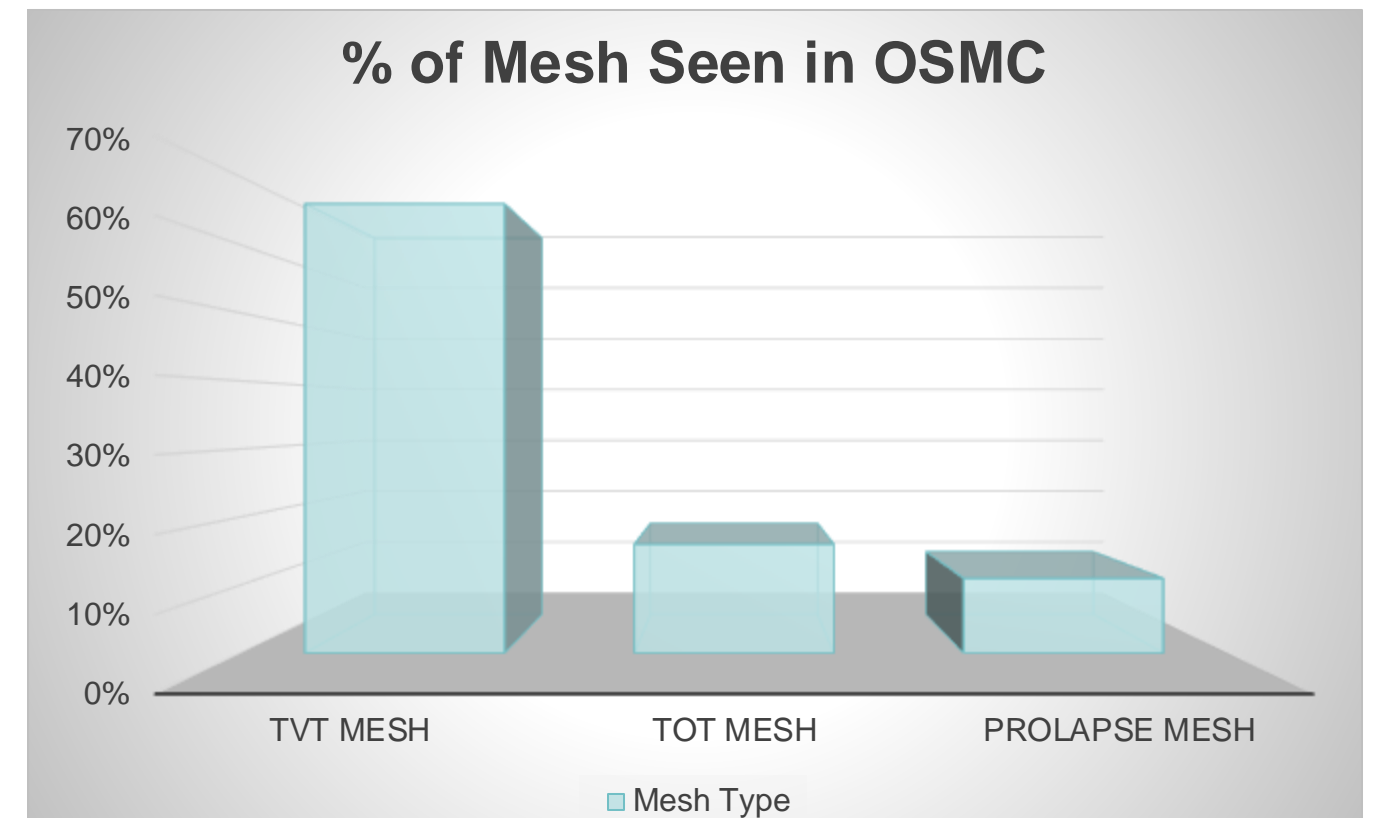
- This study explores the relationship between chronic pain presentations in women with vaginal mesh and the presence of abnormal nerve proliferation on the histology specimen following mesh removal.
- The correlation of clinical with histological data.
- The assessment of other non-pain associated presentations to the mesh clinic.
- We hypothesise that nerve damage or abnormal nerve proliferation into the mesh is associated with mesh implantation predisposing women to chronic pain.

Study design, materials and methods

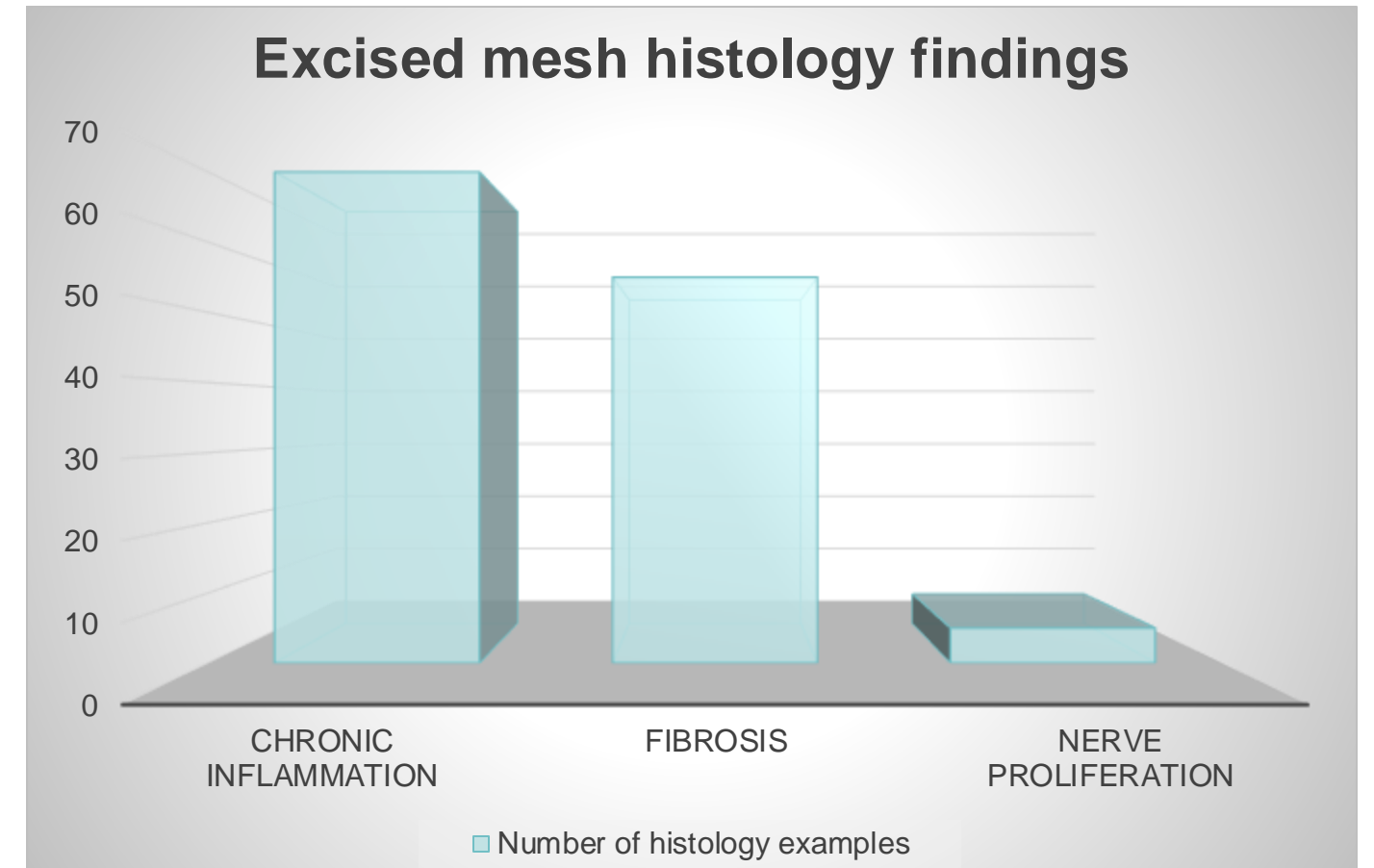
- Retrospective observational study of women presenting to the tertiary one stop mesh clinic (OSMC).
- Local institutional board approval was sought for this service improvement project.
- Inclusion criteria were women opting for mesh removal surgery between the periods September 2013 and October 2023.
- Exclusion criteria were women under the age of 18 years, women presenting to the mesh centre without vaginal mesh, and women not opting for mesh removal.
- All excised mesh was sent for histological examination.
- Spearman's Rank test used.

Results and interpretation

- 228 mesh removals in the study period.



- Pain, recurrence of incontinence, recurrent UTI and OAB-main presenting complaints.
- To supplement the clinical examination, MRI, cystoscopy, UDS and USS used.
- Psychological input in their management, with 25.7% specifically reporting a negative effect of the mesh on their psychological wellbeing. Others had onwards referral to the pain team or were also managed by physiotherapy.
- 173 excised mesh samples were sent for histological analysis.



Mesh associated complications causes distress. Histological examination does not necessarily help in the management of these women. The pain presentation is not necessarily due to abnormal nerve proliferation and so other causes of pain need to be investigated.

Conclusions

Through a comprehensive analysis we identified no association between pain presentation and abnormal nerve proliferation in the excised mesh specimens. The reason for the presentation of chronic pain is as yet undetermined from a histological perspective. Further questioning of the data presented i.e. the role of imaging in determining complications associated with the mesh is warranted. Additional research into the role of chemokines and cytokines in women presenting with pain secondary to vaginal mesh is required.