

## Introduction

Following a series of high profile cases showing the potentially catastrophic consequences of vaginal mesh insertion for stress urinary incontinence (SUI) recommendations have been made to halt further insertions. The National Institute of Health & Clinical Excellence (NICE) have updated their guidance to this effect. Removal of meshes is performed in specialist salvage centres such as ours. It is not always clear why some patients have problems with their meshes and the range of presenting complaints is varied. This study outlines the following: presenting complaint of patients attending for vaginal mesh salvage surgery; it then goes on to highlight the microbiology findings of meshes removed following complications and the possible links to presenting complaint.

## METHODS

This study was based on a reviewed of a prospectively maintained database for all patients referred with complications relating to mesh insertion between 2012 and 2018.

The database included demographic information, date of surgery, presenting complaint and the type of repair undergone.

The meshes removed were routinely sent for microscopy, culture and sensitivities from 2017, 24 samples were sent.

The clinical database for the hospital was then searched using patient identifier and the microbiology findings identified.

## RESULTS

In total, 68 patients were identified, 63 underwent vaginal mesh removal procedures. From 2017 the removed mesh (n=33) began to be routinely sent for microscopy, culture and sensitivities (MC&S). Perioperative IV antibiotics given and Betadine applied to the operation field. Of the specimens (n=33) sent; 17 were negative and 16 were positive on at least one category in MC&S.

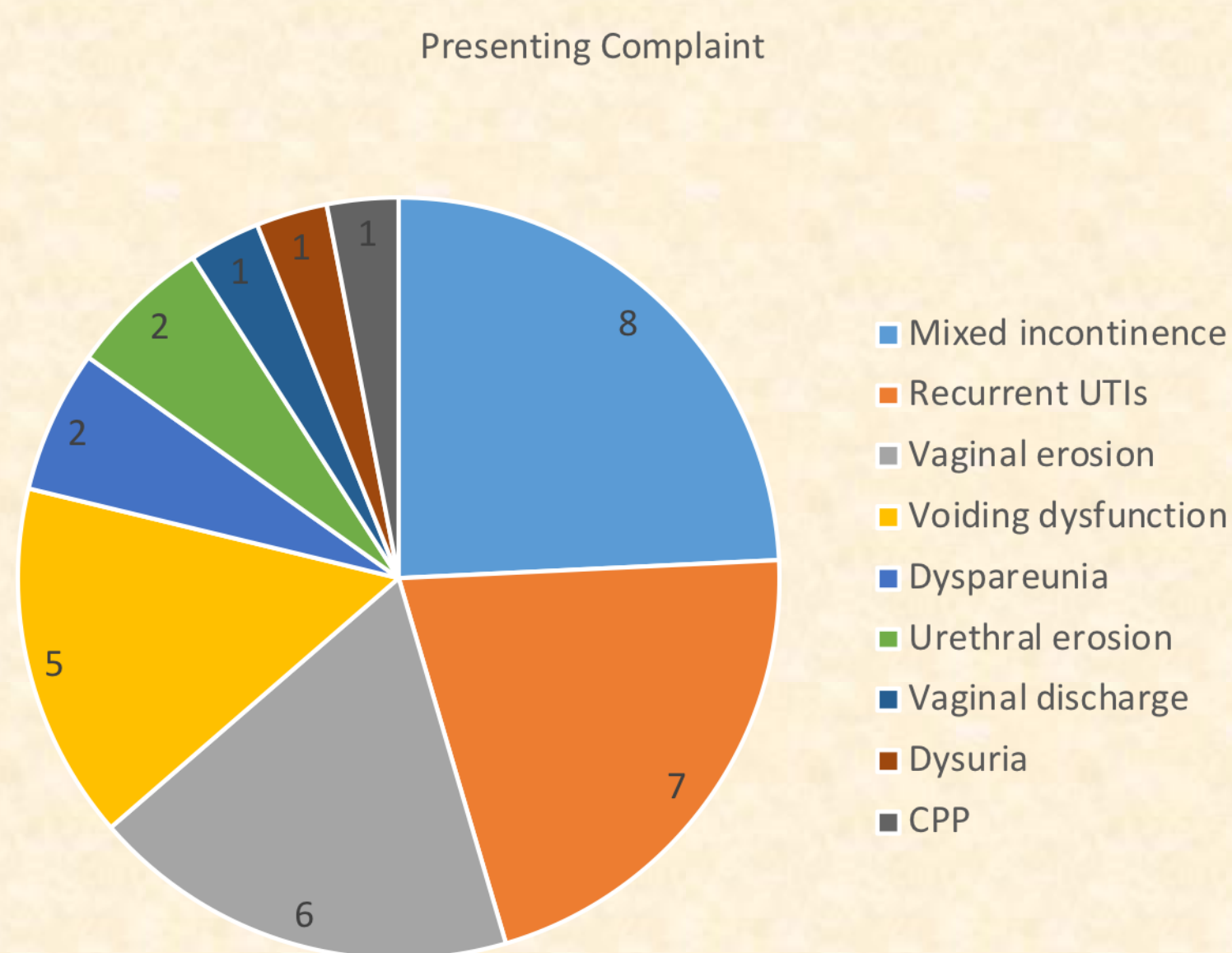


Figure 1

Organisms	Total
None	22
Strep. Constellatus & Staph. Aureus	1
Propionibact. Avidum	1
Diphtheroid bacilli & Mixed Anaerobes	1
Strep. parasanguinis & Candida glabrata & Mixed Anaerobes	1
E coli	1
Strep. Anginosus	1
Ent. faecalis	1
Strep. milleri & Enteroba. hormaechei	1
Gram pos. bacillus	1
Beta Haem Strep gp B & Pseudo. aeruginosa	1
Lactobacillus sp	1
Grand Total	33

Figure 2

### Presenting Complaint & Positive Culture

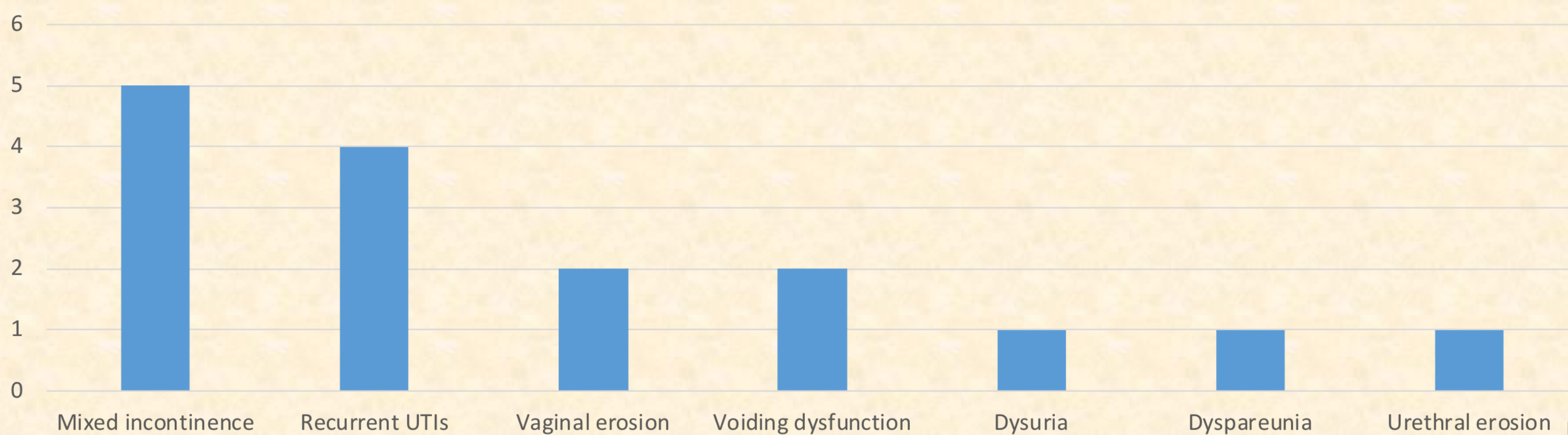


Figure 3

The results were varied and showed a diverse range of presenting complaints (fig 1).

The majority of cultures were negative and of those that were positive the organisms were mainly organisms commonly found in the GI tract, urinary tract and genital tract (fig 2).

The majority of patients presenting with recurrent UTIS had a positive culture (4/7). Two of the samples sent from women presenting with vaginal erosion were positive however for polymorphs only (fig 3).

Mellano et al (2016) showed results from 107 meshes removed having positive growth in 82 (77%) with no difference between recurrent or no infections

## CONCLUSIONS

It is not immediately apparent why some samples are positive. Mesh removal surgery is not “clean” and it is possible some of the results come from contamination at time of surgery.

A further possibility is that these results represent chronic low grade infection, this may correlate with the presenting complaint being recurrent UTIs.

We are beginning to routinely take urine samples and high vaginal swabs to send for MC&S at pre-operative assessment, doing such may assist with management strategies for future vaginal mesh complications.

It is not clear if the presence of colonisation leads to mesh complications. As more data becomes available, both in terms of sending samples routinely for MC&S and potentially taking swabs/MSU for MC&S we may learn more about the types of bacteria present and their impact on complications.

This study is based on a small sample size and will be repeated in future when new results are available.

## REFERENCES