

Objectives

Tubo-ovarian abscesses (TOAs) are a serious complication occurring in 17-20% of pelvic inflammatory disease (PID) cases, potentially leading to significant morbidity if not appropriately managed (1). This audit evaluated TOA management at Whittington Hospital to inform local guideline development and service improvement.

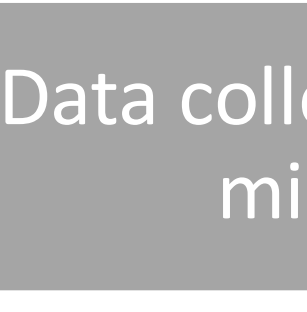
Study Design

Retrospective audit spanning two years (01/08/2022-01/08/2024), analysing clinical parameters, microbiological findings, and management in confirmed TOA cases.

Methods



Of the 110 cases identified through coding, 43 patients met the inclusion criteria.



Data collection encompassed demographic characteristics, microbiological results, and clinical outcomes.



Statistical analysis was performed using Python, primarily focusing on length of stay (LOS) as the key outcome measure.

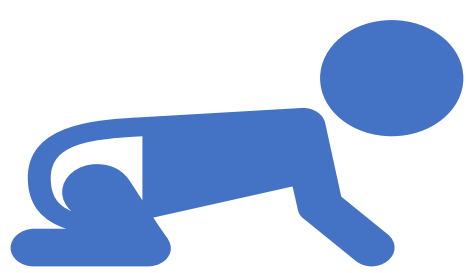
Patient Demographics



Mean age 39.8 years (15–63)



Mean body mass index (BMI) 27 (17–49.2)



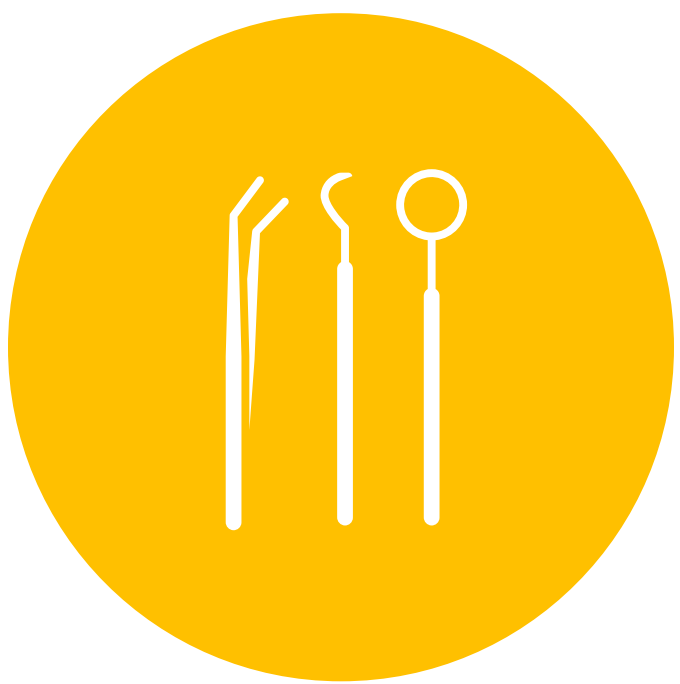
54% nulliparous



MEDICAL MANAGEMENT: 20 PATIENTS



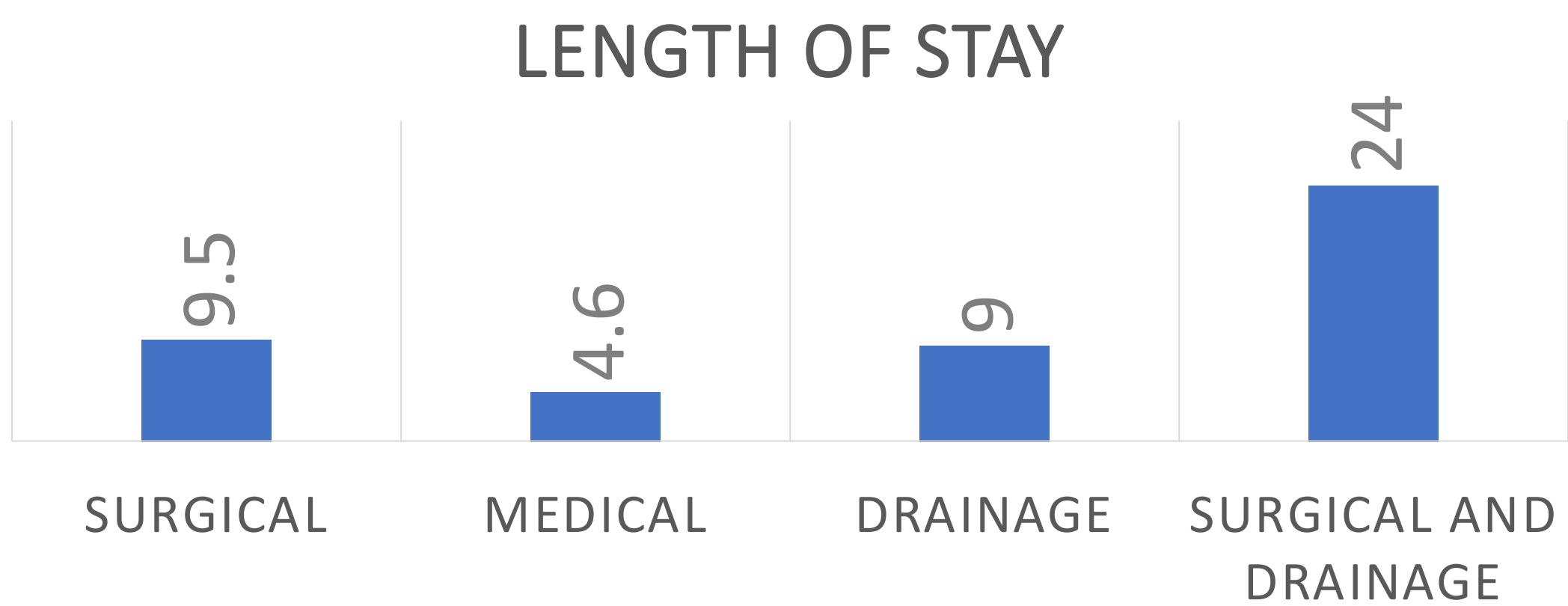
DRAINAGE/ASPIRATION: 4 PATIENTS



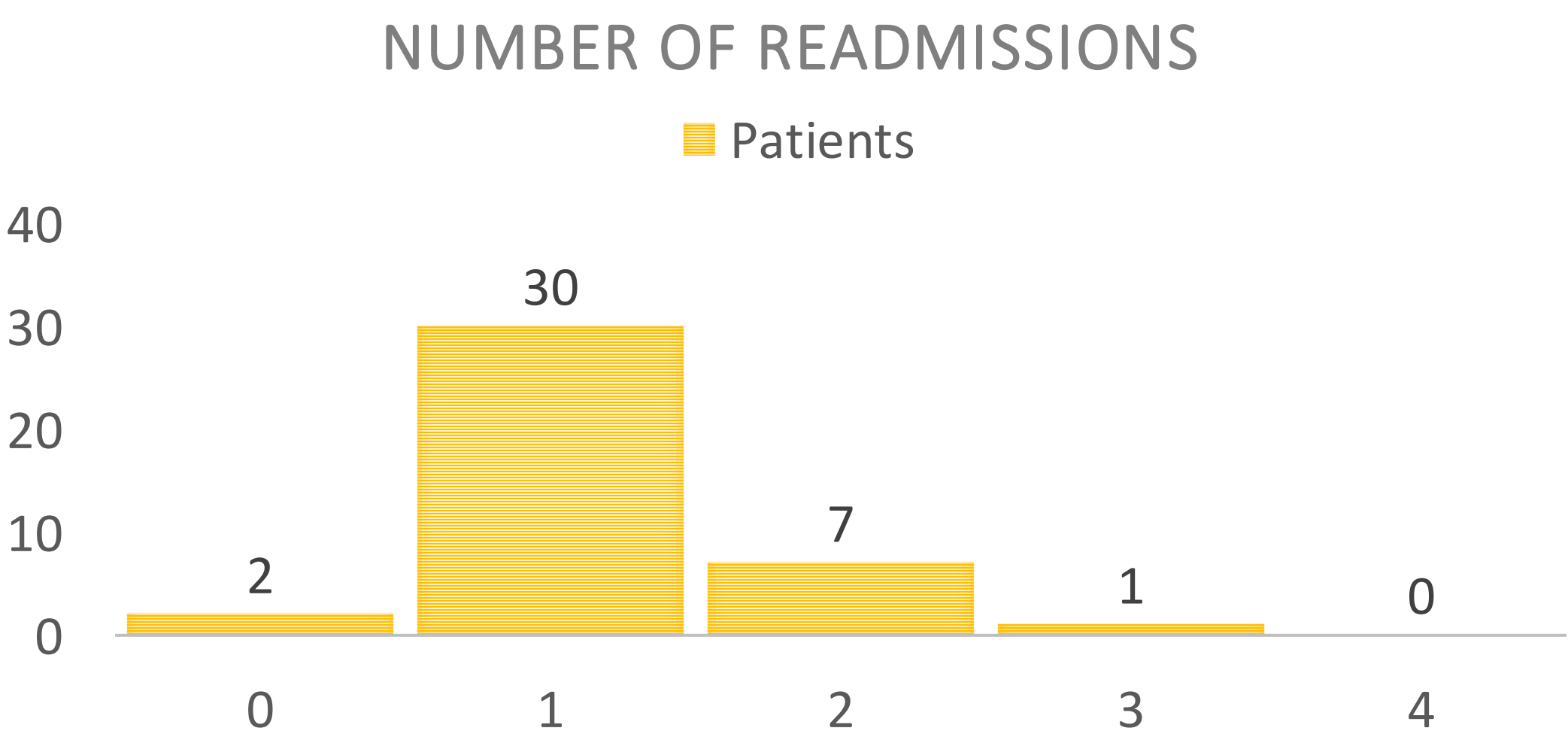
SURGICAL MANAGEMENT: 18 PATIENTS



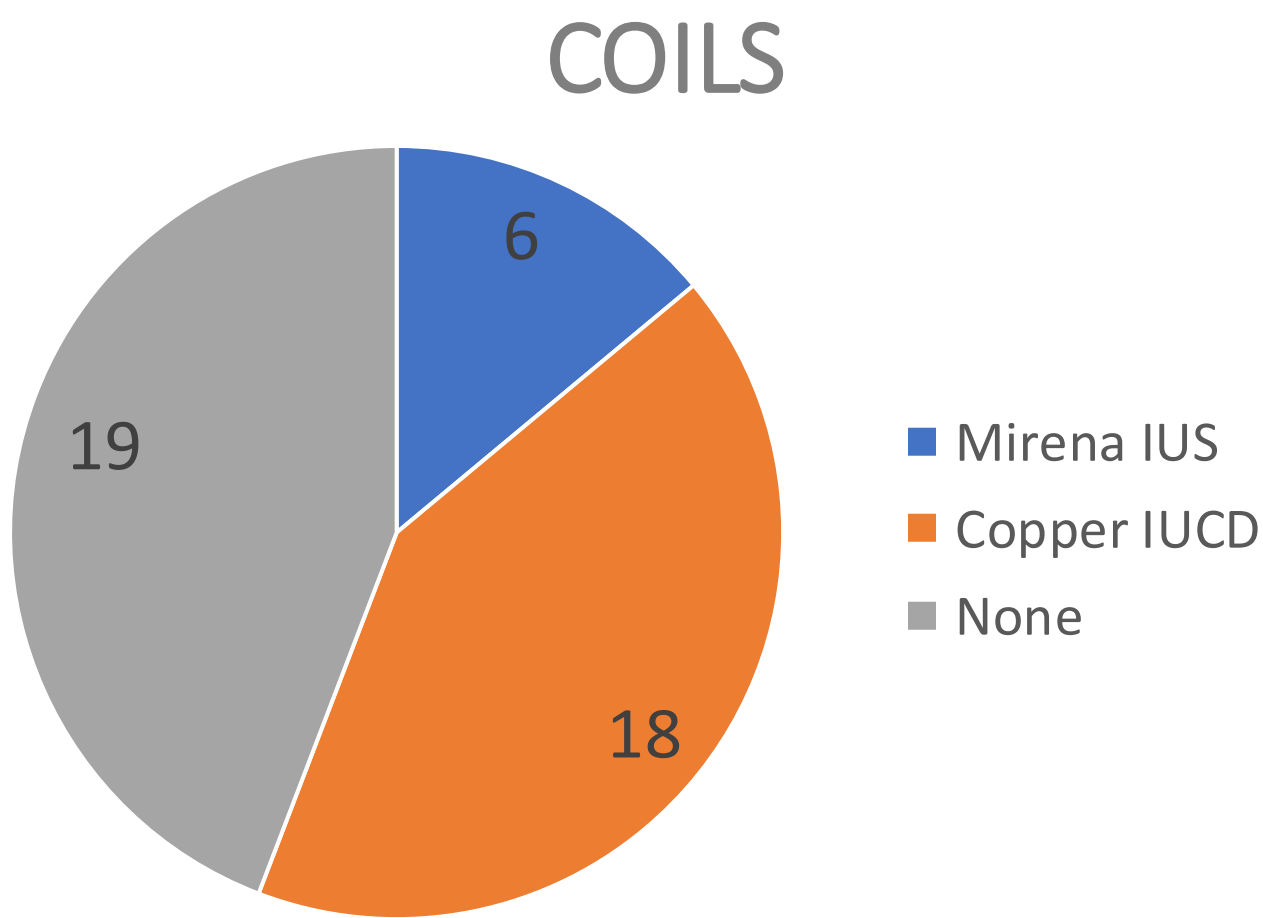
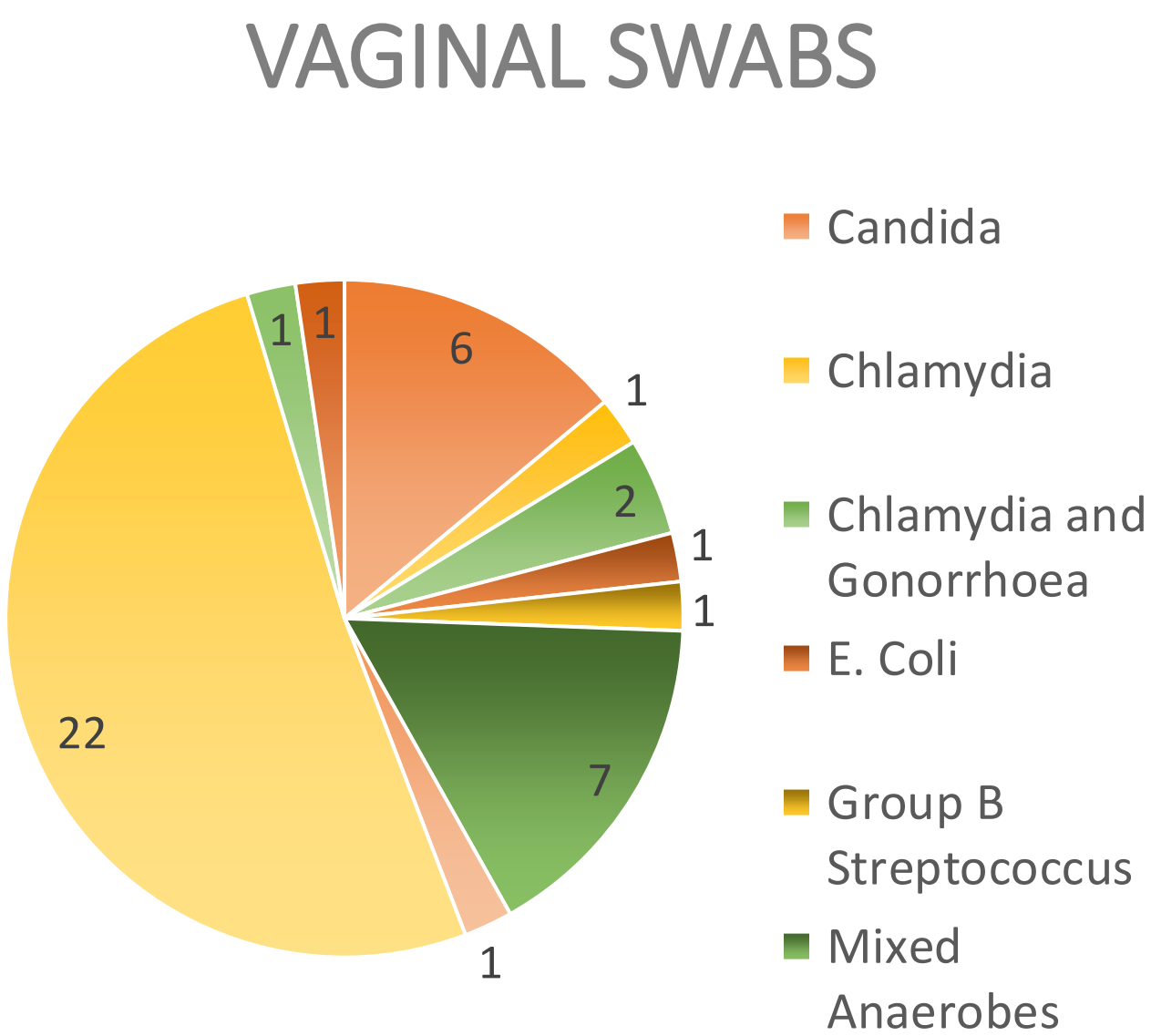
SURGICAL + DRAINAGE: 1 PATIENT



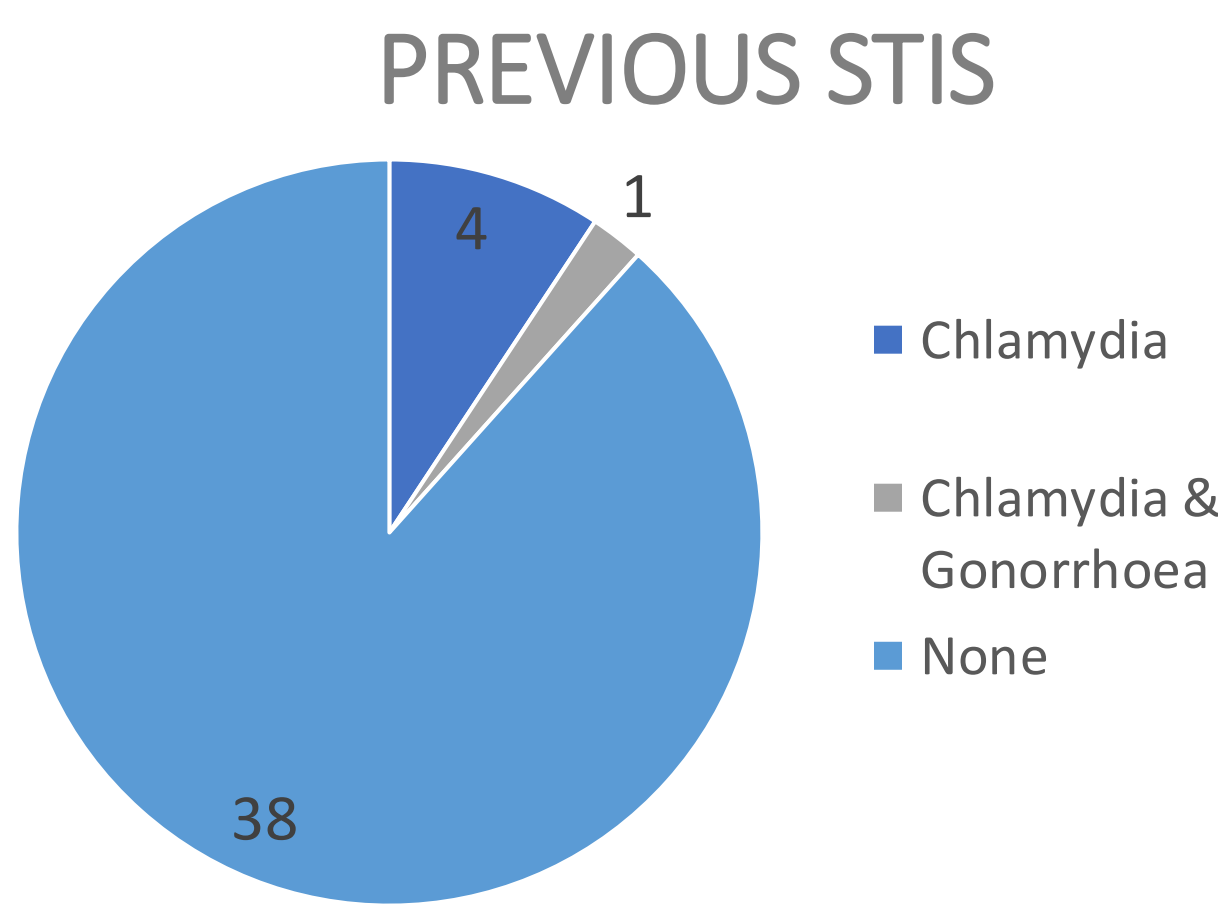
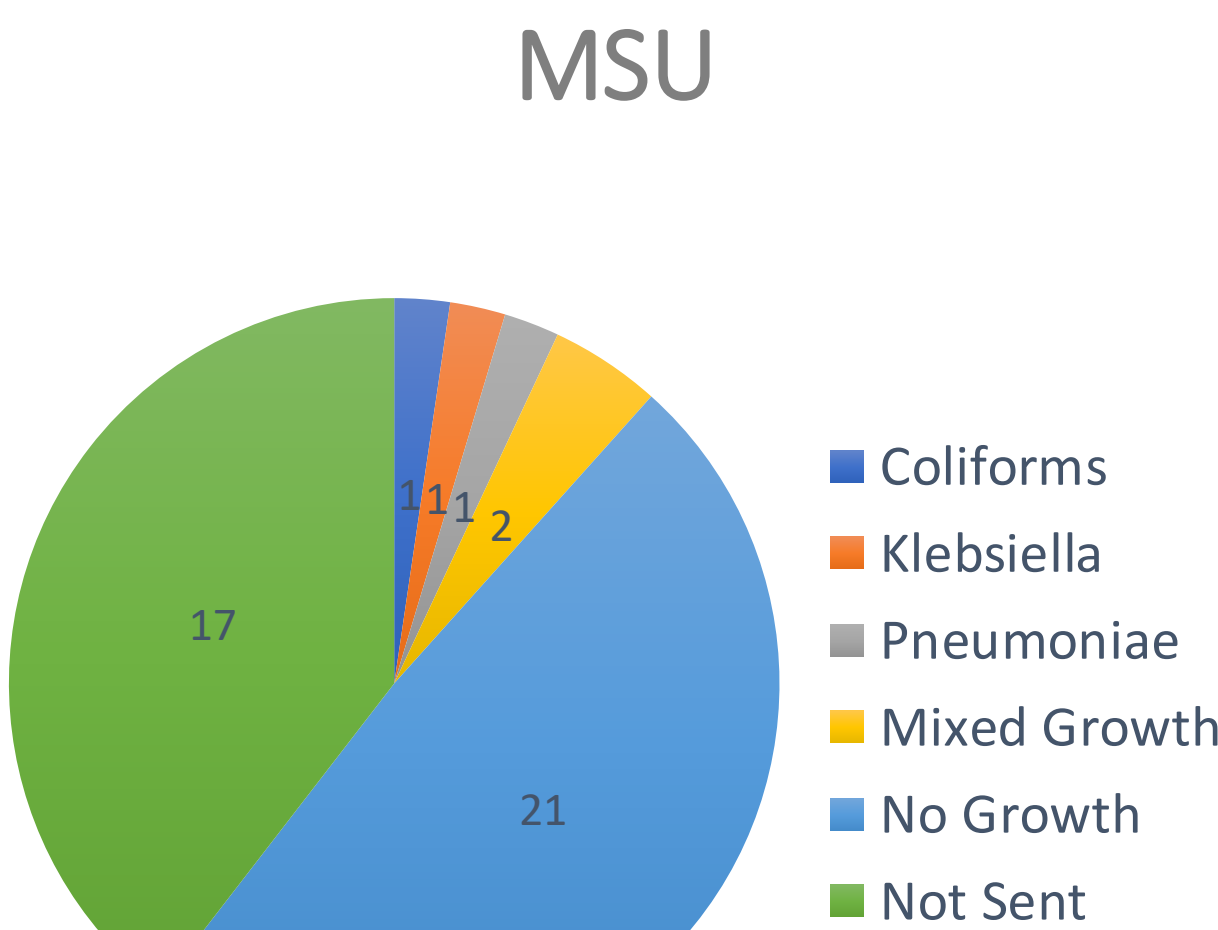
Mean Length of Stay was 7.4 days (range 1–37). Kruskal-Wallis revealed a significant difference in LOS between management groups ($H=10.01$, $p=0.0185$), which, on visual inspection, appeared to be driven by one outlier requiring surgery and drainage.



No significant difference between management groups ($F=1.52$, $p=0.2328$).



55% of patients had an intrauterine device (all removed). Vaginal swab cultures were positive in 46.5% (Candida, mixed anaerobes). The majority of mid-stream urine cultures were negative. 38/40 patients had no history of previous STIs.



Results

Management

Source control attempted in the majority (53%) of patients often per microbiology recommendation. Limited availability of image guided drainage in our trust reduced number of patients managed this way.

Complications

Surgical patients had a 20% complication rate – including bowel injury, ITU admission, return to theatre for midline laparotomy and re-admission for collection drainage. There were no complications in the IR drainage group.

Consultant Review

Only 12% of patients had daily consultant reviews; 7% had none.

Follow-Up

All but one patient had follow-up arranged. 33 with transvaginal ultrasound in the acute gynaecology unit, 9 with MRI. 16 patients were seen in gynaecology clinic and 8 received complex outpatient antibiotic therapy follow-up from the microbiology.

Conclusion

LOS outcomes were comparable across management modalities. Surgical complications align with literature reports (2), but the complication-free drainage cases suggest potential benefits from standardised radiology and microbiology input. Clarifying imaging criteria, particularly for suspected endometriosis, may optimise resource utilisation and patient care. These findings will inform local TOA guidelines, aiming to standardise management.

Bibliography

Kairys N, Roepke C. Tubo-Ovarian Abscess [Internet]. Nih.gov. StatPearls Publishing; 2019. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK448125/>
Carlson S, Batra S, Billow M, El-Nashar SA, Chapman G. Perioperative complications of laparoscopic versus open surgery for pelvic inflammatory disease. J Minim Invasive Gynecol [Internet]. 2021;28(5):1060–5. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S1553465020308785>