

Comparing Surgical and Medical Management of Tubo-Ovarian Abscesses: A Retrospective Single Tertiary Centre Study



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Introduction

Tubo-ovarian abscess (TOA) is an inflammatory mass that forms most commonly as a complication of untreated pelvic inflammatory disease (PID). Women can be managed either medically with IV antibiotics, or with surgical drainage. PID affects one in ten women during their reproductive years, and one third of these patients are hospitalised due to a TOA². The reported success of intravenous antibiotics alone ranges from 34% to 87.5%, with surgical intervention needed in approximately 25% of all TOAs^{1,2}. This study aims to identify factors which may predict successful management.

Methods

This was a 5-year retrospective study of women with a TOA, at a tertiary centre between January 2013 and December 2017. Patients who were managed surgically were compared with those who had medical management. Data collected included the patients age, BMI, length of stay, obstetric and gynaecological history, smoking status, past medical history, pathology results on admission, medical imaging results and clinical outcomes.

Failure for surgery was defined as recurrence within 1 year, and failure for medical management was defined as needing surgical management during that admission.

Results

50 women were treated for a TOA during the 5 year study period. The mean age was 37.0 years, and the mean BMI was 27.7 kg/m². 19 women (38%) were managed medically, and 31 women (62%) were managed surgically (Figure 1). The mean length of stay for the surgical group was 7.5 days, compared to 6.9 days in the medical group.

Of the 19 women managed medically, 7 women (37%) required surgical management. In the group who were successfully managed medically, compared to those who required surgery, the mean WBC, CRP and TOA diameter was 16.5 and 15.7 x10⁹/L, 164.9 and 178.6 mg/L, 53.5 and 82.4mm respectively (Figure 2).

Of the 31 women in total who had surgery, 29 women in the surgical group underwent laparoscopy, and 2 of those cases were converted to laparotomy. One woman had a planned laparotomy and one woman had a failed CT guided drainage, which required further laparoscopic drainage. There were 3 women (10%) who had a recurrence requiring repeat surgery within 1 year. Comparing women who did not have recurrence within 1 year and those who had a recurrence, the mean WBC, CRP and TOA diameter was 15.4 and 21.6 x10⁹/L, 234.6 and 116.3mg/L, and 57.6 and 84.5mm (Figure 3).

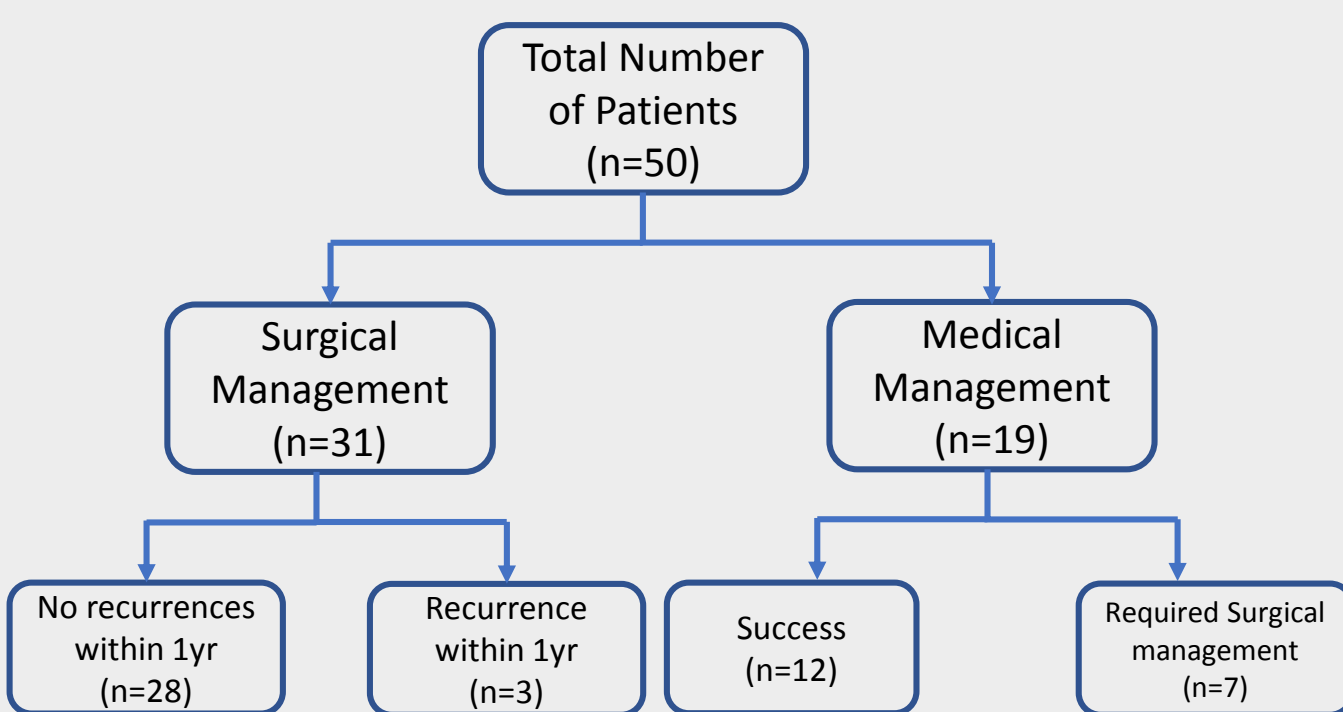


Figure 1. Breakdown of outcomes in surgical and medical groups

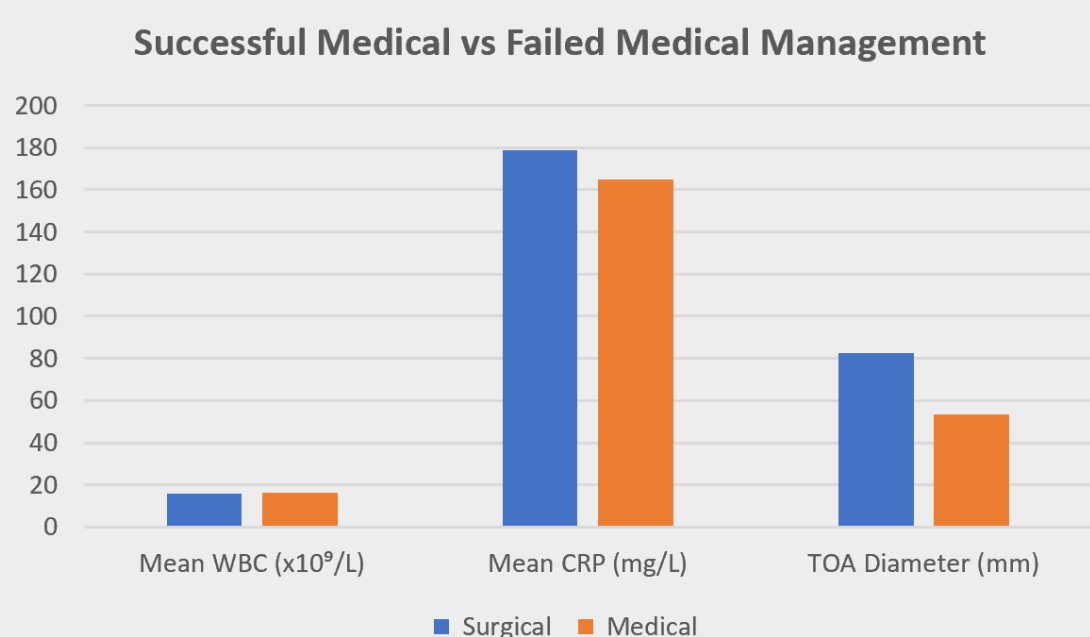


Figure 2. Comparing variables between successful medical and failed medical management groups

Conclusion

Length of stay was comparable between the two groups. Higher CRP and larger TOA diameter may be predictive of failure of medical management. Having a higher WBC and larger TOA diameter may be predictive of TOA recurrence within a year following surgical drainage.

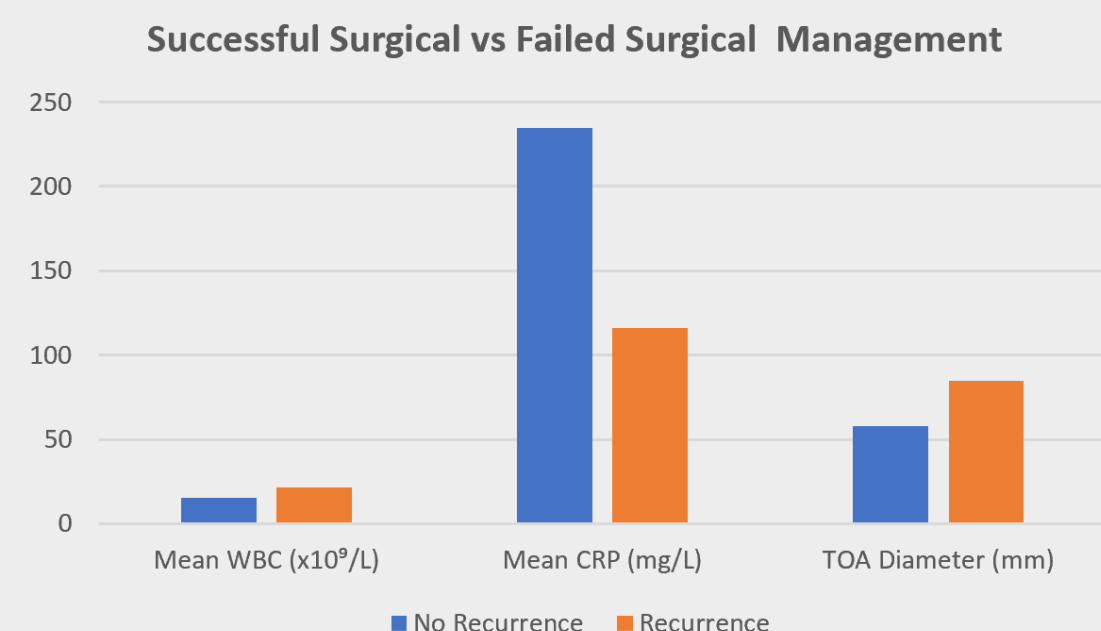


Figure 3. Comparing variables between successful surgical and failed surgical management groups

References

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