

INTRODUCTION

Post-operative intra-abdominal adhesions are the leading cause of small bowel obstruction (SBO) and remain one of the main diagnoses warranting emergency laparotomies. The National Audit in Small Bowel Obstruction advocates the use of water-soluble contrast agents (WSCA) as initial management of SBO. We aim to assess the role and outcomes of WSCA and its rate in successfully managing SBO non-operatively.

METHODS

We conducted a 2-year retrospective analysis including all patients admitted with adhesive SBO. Outcomes of patients who received WSCA were compared to those who hadn't. Subsequent need for surgery and length of stay (LOS) were compared using non-parametric Kruskal-Wallis test.

RESULTS

- 77% of patients were initially managed conservatively.
- From this group, 58.2% received WSCA as part of initial management.
- Almost 40% of the patients that received WSCA were successfully managed non-operatively compared to the 28.5% that didn't, this however lacked statistical significance (*Figure 2*).
- LOS didn't differ between the two groups (5 days vs. 5.5 days, $p=0.805$).
- 32% of the patients required eventual surgical intervention needing longer LOS regardless of receiving WSCA (6.6 days vs. 13.6 days $p<0.001$).

Figure 1: Flow of patients

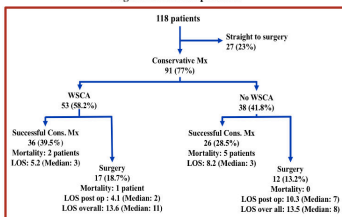
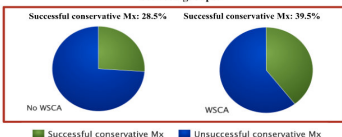


Figure 2: Successful conservative management comparison between groups.



CONCLUSION

Adhesive SBO remains a common surgical emergency that can be managed conservatively in up two-thirds of patients. The use of WSCA has a positive impact but needs further assessment in larger studies.