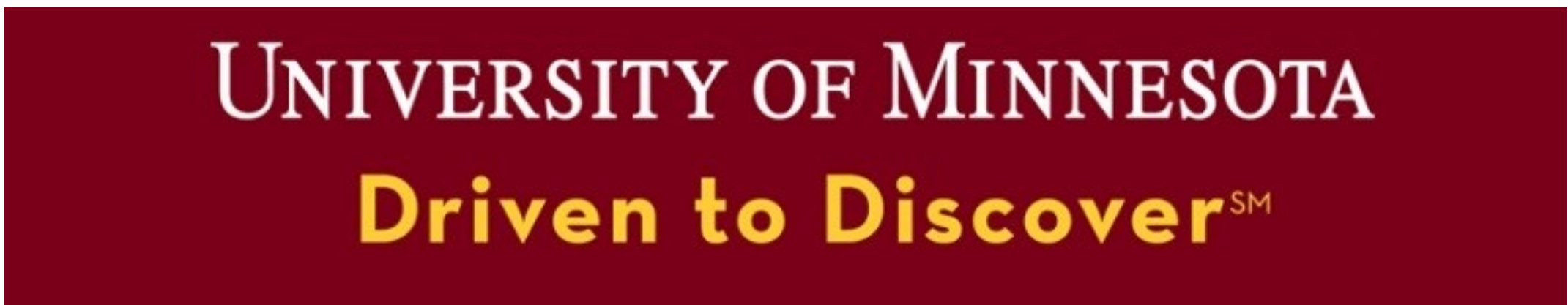




Clinical Outcomes in Crohn's Disease Patients with Acute Appendicitis Treated Operatively vs Non-Operatively

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INTRODUCTION

- The effects of surgical vs medical management of appendicitis in Crohn's disease (CD) patients remain unknown.
- Our aim was to evaluate outcomes of CD patients who have undergone operative vs. non-operative treatment of acute appendicitis.

METHODS

- Retrospective cohort study of adult CD patients presenting with acute appendicitis between 1/1/2015 and 12/31/2020.
- Collected demographics, CD classification, medications, disease activity, appendicitis course and subsequent complications and disease outcomes.
- A t-test was used to compare continuous variables and Fisher's exact tests were used to compare categorical variables. Univariate logistic regression was used to compare outcomes for those treated with operative versus non-operative management of appendicitis.

RESULTS

- 8 patients (33%) received nonoperative management with antibiotics.
- 16 patients (66%) had surgical management.
- 5 patients (63%) in the medically managed group had a CD flare on admission vs. 1 (6%) in the surgically managed group (63% vs 6%, p<0.01).
- 4 patients (50%) treated with antibiotics eventually required an appendectomy. These patients were more likely to have:
 - Ileocolonic disease
 - CD flare at time of appendicitis requiring treatment
 - Complication (abscess, fistula or perforation) at time of appendicitis
- No differences in length of stay, rate of complications up to 6 months, time to subsequent CD-related surgery or time to CD flare were seen between the two groups.

In Crohn's disease, antibiotic therapy alone can be an effective and safe option for the treatment of acute appendicitis, especially in patients presenting with a concomitant flare.



Non-operative management can help avoid eventual surgery in half of patients.

Table 1. Clinical characteristics of Crohn's Disease patients presenting with acute appendicitis

| | All | Antibiotics (n=8) | Surgery (n=16) | P-value |
|---|-----|-------------------|----------------|---------|
| Sex | | | | >0.05 |
| F | 10 | 4 (50%) | 6 (37%) | |
| M | 14 | 4 (50%) | 10 (63%) | |
| Montreal Classification Age | | | | >0.05 |
| A1 | 3 | 2 (25%) | 1 (7%) | |
| A2 | 14 | 4 (50%) | 10 (72%) | |
| A3 | 5 | 2 (25%) | 3 (21%) | |
| Montreal Classification Location | | | | |
| L1 | 9 | 2 (25%) | 7 (44%) | |
| L2 | 6 | 2 (25%) | 4 (25%) | |
| L3 | 9 | 4 (50%) | 5 (31%) | |
| Presence of flare during admission | | | | <0.01 |
| Yes | 18 | 5 (63%) | 1 (6%) | |
| No | 6 | 3 (37%) | 15 (94%) | |
| Age at appendicitis episode | | 31 (18-44) | 40 (31-49) | >0.05 |
| Length of stay | | 2.5 (1.9-3.1) | 2.3 (0.9-3.8) | >0.05 |

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