Laparoscopic Surgery For Complicated Diverticulitis: A Nine-Year Retrospective Review Of Outcomes

David Moros MD; Manuel E. Moros MD; Oscar G. Villamizar MD; Hender Hernandez MD; Ramon Duran MD; Alexander Bahamon MD; David Figueroa MD; Leonardo Carrascal, MD; Deivis Lopez MD

Clínica Gastroquirúrgica, Clínica Santa Ana, Hospital Universitario Erasmo Meoz, Cúcuta, Colombia

Introduction

- Diverticulitis is a common condition with rising incidence, especially in older population, with 12% developing complications and 15% requiring surgery
- Minimally invasive surgery, aligned with Enhanced Recovery After Surgery protocols, is increasingly preferred for managing complicated cases
- These approaches are associated with better outcomes, including faster recovery and shorter hospital stays

Objective

- To evaluate our experience and outcomes of laparoscopic surgery for complicated diverticulitis in a Latin American setting, in academic and non-academic centers

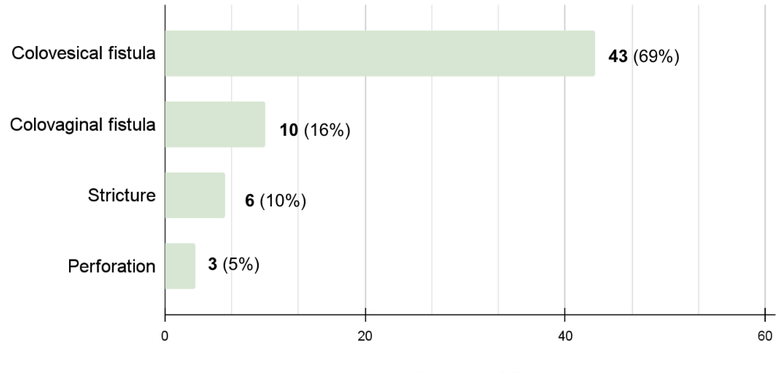
Methods

- Timeframe: January 2015 to July 2023
- N = 62 patients who underwent laparoscopic surgery for complicated diverticulitis
- Preoperative characteristics, intraoperative details, and postoperative outcomes were retrospectively collected. All surgeries were done by the same surgical teams

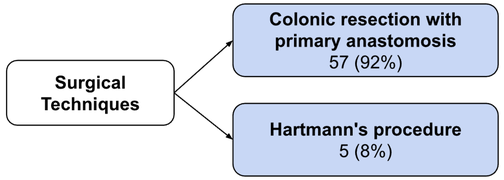
Results

Preoperative Characteristics	*n (%), mean (SD)*
Age (years)	62 ± 13
Female	39 (63)
BMI 25 - 30	32 (51)
ASA I	16 (26)
ASA II	41 (66)
ASA III	5 (8)
Comorbidities	27 (44)
Hypertension	6 (10)
Coronary Artery Disease	2 (3.2)
COPD	6 (10)
Diabetes	5 (8.1)
Chronic corticosteroid use	2 (3.2)
Others	6 (10)

Complicated Diverticulitis Presentation

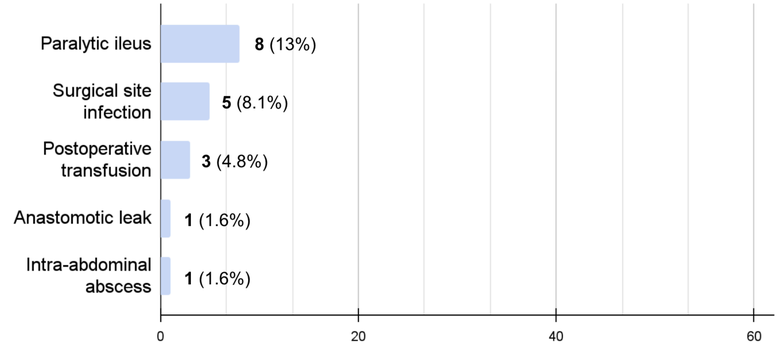


Intraoperative Details	*n (%), median (IQR)*
Conversion to open surgery	7 (11)
Technical difficulties	7 (100)
Estimated blood loss < 100 mL	31 (50)
Operative time (min)	130 (100 - 190)



Postoperative Recovery	*n (%), median (IQR)*
Initiation of oral diet (days)	1 (1 - 2)
Transition to oral analgesia (days)	3 (3 - 4)
Requirement of Surgical ICU	9 (15)
Length of hospital stay (days)	5 (4 - 6)

Postoperative Complications



Postoperative Outcomes	*n (%), median (IQR)*
Reoperation	7 (11)
Anastomotic leak	1 (1.6)
30-day readmission	3 (8.9)
30-day or in-hospital operative mortality	1 (1.6)
Surgical cause	1 (100)

Conclusion

- Laparoscopic surgery is a feasible and effective treatment for complicated diverticulitis
- This approach offers significant benefits, including shorter hospital stays and low postoperative mortality
- Our findings are consistent with global data, reinforcing its safety and efficacy in an academic and non-academic institutions in a Latin American setting
- Structured, experienced surgical teams play a crucial role in achieving optimal patient outcomes