

# Extraperitoneal sigmoidopexy versus Sigmoidectomy for sigmoid volvulus: a prospective comparative study

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# Background

- **Sigmoid volvulus (SV) is one of the main causes of large bowel obstruction throughout the world, particularly among the elderly).**
- **Initial treatment includes deflation and subsequent de-twisting of the sigmoid colon followed by definitive treatment either non-resective or resective procedures**
- **The mainstay of treatment of SV is resection of redundant sigmoid colon. While recurrence is essentially absent, it is linked with an increase in the mortality rate (14–45%).**



# Objectives

- Extraperitoneal sigmoidopexy is a simple ,safe and effective non-resective procedure with minimal morbidity and mortality.
- It could be an alternative treatment in elderly and fragile patients with non complicated SV

# Method

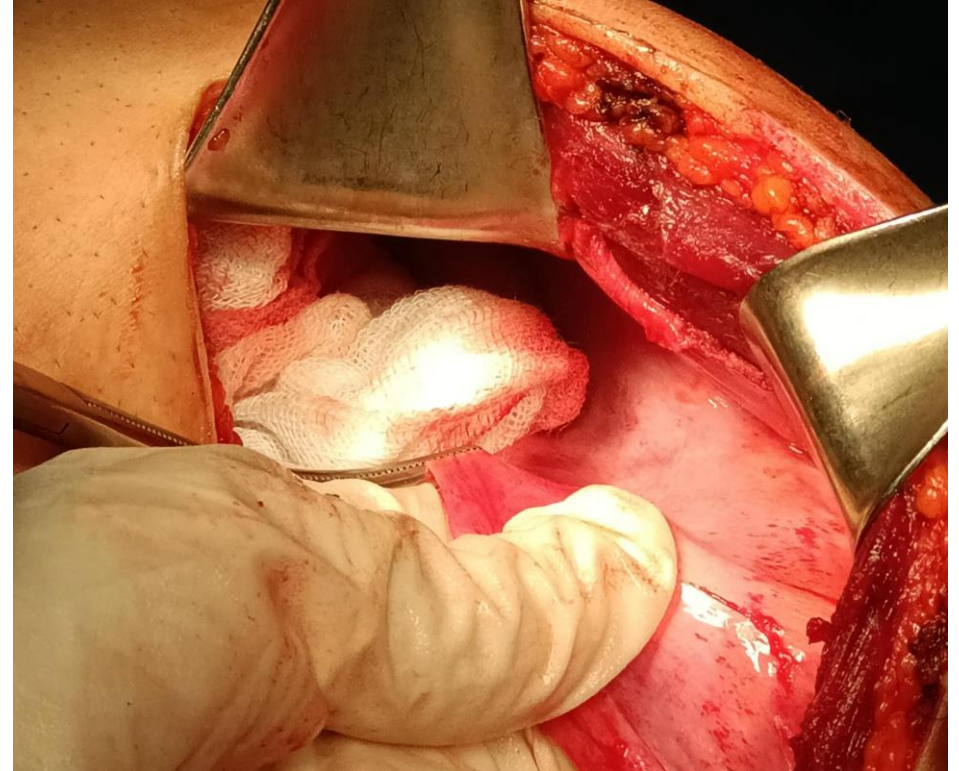
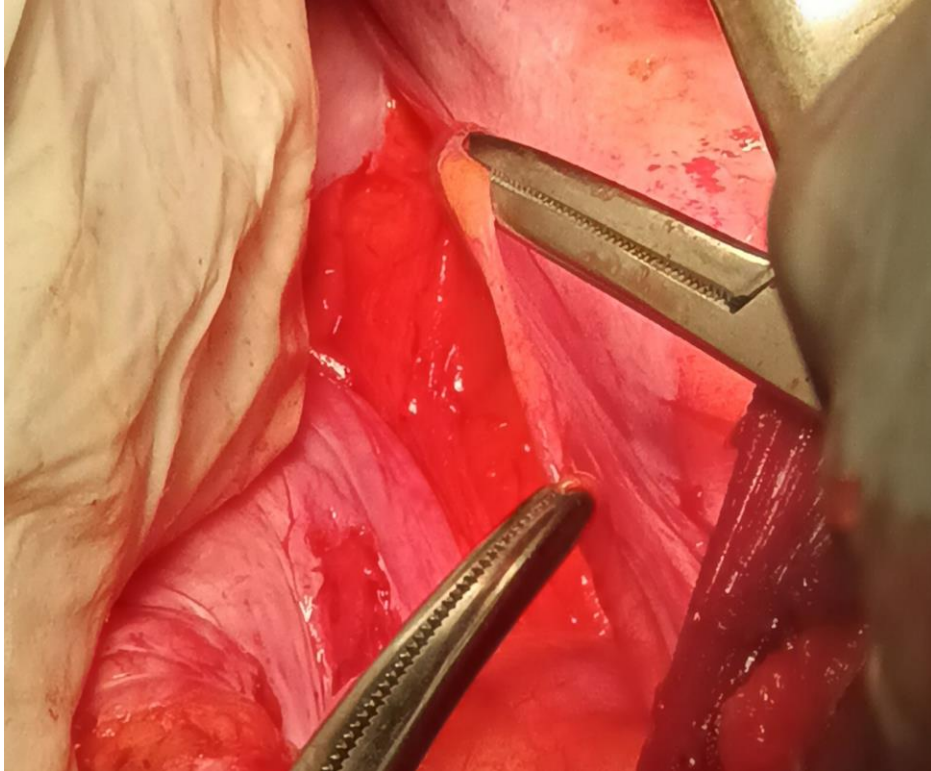
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- a prospective comparative study on 105 patients who had uncomplicated SV,
- from June 2021 to January 2023. At **Asyut University** Hospitals, Egypt,
- The study population were divided into two groups: **group A** was managed extraperitoneal sigmoidopexy, while **group B** was treated by sigmoidectomy and primary anastomosis.



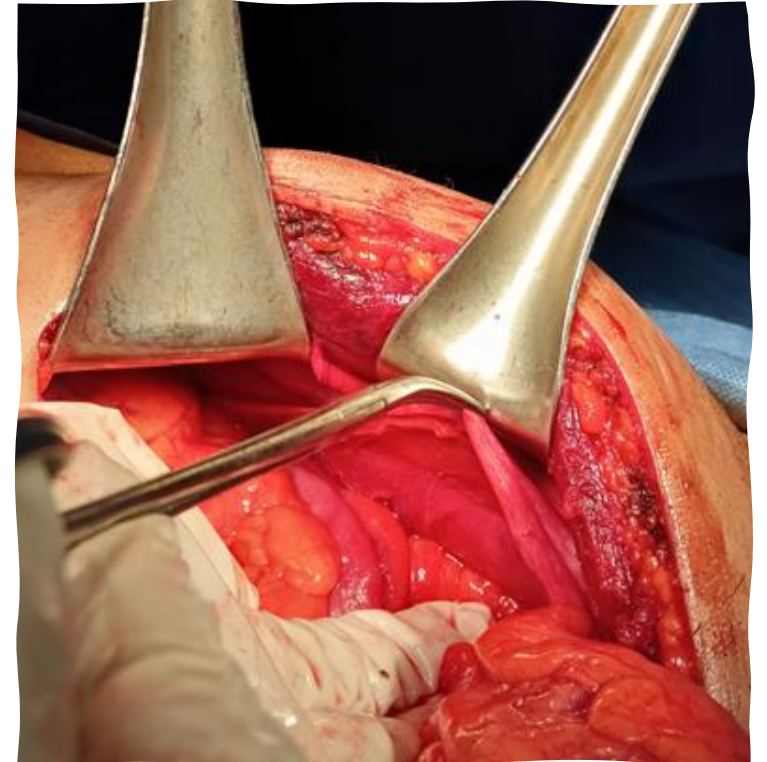
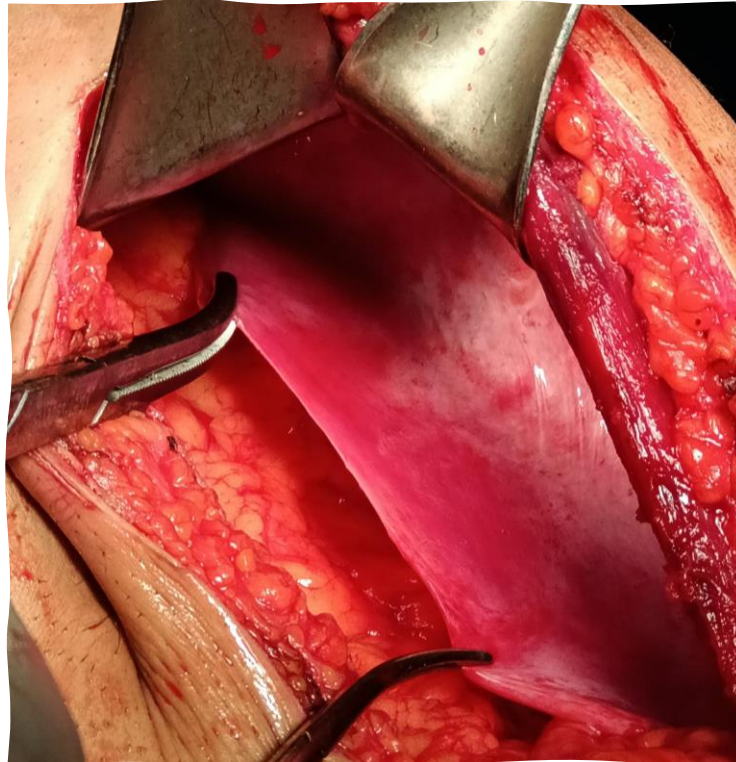
# Technique

- Midline or ght paramedian incision
- Starting opposite the ischial promontory and extending upward to the level of splenic flexure



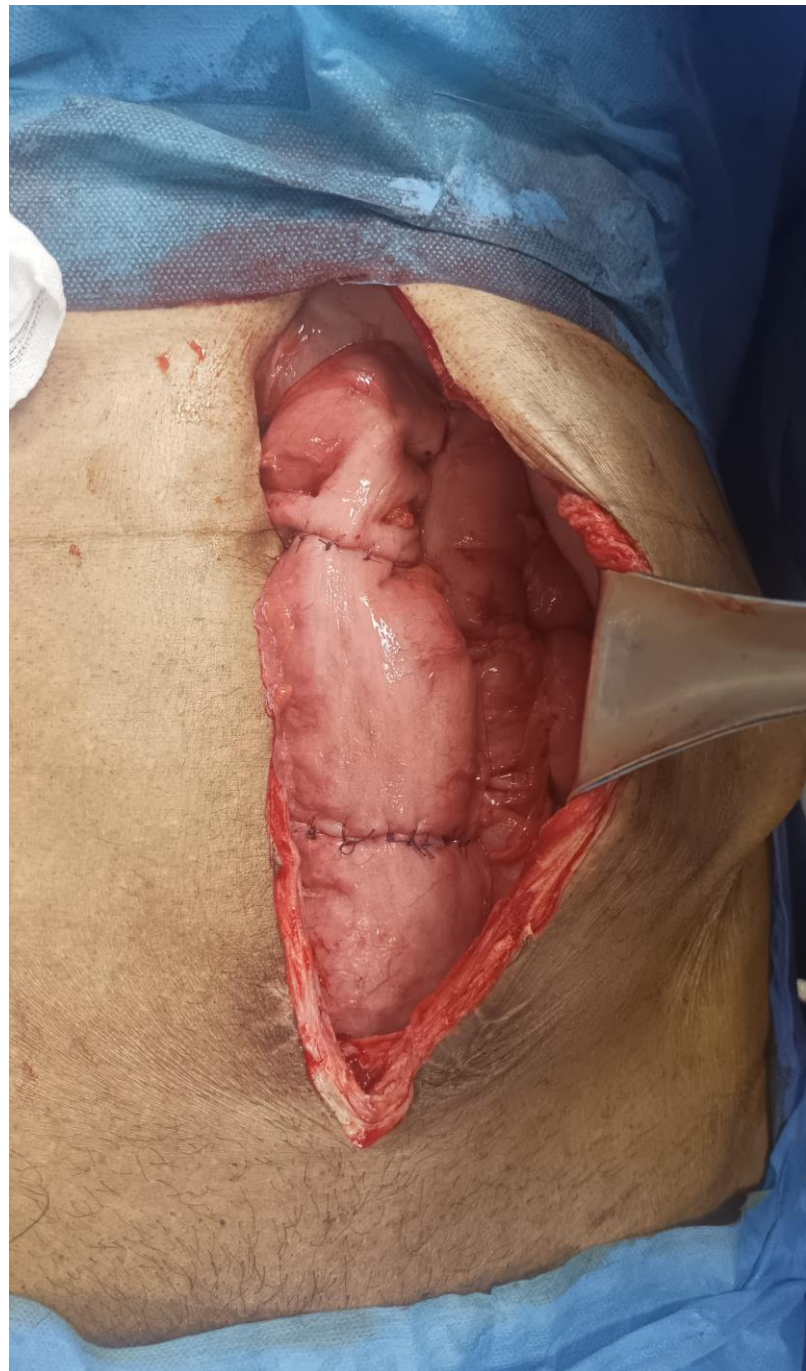
an extraperitoneal pocket-like pouch was developed on the lateral abdominal wall between the peritoneum and anterolateral abdominal muscle

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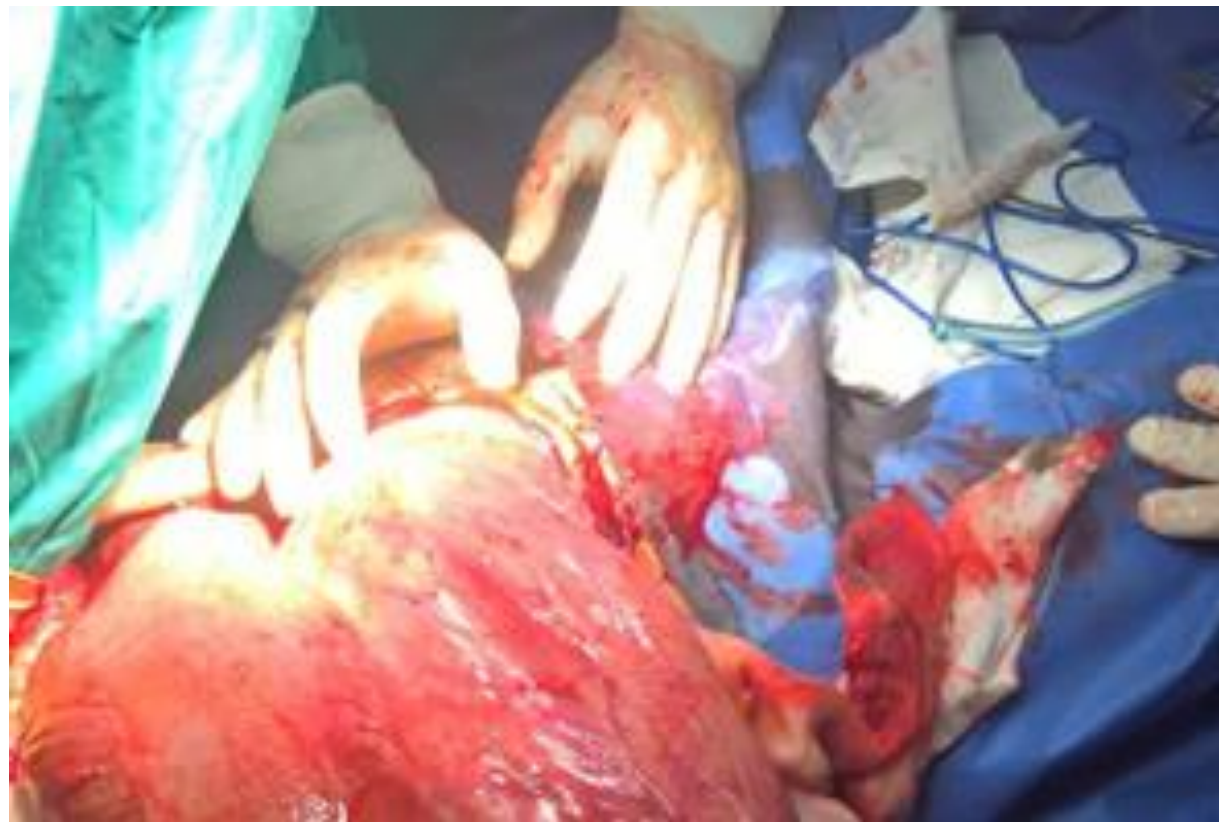
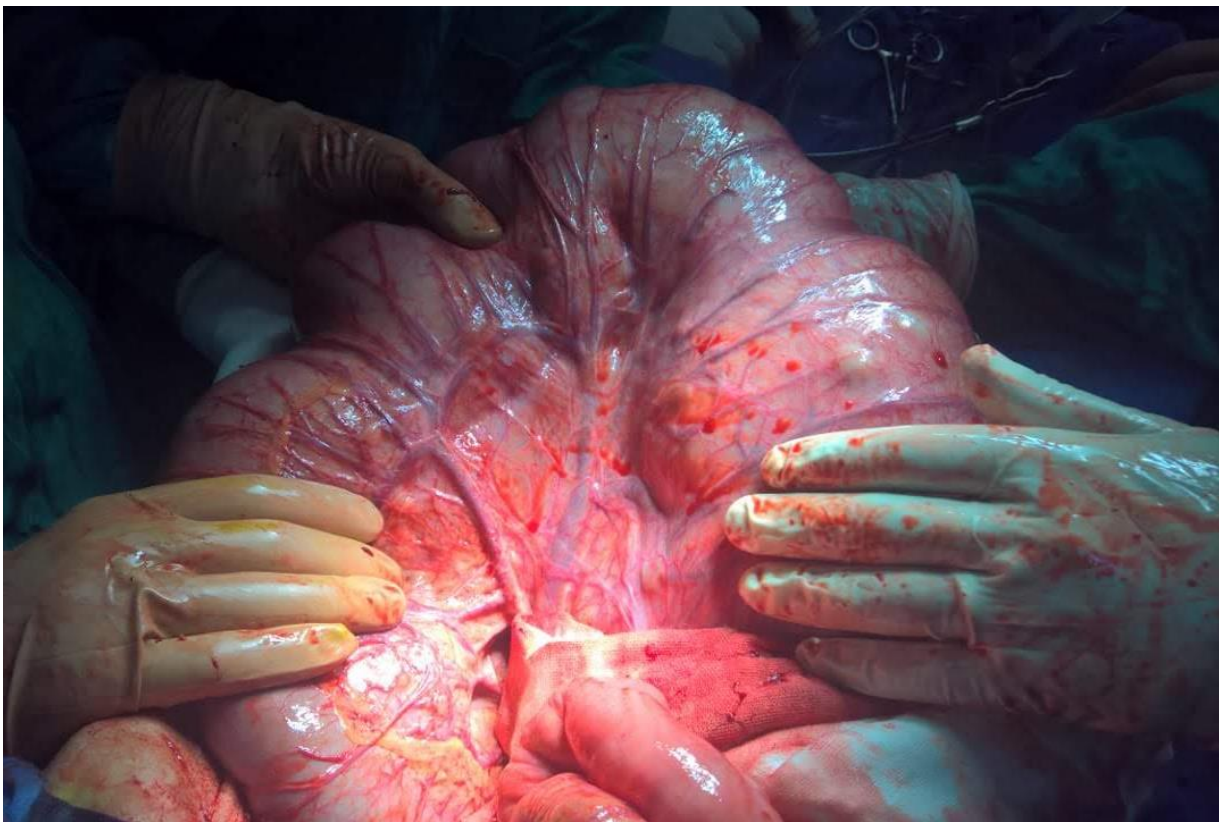


- The untwisted colon had been buried into this area at this time. The generated peritoneal fold was subsequently sutured to the sigmoid mesentery with continuous absorbable sutures in the first few cases, and then with interrupted absorbable sutures (2/0 Vicryl) in the remaining cases

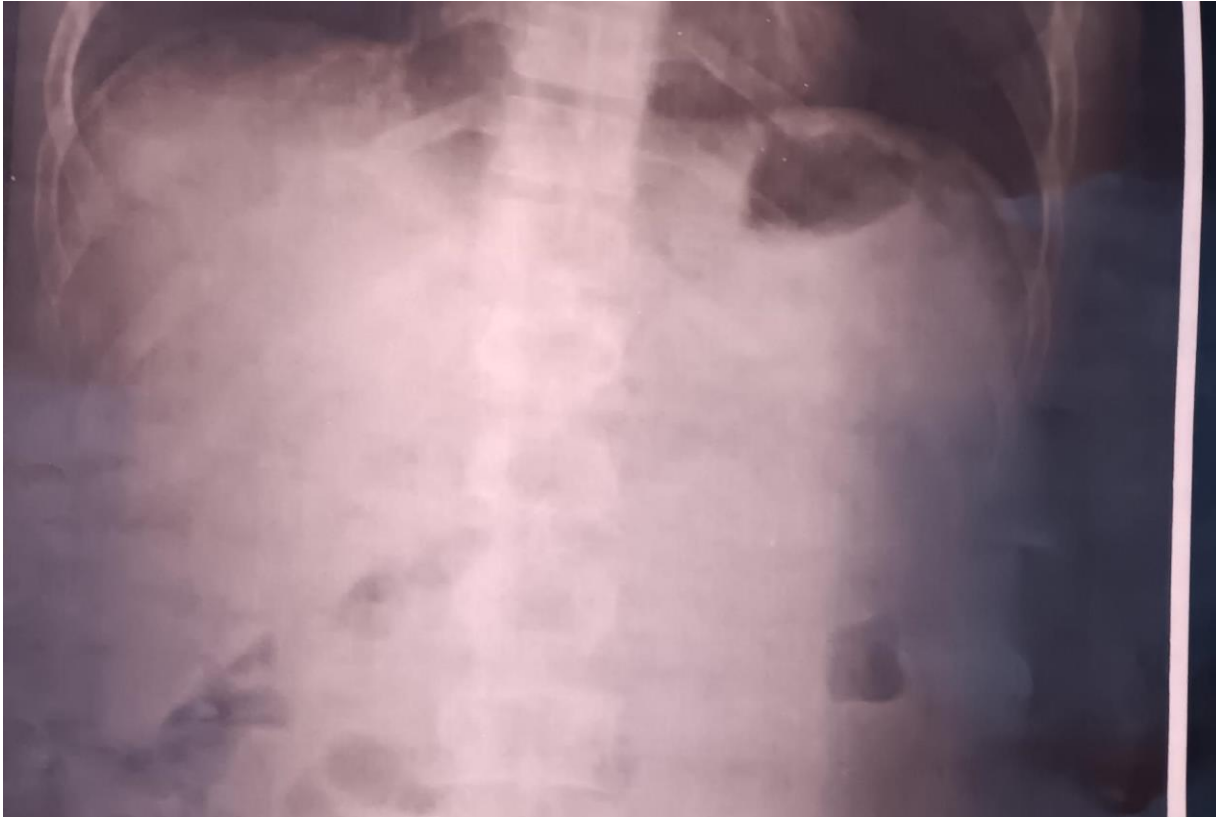




# Megacolon



# Pre and post operative plain x ray



# Results

	Group A No=56	Group B No=49	P value
<b>Age (mean ±SD)</b>	65.33±2.65	66.21± 3.59	0.1528
<b>Sex male (no %)</b>	43(76.7%)	40(81.6%)	0.5406
<b>Elective</b>	40(71.3)	37(75.5)	0.6292
<b>Previous attack</b>			
≤ 2	36 (64%)	28( 57%)	0.4530
≥ 3	24	33	
<b>Chronic constipation</b>	49	43	0.9754
<b>Associated medical diseases</b>			
<b>DM</b>	33	29	0.9835
<b>HTN</b>	26	28	0.0816
<b>Psychological instability</b>	14	9	0.3950
<b>Megacolon</b>	4	7	0.2369

	Group A No=56	Group B No=49	P value
Operative time	62.25±1.38	87.60±2.38	< 0.0001*
Hospital stay (days)	6.25±0.29	9.04± 0.34	< 0.0001*
ICU admission	1(1.87%)	4(8.1%)	0.1298
Wound infection	4(7.1)	12(24%)	0.0142*
Incisional hernia	2(3.5%)	9(18.3%)	0.0137*
Pneumonia	7(12.5)	11(22.4%)	0.1812
Leakage	0	5(10.2%)	0.0148*
Mortality	0	1(2.05)	0.2875
Readmission	1(1.7)	2(4.1)	0.4608
Additional surgery	3(5.3%)	1(2.05)	0.4608
Recurrence of symptoms	11(19.6%)	1(2.05%)	0.0050*

# Conclusions

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- Extraperitoneal sigmoidopexy is a simple, safe, and effective treatment option for non-complicated SV. Despite higher recurrence, it has a lower morbidity and mortality compared to Sigmoidectomy
- It could be an alternative treatment in elderly and fragile patients with non complicated SV



## Extraperitoneal sigmoidopexy versus sigmoidectomy for sigmoid volvulus: A prospective comparative study ^

### 1 | INTRODUCTION ∨

Globally, sigmoid volvulus (SV) is one of the main causes of large bowel obstruction throughout the world, particularly among older individuals.<sup>1,2</sup> Initial treatment includes deflation and subsequent de-twisting of the sigmoid colon, followed by definitive treatment with either non-resective or resective procedures.<sup>3-5</sup> The mainstay of treatment of SV is resection of the redundant sigmoid colon. While recurrence is essentially absent, it is linked with an increase in the mortality rate (14-45%).<sup>6,7</sup> Bhatnagar and Sharma have published the outcome of a study of 84 patients between 1968 and 1992 and therefore, they have introduced extraperitonealization sigmoidopexy as a safe non-resective surgery in the treatment of uncomplicated SV.<sup>8</sup> Furthermore, additional studies confirmed its feasibility, safety, and efficacy. This procedure

