Success with Novel Combined Endoscopic and Fluoroscopic Approach for Distal Small Bowel Obstruction

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Background

Adhesive small bowel obstruction (SBO) often requires surgical management.

But

THE FUTURE: LESS INVASIVE & LESS expensive

Here we presented 9 adhesive SBO cases treated with combined endoscopic and fluoroscopic imaging.

Our strategy

Acute SBO

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Resuscitation

- Strangulation
- Peritonitis
- Bowel ischemia

→ **Surgical treatment**

Others (distal bowel) → **Endoscopic and radiologic approach**

Chronic/ Intermittent SBO

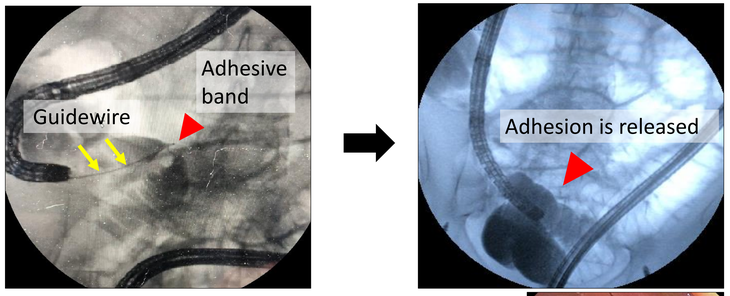
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Resuscitation

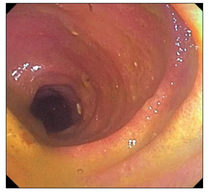
? → Distal bowel) → **Endoscopic and radiologic approach**

Surgical treatment

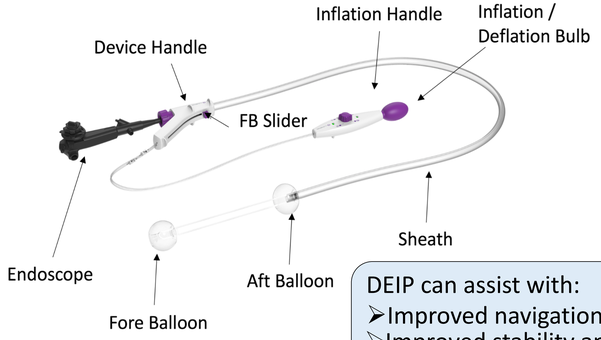
Endoscopic and radiologic approach



1. Guidewire passed through the obstruction
2. Colonoscope advanced along the guidewire (+/- Balloon Dilation)
3. Adhesion is released.



Double-balloon endolumenal interventional platform (DEIP)



DEIP can assist with:
- Improved navigation
- Improved stability and visualization
- Efficient delivery

Case Details

#	Age	History	Onset (Decompression days)	Distance from ICV/Anastomosis	Others	Follow-up (month)
1	85	Right Colectomy	Acute (3)	10 cm (Anastomosis)	No	27.5
2	68	Cesarean Sections	Acute (7)	50-60 cm (ICV)	No	25
3	79	Cystectomy	Acute (5)	20 cm (Anastomosis)	Dilation	24
4	74	Small Bowel Resection	Acute (1)	5cm (ICV)	No	22.5
5	62	Hysterectomy (Radiation)	Chronic (N/A)	50-60 cm (ICV)	Dilation	20.5
6	68	Ileocecal Resection (Radiation)	Chronic (N/A)	20 cm (Anastomosis)	Dilation/ DEIP	9*
7	81	Appendectomy	Acute (1)	5 cm (ICV)	Dilation/ DEIP	7
8	68	Right Colectomy	Acute (3)	8cm (Anastomosis)	Dilation/ DEIP	4
9	78	Right colectomy Hysterectomy (Radiation)	Chronic (N/A)	5cm (Anastomosis)	Dilation/ DEIP	4

*Case 6 had the recurrence at 3 months after treatment, but she was retreated with relief of obstruction.

Conclusion

Distal SBO using combined endoscopy and advanced imaging may be safe and feasible.