

The Role of Surgery and Adhesion Management in PIPO Cases

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Introduction

We retrospectively reviewed records of patients diagnosed with PIPO and followed between January 2024 and June 2025. Demographic data, clinical history, physical exam findings, and surgical details were collected for patients who underwent surgical intervention.

Material and Methods

Pediatric Intestinal Pseudo-Obstruction (PIPO) is a rare motility disorder mimicking mechanical obstruction without luminal blockage. Nonspecific and persistent symptoms often delay diagnosis, leading to repeated, high-risk surgeries associated with significant morbidity and mortality.

Results

Results from four patients with a genetically confirmed diagnosis were evaluated (Table). At our center, the mean number of surgeries per patient decreased to 1.7. An absorbable **hyaluronic acid–based anti-adhesion barrier gel** was applied in all procedures.

Indications for repeat surgery included **ileostomy revision (n=2)** and **incisional hernia repair (n=1)**. No significant adhesions or complications were observed (Figure).

Table. Clinical Findings (n=4)

Mean age	14.2 years (range: 11–18)
Mean age at symp. onset	9.2 years (range: 1–14)
Surgery before referral	Mean 5/patient (range: 4–6), total: 20
Reoperation indications	Adhesiolysis ± bowel resection, ileostomy
Referral	2 for intestinal transplantation, 2 to rehabilitation unit

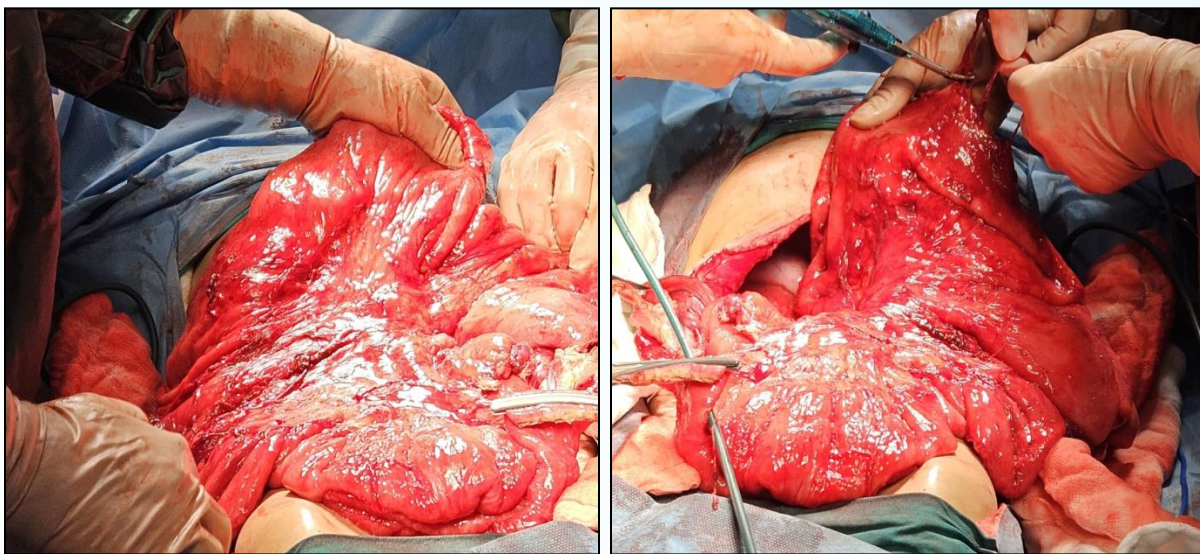


Figure. Intraoperative findings during the second surgery: absence of adhesions, attributed to adhesion barrier application

Conclusion

Surgery in PIPO should be minimized due to the high risk of adhesions. When unavoidable, adhesion barrier gel may reduce morbidity and prevent recurrent adhesions.

