

# Pediatric Interventional Gastroenterology: Minimally Invasive Solutions

## Introduction

Interventional gastroenterology in children has evolved as a minimally invasive specialty addressing gastrointestinal and hepatobiliary disorders. With the advent of pediatric endoscopy and related procedures, many conditions that previously required laparotomy are now managed endoscopically [1].

## Key Procedures

**Percutaneous endoscopic gastrostomy (PEG)** has become standard for children requiring long-term nutritional support. **Endoscopic retrograde cholangiopancreatography (ERCP)** plays an important role in managing biliary atresia and choledochal cysts. Pediatric colonoscopy is now routinely used for diagnosis and therapeutic interventions in inflammatory bowel disease [2].

Capsule endoscopy is another innovation enabling non-invasive visualization of the small bowel, aiding in diagnosis of obscure gastrointestinal bleeding [3].

## Challenges and Future

Challenges in India include lack of specialized pediatric endoscopic equipment and limited

trained personnel. Moreover, ensuring safety in anesthesia for smaller children is a crucial concern [4]. Looking ahead, integration of robotics and AI-assisted imaging may refine diagnostic and therapeutic outcomes in pediatric gastroenterology [5].

## Conclusion

Pediatric interventional gastroenterology provides effective, minimally invasive solutions for complex gastrointestinal disorders. Expanding access to technology and training programs in India will enhance outcomes for affected children.

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**Received:** 01-March-2025,  
Manuscript No. IPDR-25-170179;  
**Editor assigned:** 4-March-2025,  
Pre-QC No. IPDR-25-170179 (PQ);  
**Reviewed:** 20-March-2025, QC  
No IPDR-25-170179; **Revised:**  
26-March-2025, Manuscript No.  
IPDR-25-170179 (R); **Published:**  
30-March-2025, DOI: 10.37532/  
ipdr.2025.8(1).133