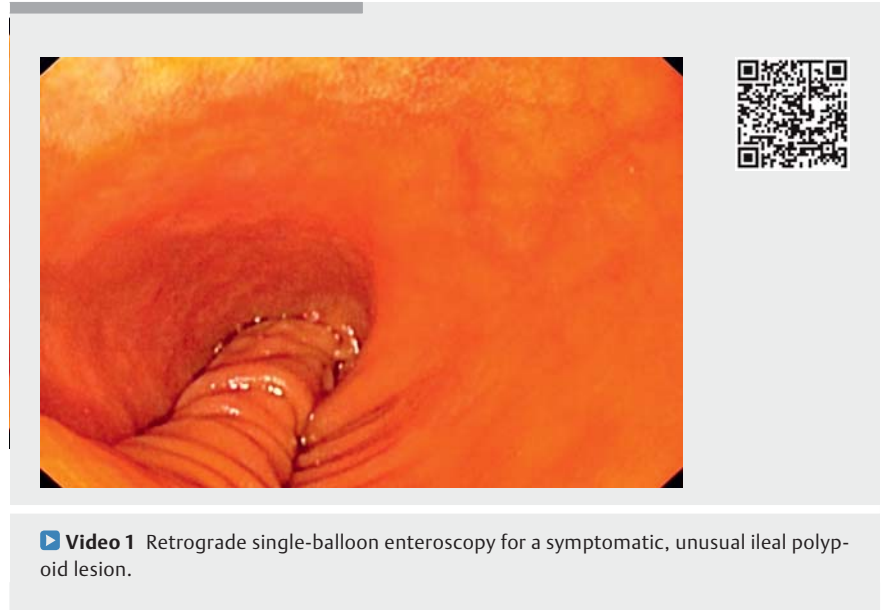


## Retrograde single-balloon enteroscopy for a symptomatic, unusual, ileal polypoid lesion

Meckel's diverticulum is a remnant of the omphalomesenteric duct, which is normally obliterated between the 5th and 8th week of gestation. It occurs in 2% of the population [1] and it is often an incidental finding. Anatomically, Meckel's diverticulum comprises all layers of the intestinal wall and, in approximately 50% of cases, contains ectopic tissues which can cause complications. Meckel's diverticulum can cause abdominal pain, bleeding, and intestinal obstruction but is rarely symptomatic (4%) [2]. Adult intussusception due to an inverted Meckel's diverticulum has also been reported [3].

We report the case of a 42-year-old man who was referred to our institution because of mild microcytic anemia (hemoglobin 10.9g/dL) and a positive fecal occult blood test. Family and past medical history were unremarkable. The patient underwent outpatient gastroscopy and colonoscopy, with negative macroscopic results. Histological analysis of the duodenum, stomach, and colon specimens was inconclusive.

While awaiting a video capsule endoscopy appointment, the patient was admitted to our emergency department because of right lower abdominal pain. Computed tomography of the abdomen revealed a suspicious intussusception of the ileum, which was due to the presence of a tumor. A retrograde single-balloon enteroscopy (GIFQ180; Olympus, Tokyo, Japan) revealed the presence of an inverted Meckel's diverticulum with eroded apex in the distal ileum (70–90 cm proximal to the ileocecal valve). We marked the site with a tattoo (Spot; GI Supply, Mechanicsburg, Pennsylvania, USA) and



**Video 1** Retrograde single-balloon enteroscopy for a symptomatic, unusual ileal polypoid lesion.

an endoclip for laparoscopic segmental ileum resection (► **Video 1**). Histological analysis of the surgical specimen confirmed the diagnosis of inverted Meckel's diverticulum and also showed the presence of inflamed heterotopic pancreatic tissue, as described in the literature in 5% of cases [4]. At follow-up 2 months later, the patient had no symptoms and normal hemoglobin levels. In conclusion, intussusception of Meckel's diverticulum is a rare but important clinical entity with nonspecific presenting symptoms. Diagnosis of Meckel's diverticulum intussusception should be considered and radiologically suspected. Enteroscopy can guide the appropriate surgical or endoscopic management.

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### Competing interests

Cristiano Spada is consultant for Medtronic and received speaker and travel support from Olympus.

### The authors

**Nicola Olivari<sup>1</sup>, Sebastian Manuel Milluzzo<sup>1,2</sup>, Denise Bianchi<sup>3</sup>, Cristiano Spada<sup>1,4</sup>**

- 1 Department of Medicine, Gastroenterology and Endoscopy, Fondazione Poliambulanza, Brescia, Italy
- 2 Department of Gastroenterology, Fondazione Policlinico Universitario A. Gemelli IRCCS – Università Cattolica del Sacro Cuore, Roma, Italy
- 3 Pathology Unit, Fondazione Poliambulanza, Brescia, Italy
- 4 Digestive Endoscopy Unit, Fondazione Policlinico Universitario A. Gemelli IRCCS – Università Cattolica del Sacro Cuore, Roma, Italy

## Corresponding author

**Sebastian Manuel Milluzzo, MD**

Digestive Endoscopy Unit and  
Gastroenterology, Fondazione  
Poliambulanza Istituto Ospedaliero, Via  
Leonida Bissolati 57, Brescia 25124, Italy  
Fax: +39-030-3518221  
sebastian.m.milluzzo@gmail.com

## References

- [1] Perne AS. Meckel diverticulum: Meckel's diverticulum; x-ray diagnosis. *N Engl J Med* 1959; 260: 690–696
- [2] Moore T, Johnston AOB. Complications of Meckel's diverticulum. *Br J Surg* 1976; 63: 453–454

- [3] Ito T, Sato K, Maekawa H et al. Adult intussusception caused by an inverted Meckel diverticulum. *Case Rep Gastroenterol* 2011; 5: 320–324
- [4] Zarand A, Bajtai A, Baranyai Z et al. Inflammation of ectopic pancreatic tissue in a Meckel's diverticulum causing acute abdominal symptoms: a case report and review of the literature. *Int J Surg Pathol* 2011; 19: 359–363

### Bibliography

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