Chronic intussusception: is it possible?

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Title: Chronic intussusception: is it possible?

Short title: Chronic intussusception

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A 75-year-old woman, who had undergone appendectomy in the 1980s, was admitted to the Department in November 2018 for endoscopic removal of a polyp of the ileocecal valve that was discovered during routine colonoscopy performed in September 2018. The patient complained of pain in the right lower abdomen and episodes of lower gastrointestinal bleeding for approximately five years and had lost weight (around 20 kg) during this period. The first colonoscopy performed in March 2013 detected a large polyp of the ileocecal valve. Repeat colonoscopy in September 2013 and in February 2014, did not detect the previously described polyp. A contrast-enhanced computed tomography (CECT) of the abdomen and pelvis performed in June 2014 did not reveal any abnormalities. Due to persistent gastrointestinal bleeding, the patient underwent another colonoscopy in January 2016, which showed a polypoid lesion in the ileocecal valve. A colonoscopy performed in April 2016 revealed normal appearance of the cecum and distal portion of the ileum. However, the pain in the right lower abdomen and intermittent lower gastrointestinal bleeding continued. Therefore, the patient underwent another colonoscopy in August 2018, which revealed a cecal polyp. The patient was referred to our Department for endoscopic treatment. A colonoscopy performed in October 2018 revealed an ileal tumor (Figures 1A,B), which suggested intussusception of the distal portion of the ileum through the ileocecal valve and into the lumen of the cecum. CECT of the abdomen and pelvis confirmed the diagnosis (Figure 1C,D,E). The patient qualified for surgical treatment. A laparoscopic right hemicolectomy was performed. Intraoperative examination revealed intussusception of the distal ileum through the ileocecal valve and a coexisting ileal tumor, which acted as a pathological lead point (Figures 1F). No complications occurred in the postoperative period. The patient was discharged, in good condition, on the fourth day after the surgery. Histopathological examination of the specimen confirmed the presence of the neuroendocrine tumor of the ileum T3N1M0 (carcinoid CD56(+) Ki67(+) in < 2% of tumor cells). Thereafter, the patient
continued to receive outpatient care, where further control imaging examinations did not reveal any signs of cancer recurrence.

Intussusception is a telescoping of the proximal part of the intestine into its distal portion, which is hardly detected in adult patients [1,2]. In most cases, intussusception is an acute condition and requires immediate surgical intervention [3]. Chronic intussusception is a casuistic concept [4,5]. However, in this case- based on clinical presentation as well as the results of additional diagnostic tests and histopathological examination of the obtained specimen - a chronic intussusception of the ileum through the ileocecal valve was diagnosed. At the early stage of the disease, intermittent intussusceptions of the ileum through the ileocecal valve occurred. Progression of endocrine-inactive ileal tumor and gradual increase in tumor volume which was the anatomical cause underlying the intussusception and acted as a pathological lead point - resulted in the formation of a very rare medical condition - chronic intussusception.

References

Figure 1 A,B: Images of colonoscopy-revealing an ileal tumor (white arrow), suggesting intussusception of the distal portion of the ileum through the ileocecal valve (yellow arrow) and into the lumen of the cecum.
Figure 1C.D.E: An image of contrast-enhanced computed tomography of the abdomen and pelvis confirming intussusceptions (arrow) of the distal portion of the ileum through the ileocecval valve.
Figure 1F: Images of specimen removed during laparoscopic right hemicolecotomy. Ileal tumor (arrow) as a pathological lead point is visible.