CLINICAL IMAGE 357

Incomplete intestinal obstruction

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Question

A 51-year-old man presented with a three-month history of intermittent abdominal pain accompanied by nausea and vomiting. Clinical examination showed a slightly tender abdomen without palpable mass or signs of peritonitis. Digital rectal examination was unremarkable. His laboratory investigations were normal except for mild leukocytosis ($12.50 \times 10^9/L$). Abdominal CT scan revealed two remarkable intra-abdominal mass lesions with slightly dilated proximal intestinal loops but without signs of perforation or intraperitoneal collections (Figure 1). What is your diagnosis and how it is managed?

Answer

Abdominal CT scan revealed a double site enteroenteric intussusception with multiples mesenteric lymph nodes. At the same computed tomographic view are detected two typical images suggestive for intestinal intussusception. In a cross-sectional view (Figure 1, blue arrow), a three-layered structure is seen, giving the characteristic target-shaped appearance. The central area is formed by the intussusceptum, surrounded by its accompanying mesenteric fat and blood vessels, and all surrounded by the thick-walled intussuscipiens. In a longitudinal view (Figure 1, red arrow), the threelayered structure and contained fat are more elongated giving the characteristic sausage-shaped sign. At laparotomy, 60-cm segment of small bowel was resected with immediate anastomosis, but without any attempt to reduce the invaginated segments (Figure 2). Macroscopic examination of the resected specimen revealed 2 pendulant polypoid masses (Figure 3), for which histologic analysis identified an undifferentiated carcinoma.

Intussusception is an uncommon disease in the adult population. Double site intussusception represents an extremely rare variety with only a few cases reported in the medical literature (1).

In contrast to the pediatric form, clinical presentation of adult intussusception is considerably variable and nonspecific. The classic triad of abdominal pain, palpable mass and per-rectal bleeding is rarely encountered.



Figure 1 — CT scan findings suggestive for double site intussusception with 2 typical signs: "target sign" in the perpendicular axis (blue arrow) and "sausage shaped" sign in the longitudinal axis (red arrow).

Adult patients often present with intermittent or chronic symptoms suggestive for incomplete intestinal obstruction. However, the widespread use of CT scan made the diagnosis easier especially in the presence of typical signs (2). In addition, adult intussusception is usually due to an underlying lesion that requires surgical exploration to exclude malignancy. Intestinal resection without previous reduction is recommended if a malignant etiology is suspected regarding the risk of tumor cells dissemination (3).

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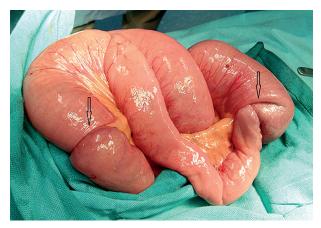
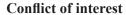


Figure 2 — Intra-operative findings with double site enteroenteric intussusception and slight proximal intestinal dilation.



The authors declare that they have no conflicts of interest.

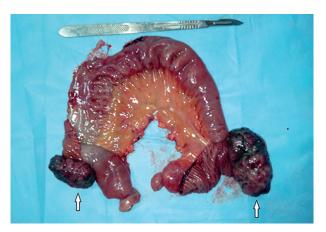


Figure 3 — Surgical specimen with two pendulant polypoid masses within the intestinal wall.

References

- PATRIZI G., DI ROCCO G., GIANNOTTI D., CASELLA G., CASELLA MARIOLO JR., BERNIERI MG., et al. Double ileo-ceco-colic invagination due to right colon carcinoma: clinical presentation and management. Eur. Rev. Med. Pharmacol. Sci., 2013, 17: 2267-2269.
- PARK SB., HA HK., KIM AY., LEE SS., KIM HJ., PARK BJ., et al. The diagnostic role of abdominal CT imaging findings in adults intussusception: focused on the vascular compromise. Eur. J. Radiol., 2007, 62: 406-415.
- 3. SHENOY S., Adult intussusception: A case series and review. World. J. Gastrointest. Endosc., 2017, 9: 220-227.