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A rare cause of intestinal obstruction: jejunal ALK-positive anaplastic large-cell lymphoma

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Keywords: Intestinal obstruction. Lymphoma. ALK positive.

Case report



A 32-year-old man had recurrent abdominal pain and vomiting for 2 weeks. Physical examination revealed a 4×2-cm abdominal tough mass with unclear boundaries. Palpation caused mild tenderness without rebound pain. Computed tomography (CT) showed a proximal jejunal mass with incomplete small-bowel obstruction (Fig. 1A and B), and double-balloon enteroscopy showed a large protruding proximal jejunal mass covered with dirt and a narrow lumen (Fig. 1C); an enteroscope would not pass through. Pathological diagnosis by insufficiently deep endoscopic biopsy is difficult. After multidisciplinary discussion, surgical resection was performed. Histopathology revealed a malignant tumor (Fig. 1D). Immunohistochemical results: CD30 (+), ALK (+), EMA (+), GrB (+), CD2 (+), CD43 (+), TIA-1 (+), and silver staining (+). Sarcoma 86 fusion-gene detection showed NPM1-ALK gene rearrangement. The patient was diagnosed with anaplastic large-cell lymphoma (ALCL) and underwent chemotherapy.

Discussion

ALCL is a rare, aggressive, and CD30-positive mature peripheral T-cell lymphoma (1). Gastrointestinal tract ALK-positive ALCL is exceedingly rare and must be distinguished from other tumors exhibiting alloplastic morphology that express CD30 and/or ALK, particularly ALK-positive large B-cell lymphoma (2). Potential complications may encompass bowel obstruction, intussusception, gastrointestinal perforation, and hemorrhage (3). Our patient had jejunal ALK-positive ALCL with intestinal obstruction as the initial symptom. Intestinal lymphoma primarily arises from the submucosa and lamina propria. The pathological diagnosis is frequently challenging due to inadequate endoscopic biopsy depth or insufficient sampling. Postoperative pathological results supported the definitive diagnosis.

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Fig. 1. A and B. CT showing dilatation of the small intestine in the upper abdomen and incomplete small-bowel obstruction with a proximal jejunal mass (arrows: the mass). C. Enteroscopy showed a large protruding mass in the proximal jejunum. D. Histopathological analysis of the resected specimen identified a malignant tumor.