Small bowel occlusion due to Anisakis infection

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ABSTRACT

Abstract is not required for Letter to the Editor

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To the editors,

Anisakis is a parasitic disease. Commonly, humans are accidentally infected by eating raw or uncooked fish containing the parasites. The larva of *Anisakis* penetrates into the mucosa of the digestive tract causing the disease [1]. Generally, intestinal *Anisakis* is characterized by intermittent or constant abdominal pain starting 5–7 days after ingestion of the larvae [2]. In Japan, where this kind of infection is mostly registered, *Anisakis* is preferentially localized in the stomach (96%), while the intestine is involved in about 4% of cases [3]. On the contrary, in European countries some authors reported the preferred site of the infection is the intestine [4]. Rare complications include small bowel obstruction, intussusception, ileal stenosis, intestinal perforation and pneumoperitoneum [5].

A 42-year-old male was admitted for severe abdominal pain and vomiting. A clinical interview was performed, under which the patient reported that he ate raw fish (sushi) five days before the onset of his symptoms. The patient presented expired clinical conditions with dry skin and mucosae. The registered temperature reached

38.9°C, blood pressure was 120/70 mmHg, while the pulse rate was 120/min and the respiratory acts 18/min. Increased white blood cell count (16.43/mm³; neutrophils 88.9%) and index of inflammation (CRP 6.0 mg/dL) were present. On physical exam, the abdomen was poorly negotiable with signs of peritoneal reaction. The patient underwent an abdominal radiography and an abdominal computed tomography (CT) scan, showed the presence of marked air-fluid levels. The diagnosis of small intestinal obstruction was run and the patient had to have surgery, consisting of removing the terminal ileum (Figure 1). The bowel was erythematous and markedly stenotic with enlarged lymph nodes in the adjacent mesentery. The day after the operation, *Anisakis* antibodies IgG and IgA were tested and both of them turned out to be positive. Based on these findings, a diagnosis of small bowel obstruction caused by *Anisakis* was made. A drug treatment with albendazole (800 mg daily) for 10 days was administered. The patient recovered well and was discharged seven days after the operation.

In conclusion, the symptoms of intestinal *Anisakis* are non-specific and the patients often are misdiagnosed. According to our opinion, this is the very first case of a small bowel obstruction due to *Anisakis* infection occurred in Italy.

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Figure 1: A general view of the ileal resection specimen showing third-stage larva of *Anisakis* simplex: (a) In the wall (white arrow), (b) In the lumen.

Keywords: Anisakis, Small bowel obstruction, Ileal resection, Anisakis antibodies

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Daniela De Nitto – Analysis and interpretation of data, Revising it critically for important intellectual content, Final approval of the version to be published

Giuseppe Grassi – Analysis and interpretation of data, Revising it critically for important intellectual content, Final approval of the version to be published

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The corresponding author is the guarantor of submission.

Conflict of Interest

Authors declare no conflict of interest.

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