Case	(177) Gastric anisakiasis, a radiological diagnosis.
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CASE PRESENTATION

A 37-years-old male with no personal history came into the emergency room. Abdominal pain for the past 12 hours and vomiting were the symptoms. At the exploration, the pain was focalized at the right iliac fossa and blood analytics just showed a discrete alteration of the acute phase reactants.

An acute appendicitis was suspected. An ultrasound and, afterwards, a contrastenhanced computed tomography (CT) were performed. During the sonography, the appendix presented a preserved morphology, but some free liquid at the pelvis was seen. The CT showed no other alteration at the lower abdomen.

However, a severe and diffuse mural thickening and edema of the gastric submucosa was noticed. It involved the anterior and posterior wall with increased attenuation of the adjacent fat. Duodenum was preserved and there were no signs of bowel obstruction. An inflammatory/infectious gastric process was suspected, being anisakiasis the first option. Because of the radiologist report, the patient was interrogated again and confirmed the ingestion of raw fish the day before the onset of the clinic. During the gastroscopy, the larvae was found attached to the gastric wall and resected.

DISCUSSION

Gastrointestinal anisakiasis is a rare parasitic disease caused by the ingestion of Anisakis larvae. The life cycle of Anisakis involves three hosts, being the humans an accidental hosts due to the ingestion of raw fish.

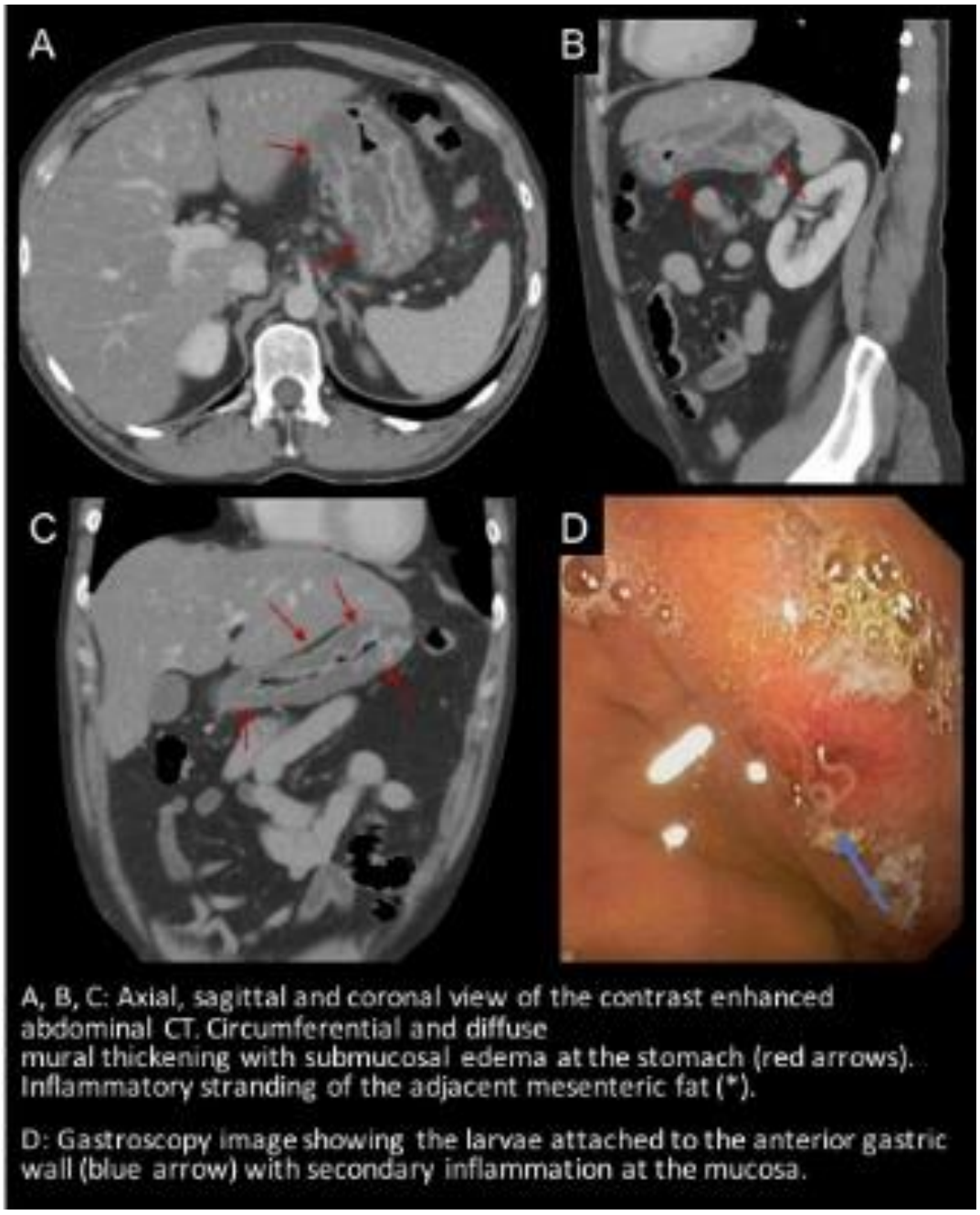
Anisakis larvae can infest any organ of the human body, but gastrointestinal forms are the most frequent involvement. Among them, the gastric infestation is compromised in 75% of the cases. Clinical manifestations are secondary to acute ulceration of the gastric mucosa. Acute abdominal pain, vomiting and nausea are described, as well as, leukocytosis in the laboratory tests. The mean time between the ingestion of the fish and the onset of the clinic is around 4-6 hours.

Radiological findings on CT are not specific but constant: severe symmetric wall thickening, diffuse mucosal enhancement, inflammatory changes in the adjacent fat and various degrees of ascites. These findings can also be studied through sonography, where we can add decreased peristalsis.

Differential diagnosis must include viral or bacterial gastritis, eosinophilic gastroenteritis and Crohn's disease. Gastric anisakiasis diagnosis is always confirmed by gastroscopy, being also the treatment in most of the cases.

CONCLUSION

Gastric anisakiasis is a parasitic disease, usually diagnosed by the clinical interrogation. However, there are some cases when this information is not known. Radiologists must know its radiological findings and always consider it when the CT findings are favorable.



A, B, C: Axial, sagittal and coronal view of the contrast enhanced abdominal CT. Circumferential and diffuse mural thickening with submucosal edema at the stomach (red arrows). Inflammatory stranding of the adjacent mesenteric fat (*).

D: Gastroscopy image showing the larvae attached to the anterior gastric wall (blue arrow) with secondary inflammation at the mucosa.

BIBLIOGRAPHY

- CT findings of gastric and intestinal anisakiasis. Shibata E, Ueda T, Akaike G, Saida Y. Abdom Imaging. 2014;39(2):257-261.