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Primary intestinal follicular lymphoma: A case report☆

Linfoma folicular primario intestinal: reporte de un caso

The most common extranodal location of lymphoma is the gastrointestinal tract. The most frequent lymphomas are the large B-cell type, followed by MALT-type lymphoma.[1] Primary intestinal follicular lymphoma is rare, occurring in 1–3% of all B-cell non-Hodgkin's lymphomas.[2]

We present herein the case of a 44-year-old man who presented with 6-month progression of epigastric pain, associated with nausea and a 5 kg weight loss. Laboratory tests showed 8,170 cells/mm^3 with 22% lymphocytes, Hb 14.7 g/dl, LDH 165 IU/l, and beta 2 microglobulin 1.2 mg/l. Endoscopy revealed a multifocal nodular pattern in the duodenum (Fig. 1a). Lower endoscopy showed a nodular pattern and an ulcer in the distal ileum (Fig. 1b), as well as an irregular mucosal area in the cecum. Tomography revealed mesenteric and retroperitoneal adenopathies and thickness of the cecal wall (Fig. 2a). The biopsy result was a structurally atypical lymphoid infiltrate with a nodular pattern (Fig. 2b). Immunohistochemistry was positive for CD20, CD10, BCL2 (Fig. 2c), and BCL6 (heterogeneous). Follicular dendritic cells were identified by CD23. Cyclin D1, CD3, and CD5 were negative, Ki-67 was 30%, and histiocytes were identified by CD68. With those findings, the diagnosis of primary intestinal follicular lymphoma was made. The final staging was II2 E (colon). The patient received 6 sessions of chemotherapy (R-CHOP), and at one year of follow-up, had favorable progression, with clinical, endoscopic, and imaging remission. We evaluated the duodenum and the distal ileum, and both appeared normal after one year of follow-up with chemotherapy (Figs. 2d and e).

Most patients with this type of lymphoma are adults, with an average 50 years of age. Both men and women are equally affected. They are frequently asymptomatic (43%), but some patients have abdominal pain (28%), nausea and vomiting (8%), and gastrointestinal bleeding (6%). The most frequent endoscopic presentation of follicular lymphoma is the nodular pattern.[3–5] For the Lugano classification, imaging studies, such as computed tomography (CT) or positron emission tomography (PET), are necessary.[6] The differential diagnosis includes lymphoid hyperplasia and duodenal xanthomas. The decrease in the vascular network and the presence of irregular vessels in the magnification are suggestive of lymphoma.[7] The presence of an ulcer in the terminal ileum, as well as retroperitoneal adenopathies, can be suggestive of tuberculosis in endemic areas.[8]

If the patient manifests symptoms, treatment should be started, varying in accordance with the histologic and clinical grade. If the disease is disseminated or has poor prognostic factors, systemic treatment with chemotherapy combined with rituximab is indicated.[9]

We reported the present case, given that it is a rarity, together with the fact that there is no consensus on treatment.

In conclusion, primary intestinal follicular lymphoma is a unique lymphoproliferative entity. The disease course is

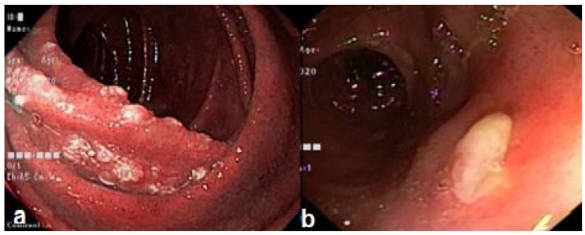

Figure 1 (a) Duodenum with whitish nodular mucosa. (b) Ulcer in the distal ileum.

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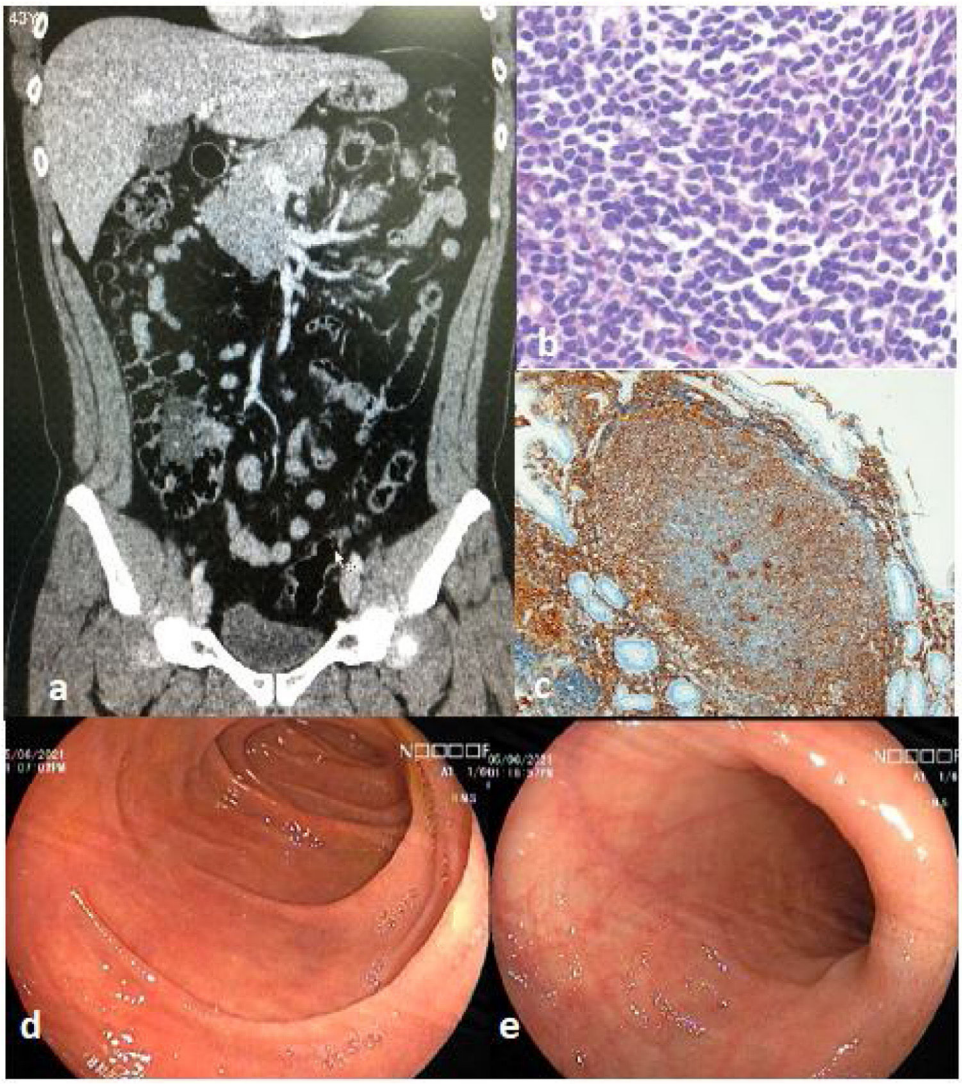

Figure 2 (a) Tomography showing a thickened cecal wall. (b) Biopsy identified an atypical lymphoid infiltrate. (c) Immunohistochemistry was positive for BCL2. (d) Duodenum with normal appearance after chemotherapy. (e) Distal ileum with preserved appearance after chemotherapy.

indolent in the majority of cases and prognosis is excellent, as occurred in our patient.

Ethical responsibilities

The authors declare that no experiments on humans or animals were performed for this research. We used our work center protocols for obtaining patients from databases, preserving the anonymity of the patient described herein. We did not obtain the patient's informed consent.

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Conflict of interest

The authors declare that there is no conflict of interest.

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Weil's disease as a differential diagnosis of jaundice: A case report☆

Enfermedad de Weil como diagnóstico diferencial en síndrome ictérico: reporte de un caso

A 64-year-old man with no comorbidities presented with symptoms for 7 days of jaundice, asthenia, fever, calf muscle pain, mild upper abdominal pain, and reduced urine output. Upon admission to a hospital in Lima, Peru, he was hemodynamically stable, had a score of 15 on the Glasgow coma scale, and had slight abdominal pain in the right hypochondrium and epigastrium. Laboratory work-up reported hemoglobin at 11.8 g/dL, leukocytes at 19,800, platelets at 30,000, urea at 206, creatinine at 5.7, amylase at 684 (normal value < 110 U/L), lipase at 1,283 (normal value < 300 U/L), and altered liver profile (Table 1). Chest x-ray was normal. No gallstones or bile duct alterations were identified in the abdominal ultrasound study.

The initial diagnostic focus was acute kidney failure secondary to severe acute pancreatitis and probable severe cholangitis. Treatment was started with fluid resuscitation, ceftriaxone, and intravenous metronidazole. The next day the patient was admitted to the intensive care unit. An abdominal tomography scan revealed no significant alterations in the pancreas or liver and the antibiotic was changed to intravenous meropenem for 14 days. Due to the presence of fever, calf muscle pain, marked direct bilirubinemia and no other alterations in the liver profile, and imaging studies that were negative for biliary, pancreatic, or neoplastic disease, an infectious etiology was suspected. Upon broadening the clinical history, it was discovered that the patient had been exposed to rodents, when cleaning a water cistern, 2 weeks prior to his hospital admission. A microscopic agglutination test was performed due to high suspicion of leptospirosis, confirming the diagnosis. Urea and creatinine levels continued to increase, and so hemodialysis was started on day 3. Liver involvement also worsened (Table 1).

One week later, the patient showed improved liver involvement but continued to undergo hemodialysis and developed respiratory failure due to diffuse alveolar hemorrhage (Fig. 1), with a drop in hemoglobin to 5 g/dL. He was given supplemental oxygen through a face mask with a reservoir bag and did not require mechanical ventilation. The patient finally presented with favorable progression and was discharged on day 31 of hospitalization, continuing hemodialysis as an outpatient.

Leptospirosis is a zoonotic infection with worldwide distribution, that is produced by spirochetes from the genus *Leptospira*. It predominates in tropical regions, especially during the rainy season, in areas with scant resources and the presence of rodents.[1] In Peru, an incidence of 1.55 to 7.11 cases per 100,000 inhabitants was reported for the period from 2017 to 2021.[2] In 2021, an additional 513 cases

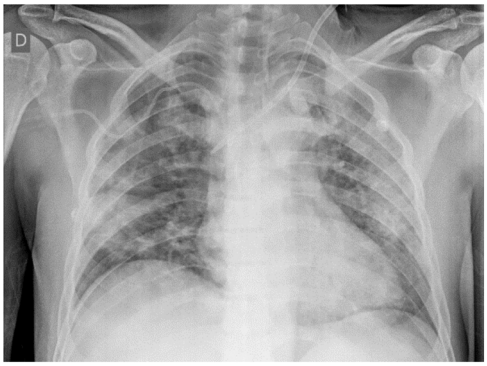

Figure 1 Chest x-ray taken on hospitalization day 6: diffuse alveolar pattern.

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