Revista Española de Enfermedades Digestivas
The Spanish Journal of Gastroenterology

Title:
Jaundice as the onset of paracoccidioidomycosis

Authors:
Teresa García Ballester, Sheila González Padilla, Rosana Villagrasa Manzano, Antonio Ferrández Izquierdo, David Martí-Aguado , José Sánchez Serrano, Vicente Sanchiz Soler, Isabel Pascual Moreno

DOI: 10.17235/reed.2024.10970/2024
Link: PubMed (Epub ahead of print)

Please cite this article as:
García Ballester Teresa, González Padilla Sheila , Villagrasa Manzano Rosana, Ferrández Izquierdo Antonio, Martí-Aguado David, Sánchez Serrano José, Sanchiz Soler Vicente, Pascual Moreno Isabel. Jaundice as the onset of paracoccidioidomycosis. Rev Esp Enferm Dig 2024. doi: 10.17235/reed.2024.10970/2024.

Revista Española de Enfermedades Digestivas
The Spanish Journal of Gastroenterology

Jaundice as the onset of paracoccidioidomycosis

Teresa García Ballester. Servicio Medicina Digestiva. Hospital Clínico Universitario de Valencia.

Sheila González Padilla. Servicio Medicina Digestiva. Hospital Clínico Universitario de Valencia.

Rosana Villagrasa Manzano. Servicio Medicina Digestiva. Hospital Clínico Universitario de Valencia.

Antonio Ferrández Izquierdo. Servicio Medicina Digestiva. Hospital Clínico Universitario de Valencia.

David Martí Aguado. Servicio Medicina Digestiva. Hospital Clínico Universitario de Valencia.

José Sánchez Serrano. Servicio Medicina Digestiva. Hospital Clínico Universitario de Valencia.

Vicente Sanchiz Soler. Servicio Medicina Digestiva. Hospital Clínico Universitario de Valencia.

Isabel Pascual Moreno. Servicio Medicina Digestiva. Hospital Clínico Universitario de Valencia.

Corresponding autor: Teresa García Ballester. teresagarciaballester@gmail.com.

ABSTRACT

Revista Española de Enfermedades Digestivas
The Spanish Journal of Gastroenterology

We report the case of a 24-year-old man from Brazil presenting with jaundice and epigastric pain. Abdominal CT and endoscopic ultrasound (EUS) revealed a mass in the pancreatic-duodenal groove, intrahepatic duct dilation, and lymphadenopathy, initially suggestive of lymphoproliferative syndrome. However, cytopathological analysis of EUS-guided fine needle aspiration (EUS-FNA) of the lymph nodes confirmed paracoccidioidomycosis. This case highlights the need to consider endemic mycoses, such as paracoccidioidomycosis, in the differential diagnosis of generalized lymphadenopathy, especially in patients from endemic regions.

Keywords: Jaundice. Lymphoproliferative syndrome. Paracoccidioidomycosis, endoscopic Ultrasonography.

Dear editor,

24-year-old man from Brazil presented with jaundice for two days and epigastric pain for three months. Physical examination highlights mucocutaneous jaundice, without abdominal masses or lymphadenopathy. Blood analysis showed hyperbilirubinemia, increased acute phase reactants, anemia and eosinophilia (23%).

Abdominal CT revealed a mass in the pancreatic-duodenal groove of 33mmx27mm that dilates intrahepatic bile duct and splenomegaly.

Suspecting a lymphoproliferative syndrome, an Endoscopic ultrasound was performed, with a hypodense lesion in hepatic hilum of 40mmx35mm that dilates intrahepatic duct and compresses adjacent vascular structures and pancreatic parenchyma, with associated lymphadenopathies. FNA was performed with a 19G needle.

The cytopathological analysis showed basophilic fungal structures interspersed with necrotic-inflammatory material predominantly eosinophilic. Gomori-Grocott staining

showed “rudder wheel” images, compatible with paracoccidioidomycosis.

Oral itraconazole was prescribed with resolution of jaundice.

DISCUSSION

Paracoccidioidomycosis is the most frequent systemic mycosis in Central and South America. It is produced by the dimorphic fungus Paracoccidioides brasiliensis and its main route of transmission is the inhalation of conidia in rural areas (1).

It presents two clinical forms: the chronic form and the acute/subacute form.

The chronic form is the most frequent (90-95%) and represents the reactivation months after the primary infection. It mainly affects men between 30-60 years old with contact with the rural environment (3). It can course with exclusive pulmonary or multifocal involvement (4).

The acute/subacute form is infrequent (<10%) and represents the aggressive progression weeks after the primary infection in young people (4). Clinical presentation consists of lymphadenopathies with manifestations due to compression of structures, fever, weight loss, hepatosplenomegaly and bone marrow dysfunction (5). The differential diagnosis includes lymphoma and granulomatous diseases.

In non-endemic areas, the low index of suspicion means the delay of diagnosis and treatment, with the risk of presenting aggressive evolution of poor prognosis.

The definitive diagnosis is established by direct vision with Gomori-Grocott staining and/or culture of lymphadenopathies samples (1).

The treatment of choice is itraconazole for 6 months (1). Amphotericin B is reserved for severe cases (3).

Endemic mycoses have increased in Spain in last decades due to migratory phenomena. A recent systematic review reports 35 cases in Spain, most of them in chronic form and none with jaundice presentation (2).

In conclusion, in a patient from an endemic area with generalized lymphadenopathic syndrome, we must include paracoccidioidomycosis in the differential diagnosis, especially if it associates eosinophilia; since the delay in treatment increases mortality, which canreach 30% in systemic forms (1).

BIBLIOGRAPHY

1. Botas-Velasco M, Jover-Díaz F, Ortiz de la Tabla-Duccase V, et al. Paracoccidioidomicosis importada en España [Imported paracoccidioidomycosis in Spain]. Enferm Infecc Microbiol Clin. 2010 Apr;28(4):259-60. Spanish.

2. Wagner G, Moertl D, Glechner A, et al. Paracoccidioidomycosis Diagnosed in Europe-A Systematic Literature Review. J Fungi (Basel). 2021;7(2):157.

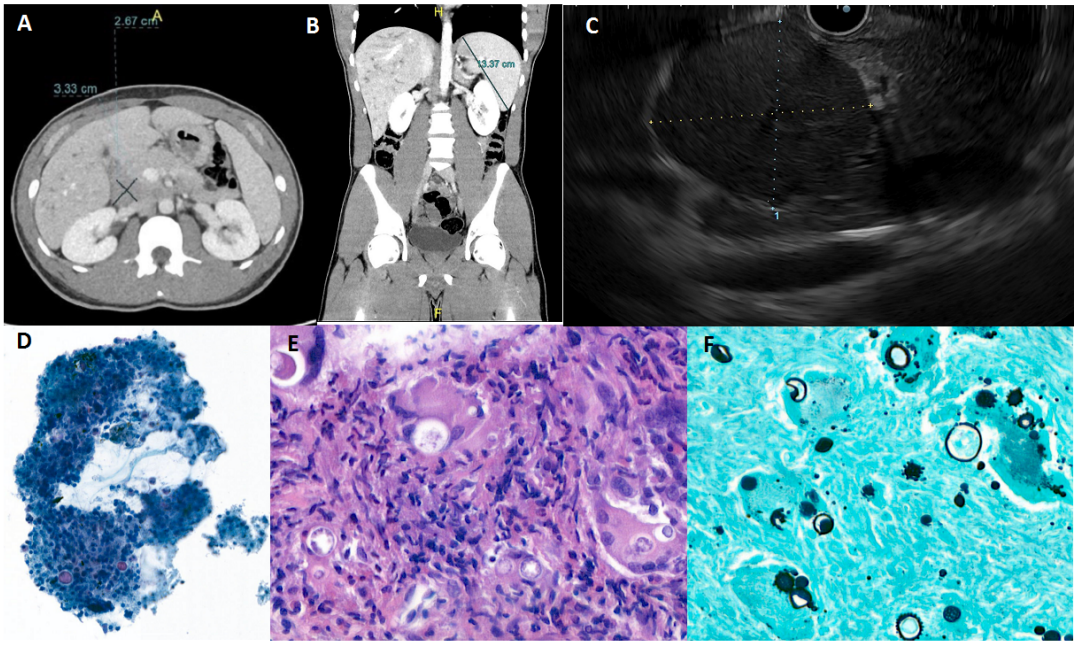
3. Asencio Egea MA, Méndez González JC, Gaitán Pitera J, et al. M. Chronic pulmonary mycosis due to Paracoccidioides brasiliensis. Rev Esp Quimioter. 2022 Dec;35(6):581-583.

4. Brummer E, Castaneda E, Restrepo A. Paracoccidioidomycosis: an update. Clin Microbiol Rev. 1993 Apr;6(2):89-117.

5. Pereira RM, Bucaretchi F, Barison Ede M, et al. Paracoccidioidomycosis in children: clinical presentation, follow-up and outcome. Rev Inst Med Trop Sao Paulo. 2004 May-Jun;46(3):127-31.

Revista Española de Enfermedades Digestivas
The Spanish Journal of Gastroenterology

FIGURE



A. Axial computed tomography (CT) enhanced portal venous phase scan. B. Coronal computed tomography (CT) enhanced portal venous phase scan. C. Endoscopic ultrasonography showing hypodense lesion in hepatic hilum of 40mmx35mm. D. Cytological analysis with Papanicolau. E. Anatomopathological analysis with hematoxylin eosin staining. F. Anatomopathological analysis with Gomori-Grocott staining.