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<https://doi.org/10.1016/j.eimce.2023.11.007>

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Delayed diagnosis of HIV in migrant patient suffering from opportunistic imported infection



Diagnóstico tardío de VIH en paciente migrante con infección oportunista importada

Through the report of a case treated in our department, we wanted to draw the attention of readers to current problems involved in the initial care of HIV infection in the migrant patient group.

This was a 53-year-old trans-sexual woman, a sex worker, originally from Colombia, who had been living in Spain for a year before admission. Six months before admission, she had been diagnosed with HIV infection following screening in primary care, but had not started antiretroviral treatment due to logistical difficulties in being able to join a specialised unit and due to poor understanding of the implications of the disease.

She was admitted with a three-month history of abdominal pain associated with a one-month history of diarrhoea with no blood or mucus and weight loss. On admission, she had a low-grade fever and a painful mass on her right side. She also had enlarged axillary lymph glands and odynophagia. Chest and abdominal X-rays were normal. Bloods showed an increase in acute phase reactants, CD4⁺ T lymphocyte count 46 cells/ μ l (CD4/CD8 ratio 0.08) and HIV viral load of 220,000 copies/ml. The initial microbiological study was negative for mycobacteria in urine, blood and faeces, cryptococcal antigenaemia, beta-D-glucan and galactomannan, stool culture, *C. difficile* toxin, parasite study and rectal PCR for chlamydia-LGV and gonococcus. Plasma CMV viral load <34.5 IU/ml.

As infectious ileocolitis was suspected, the patient was started on empirical antituberculosis treatment and prophylaxis with cotrimoxazole. One week later, she was started on antiretroviral therapy with bictegravir, emtricitabine and tenofovir. As an extension study, an abdominal CT scan was requested, which showed extensive inflammation in the stomach and small intestine with predominance in the ileocolic area. Colonoscopy showed a tumour-like ulcerated lesion from the distal ileum to the ascending colon, from which biopsies were taken: negative for Ziehl–Neelsen staining and cytopathic signs compatible with cytomegalovirus colitis, and immunohistochemistry was positive. Treatment was started with ganciclovir.

After a week on antiretroviral treatment and ganciclovir, the patient developed intestinal subocclusion and dysphagia for which she required parenteral nutrition. A repeat CT scan showed worsening of the mural thickening at the ileocolic level, causing a decrease in the intestinal lumen and retrograde dilation. At the same time, the patient developed a high fever and acute respiratory failure. Chest X-ray showed a miliary pattern (Fig. 1B). Bloods showed a marked elevation of acute phase reactants and bicytopenia not present on admission (red blood cells 3.42×10^{12} /l, haemoglobin 70 g/l, leucocytes 2.96×10^9 /l).

With the deterioration in the patient's clinical condition and multiorgan involvement, an immune reconstitution syndrome was suspected due to the unmasking of a probable opportunistic infection. Between the differential diagnosis and taking into account the patient's origin and the additional tests, we considered the possibility of disseminated histoplasmosis. The colon biopsies were reviewed and periodic acid-Schiff and silver staining identified yeasts compatible with *Histoplasma* spp (Fig. 1C). The patient was started on liposomal amphotericin B and a bronchoalveolar lavage was performed, which revealed the presence of small yeasts. After incubation, *Histoplasma capsulatum* was isolated (Fig. 1D). Fibre-optic gastroscopy showed a thickening of gastric folds and biopsies taken for molecular biology also showed the presence of *H. capsulatum*. Tests were completed with a spinal aspirate, which did not show bone marrow infiltration. After two weeks of treatment, the patient showed clinical improvement and had good oral tolerance, so consolidation treatment with isavuconazole was started. At discharge, the same treatment was maintained and the patient was linked up with a pilot programme of close multidisciplinary follow-up: specialised nursing, social work and medical team.

In Spain, endemic mycoses such as histoplasmosis are increasing due to migratory movements and tourism in endemic areas, especially in areas of Latin America. Molina-Morant et al. studied 286 cases of histoplasmosis requiring hospitalisation in the period 1997–2014 in Spain, with the most affected regions being Madrid, Catalonia and Andalusia. Up to 50% of patients with histoplasmosis had HIV infection. These patients had higher mortality rates and longer hospital stays.^{1–5}

With the migrant population comes an added situation of vulnerability, which can make it more difficult for them to access the healthcare system. Ndumbi et al. report that the most common barriers to access that migrant patients in Spain perceive are the procedures associated with obtaining healthcare coverage and the

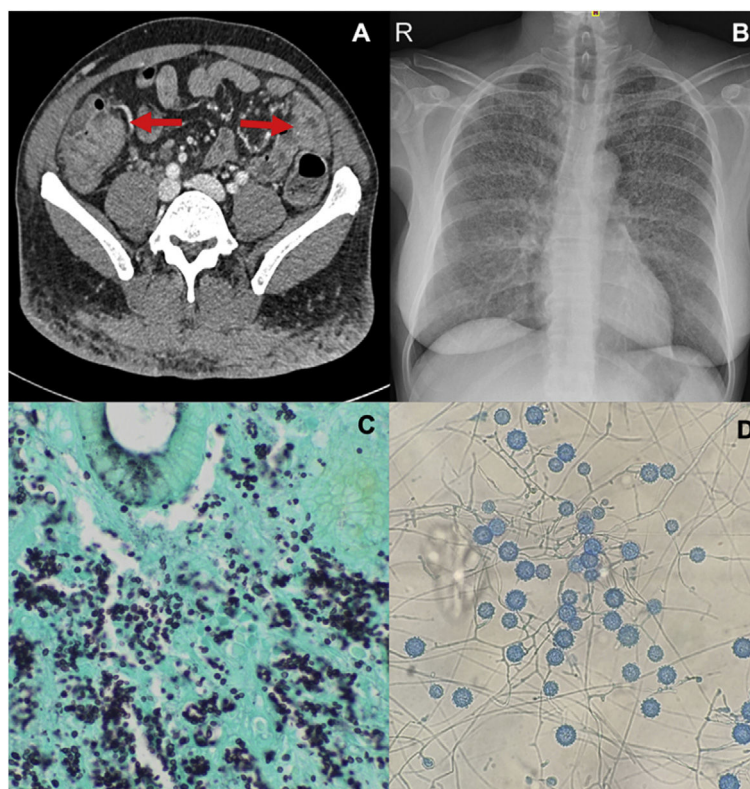


Fig. 1. A) CT section at the level of the pelvis where a thickening of the intestinal wall can be seen in the ileum and ileocolic area (arrows). B) Posterior–anterior chest X-ray showing disseminated micronodular pattern in both lungs. C) Histological section (silver stain, $\times 60$) showing fungal structures compatible by size and shape with *Histoplasma* spp yeasts. D) *H. capsulatum* var *capsulatum*. Rounded macroconidia with the characteristic spicules (echinulate).

waiting time for a hospital appointment. They also point to having irregular immigration status, social/cultural stigmas and the perception of doctors as providers of urgent and non-continuous care as other obstacles that interfere with their use of healthcare system resources.⁶ It is therefore essential not only to screen but also to create health programmes accessed from primary care which allow this population to be effectively brought into the system.^{7,8} The ultimate aim should be the early start of follow-up in specialised units with health education about the disease, in order to prevent the increase in morbidity and mortality rates which comes with late care.

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<https://doi.org/10.1016/j.eimce.2024.02.003>

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