33. **SURVIVING A TRIPLE COINFECTION IN AN HIV PATIENT: TUBERCULOSIS HISTOPLASMOSIS AND SARS-COV-2: CASE REPORT**

Wendy Moncada[1], Fabiola Cordon[2], Julián Martínez[3].

[1] Physician Specialist in Internal Medicine, Infectology, Sub Specialist in HIV-AIDS. Universidad Católica de Honduras, Instituto Nacional Cardiopulmonar del Tórax, Tegucigalpa, Honduras.

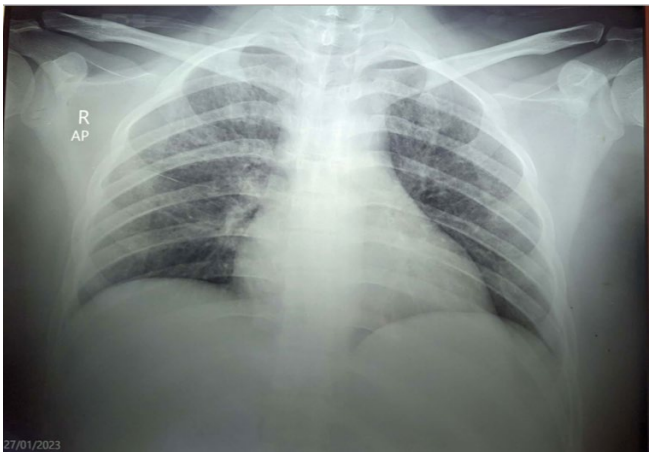
[2] Physician Specialist in Internal Medicine. Universidad Autónoma de Honduras, Instituto Nacional Cardiopulmonar del Tórax, Tegucigalpa, Honduras.

[3] Seventh year medical student. Universidad Católica de Honduras, Tegucigalpa, Honduras.

https://www.youtube.com/watch?v=vlsNiqV1-28&t=15431s

BACKGROUND: Antiretroviral therapy has become the key to global control of the HIV/AIDS pandemic. The human immunodeficiency virus (HIV) is a retrovirus that attacks CD4+ T lymphocytes. AIDS is defined by a CD4+ count of less than 200 cells/mm^3, as well as the appearance of opportunistic infections, which are the main cause of death in these patients. The most common types of co-infections are Mycobacterium tuberculosis, hepatitis C virus, Cryptococcus neoformans, Plasmodium falciparum, and hepatitis B virus. The incidence of certain opportunistic infections will continue to be a problem, especially in developing countries where access to antiretroviral therapy remains limited. **THE CASE**: A 27-year-old male patient from Juticalpa, Olancho, with a history of HIV/AIDS C3 diagnosed on January 23, 2022, with a CD4+ lymphocyte count of 115 cells/microliters and a viral load of 10,000 copies/ml, goes to his health center from his department with a history of fever, intermittent type, quantified at 40 Celsius, predominantly nocturnal, attenuated with acetaminophen, without exacerbations. Among its accompanying symptoms, general malaise and fatigue, he received treatment of which the patient is unaware. Five days after his last visit, the patient returned in poor hemodynamic condition, dehydrated, with persistent fevers of 40 Celsius and respiratory difficulty, for which fluid therapy and oxygen were started. Antigen for SARS-COV-2 is requested with a positive result, for which the patient is transferred to Tegucigalpa to the Instituto Nacional Cardiopulmonar del Torax a third level hospital. Upon admission to our hospital, hemodynamically unstable, Glasgow 14/15, it was decided to perform GENXPERT, sputum and antigen for histoplasmosis and tuberculosis, which were both positive. It was decided to transfer the patient to the intensive care unit, where he received treatment with isoniazid 300 mg orally, rifampicin 600 mg orally, ethambutol 1200 mg Monday, Wednesday and Friday, and pyridoxine 50 mg orally. Likewise, liposomal amphotericin B 280 mg was administered. Twenty days later, the patient was stable after extubating. He was transferred to a respiratory isolation room to receive treatment for COVID-19 and pulmonary tuberculosis. **CONCLUSION**: Co-infections between HIV and COVID-19 and tuberculosis with COVID-19 are currently poorly known. To date, only six cases of triple co-infections in HIV patients have been reported worldwide in Panama, the United States, Brazil and Cameroon. Due to the great clinical similarity, an in-depth differential diagnosis should be made between COVID-19 and tuberculosis. Timely diagnosis and treatment improve patient survival rates.

Figure. AP chest X-ray, bilateral diffuse miliary pattern.



Key words: AIDS; Human Immunodeficiency Virus; Mycobacterium Tuberculosis Infection; Histoplasma Infection; Case Study (Source: MeSH-NLM).