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TUBERCULOSIS PERICARDITIS: A CASE REPORT IN WESTERN AMAZONIA

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ABSTRACT

Tuberculous pericarditis is a rare but severe form of extrapulmonary tuberculosis characterized by inflammation of the pericardium by Mycobacterium tuberculosis. The disease occurs due to hematogenous spread of the primary pulmonary infection or contiguity from mediastinal lymph nodes. The patient may present with nonspecific symptoms such as fever, chest pain, dyspnea, and fatigue. Diagnosis is challenging and usually requires a combination of clinical findings, imaging tests, pericardial fluid analysis, and microbiological tests, such as MRT-TB detection. Treatment is performed with antimicrobial therapy with a four-drug regimen (RIPE). Corticosteroids may be required to prevent constrictive pericarditis. An early multidisciplinary approach and appropriate treatment are essential to improve clinical outcomes and reduce the overall burden of disease.

Keywords: Pericardial tuberculosis. Pericardial effusion. Cardiac tamponade. RIPE. Corticosteroid therapy.

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OBJECTIVE

The purpose of this study is to comprehensively diagnose differential tuberculosis in extrapulmonary tuberculosis. Tuberculous pericarditis is a serious pathology with a high risk of health problems. It has to be considered as a diagnostic hypothesis due to the incidence of cases diagnosed annually. Considering mainly a population group at risk.

MATERIALS AND METHODS

An observational and descriptive study was carried out, with clinical data collected from medical records and tests performed in the hospital unit and private laboratory. Consent was obtained and the study was approved by the Ethics Committee.

CASE REPORT

Male patient, 36 years old, at some point deprived of liberty, with a history of febrile syndrome that began in December 2023 associated with daily hyperthermia (afternoon) associated with chills, a drop in general condition and episodes of profuse sweating, in addition to sporadic epigastric abdominal pain. The patient persisted with symptoms, evolving to daily dry cough with worsening at night with intermittent crises concomitant with pleuritic chest pain (irradiation to both bases and sternal region), progressing to lower limb edema, orthopnea, and paroxysmal nocturnal dyspnea.

On 01/24/2025, she was admitted to the Urgency and Emergency reference service of Porto Velho RO (HJPII). In POCUS evaluation, the presence of significant pericardial effusion with signs of cardiac tamponade was evidenced, resolved after pericardiocentesis at the time, with a flow rate of 1,000 ml, and pericardial fluid samples were collected and analysis was performed, with positive TB MRT. The RHZE regimen for Tuberculosis Pericarditis was then initiated after confirmation of the polymerase chain reaction test.

It is noteworthy that even after pericardiocentesis and the use of RHZE, the patient persisted with fluid formation, observed by daily persistent drainage through a pericardial catheter, which generates a risk of pericarditis. In discussion with Cardiology, it was decided to start prophylactic corticosteroid therapy in order to avoid constrictive pericarditis and optimize the management of Heart Failure, evolving with improvement and catheter removal on 02/15/2024. After stabilization, he was sent to a ward bed under the care of the Medical Clinic for follow-up and management. A new bedside POCUS was performed with no evidence of pericardial effusion or signs of pulmonary congestion. The patient is discharged with improvement in his clinical presentation, maintaining the proposed

cardiovascular management, in addition to continuing treatment for extrapulmonary TB - pericardial tuberculosis.

IMAGE 1



IMAGE 2



IMAGE 3



IMAGE 4

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TRT	TESTE MOLECULAR -TUBERCULOSE SEQUENCIA DE REGISTRO---> 72 LOTE----------> 52320 TESTE RAPIDO MOLECULAR TUBERCULOSE ASPECTO DA AMOSTRA------> TURVO MATERIAL----------> LIQUIDO PERICARDICO RESULTADO-MTB----------> DETECTAVEL V.R. NAO DETECTAVEL RIFAMPICINA----------> SENSIVEL CARGA BACILAR----------> BAIXA OBSERVACAO . MTB NAO-DETECTADO: Negativo. MTB DETECTADO, RESISTENCIA A RIFAMPICINA Positivo para tuberculose, sem resisten MTB DETECTADO, RESISTENCIA A RIFAMPICINA Positivo para tuberculose, com resisten MTB-DETECTADO TRACOS, RIFAMPICINA INDETE repetir o teste com nova amostra adequa SEM RESULTADO / INVALIDO / ERRO INCONCLU Repetir o teste em nova amostra MTB DETECTADO E RESISTENCIA A RIFAMPICIN Repetir o teste em nova amostra. Programa Nacional de Controle da Tubercu

DISCUSSION

The present case highlights the importance of clinical suspicion and evaluation in patients with symptoms suggestive of extrapulmonary tuberculosis, such as prolonged fever associated with chest pain. Pericardial effusion secondary to extrapulmonary tuberculosis is a rare but potentially fatal complication requiring an immediate diagnostic and therapeutic approach.

CONCLUSION

This case reinforces the importance of early diagnosis of extrapulmonary tuberculosis in patients with respiratory symptoms. Pericardial effusion due to

extrapulmonary tuberculosis is rare but has the potential for aggravation. Where you need diagnostic approach and immediate therapies in order to avoid serious complications.

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