### RELATO DE CASO

# MAL DE POTT EM PACIENTE IMUNOSSUPRIMIDO, UM RELATO DE CASO

POTT DISEASE IN IMMUNOSUPRESSED PATIENT, A CASE REPORT

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#### RESUMO

A tuberculose (TB) é uma doença infectocontagiosa, de transmissão aérea causada pelo Mycobacterium tuberculosis. A forma pulmonar é mais frequente, mas outras estruturas corporais podem ser acometidas. O Mal de Pott (MP) é uma entidade rara e corresponde a cerca de 0,5% - 1% da manifestação extrapulmonar, principalmente em pacientes imunossuprimidos. Ocorre através da reativação de sítios para a coluna e as vezes membros inferiores. A sintomatologia se apresenta através da tríade: abscesso, paraplegia e gibosidade, associado ao quadro clínico clássico da TB pulmonar: febre, sudorese noturna e calafrios. O objetivo deste estudo é demonstrar um caso de Mal de Pott em uma paciente do sexo feminino de 56 anos, com história prévia de quimioterapia devido Linfoma não Hodgkin. Após instituído tratamento paciente evoluiu com melhora sintomática e bom desfecho clínico.

Palavras-chave: Tuberculose. Extrapulmonar. Imunossupressão.

#### ABSTRACT

Tuberculosis (TB) is an infectious disease caused by Mycobacterium tuberculosis. The pulmonary form is more frequent, but other body structures may be affected. Pott's Disease is a rare entity and accounts for about 0.5% - 1% of extrapulmonary manifestation, especially in immunosuppressed patients. It occurs through reactivation of sites for the spine and sometimes lower limbs. The symptomatology presents itself through the triad: abscess, paraplegia and gibbosity, associated with the classic clinical picture of pulmonary TB: fever, night sweats and chills. The aim of this study is to demonstrate a case of Pott's disease in a 56-year-old female patient with a history of chemotherapy due to non-Hodgkin's lymphoma. After treatment, the patient evolved with symptomatic improvement and good clinical outcome.

Keywords: Tuberculosis. Extrapulmonary. Immunosuppression.

## ACESSO LIVRE

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#### INTRODUCTION

Tuberculosis (TB) is an infectious disease caused by Mycobacterium tuberculosis, or Koch's Bacillus, which is transmitted by air<sup>1</sup>. It is an endemic disease in developing countries, according to the new WHO 2016-2020 classification. Brazil ranks 20th in the list of 30 countries with most TB<sup>2</sup>. Pulmonary infection may remain latent and may progress to symptomatic forms and spread to other parts of the body such as meninges, bones, lymph nodes and skin.

Pott's Disease (MP), described by Sir Percivall Pott in 1779 and 1782<sup>3</sup>, receives this name in honor and corresponds to about 0.5% - 1% of the extrapulmonary manifestation of TB<sup>4</sup>, being more common. In immunosuppressed patients, such as HIV-positive patients, patients undergoing chemotherapy. It occurs through reactivation of focus via hematogenous or lymphatically metastatic pathway to the spine, preferentially affecting joints and weight-bearing bones, such as lower limbs and spine<sup>5</sup>. The symptomatology is presented through the triad: abscess, paraplegia and gibbosity<sup>6</sup>, associated with classic TB clinic: fever, night sweats and chills.

#### **CASE REPORT**

A.N.G.O, 56 years old, female, married, brown, housewife, born in Tupiram - TO, living in Palmas - TO. The patient was admitted in the Palmas Public General Hospital (HGPP) with pain in the interscapular chest region, which did not give way with the use of common analgesics. He also had fevers, with intense night sweats, associated with dyspnea and asthenia beginning approximately two months ago. Patient has a previous history of diffuse large B-cell non-Hodgkin's lymphoma in which he underwent chemotherapy treatment and presented complete remission of the disease a year ago. The patient underwent a new magnetic resonance imaging (MRI), which showed an image that may correspond to the intraosseous abscess in the lower vertebral plateau of D6 (figure 1), with involvement of the surrounding soft tissues and reactive bone hyperemia in the vertebral plateau higher than D7 (figure 2).

Figure 1

Figure 2



He underwent biopsy of the vertebral abscess, and the diagnosis was confirmed by histopathological findings: chronic granulomatous osteomyelitis with areas of caseous necrosis favoring the diagnosis of tuberculosis or tuberculous spondylitis (Pott's disease). Unidentified BAAR. Treatment with the RIPE regimen (two months of rifampicin, isoniazid, pyrazinamide and ethambutol + four months of rifampicin and isoniazid) was instituted. After the treatment, the patient evolved with symptomatology improvements, was discharged after the seventh day of hospital treatment with maintenance of tuberculostatic use and ambulatory follow-up.

#### **DISCUSSION / CONCLUSION**

Pott's Disease is a neglected disease, mainly because it affects people with low purchasing power. In addition, the underdiagnoses of the disease is responsible for often irreversible sequels, and we should always be suspicious of prolonged dorsal pain symptomatology <sup>7</sup>.

Among the tuberculosis pandemic and the increasing number of cases of HIV + patients, as well as individuals immunosuppressed by transplants, chemotherapy drugs and immunodepressions, the appearance of extrapulmonary tuberculosis in this group of people is becoming more common <sup>8</sup>. In immunocompromised patients with HIV, the diagnosis becomes even more difficult, due to the fact that Pott can coexist between other pathologies such as infectious arthritis, rheumatologic diseases and spinal cord diseases that occur relatively more frequently in these individuals <sup>9</sup>.

The clinical diagnosis of Pott Mall presents low specificity. The manifestations of the disease vary and depend on the age of the patient, the location of the infection, absence or presence of abscess and disease stage <sup>10</sup>. Because of this, the diagnosis is made based on clinical suspicion, with associating imaging such as MRI, which demonstrates the affection of the vertebral bodies, as well as the destruction of the discs, cold abscesses, vertebrae collapse and spinal deformities <sup>6</sup>. Radiological examinations bring varied findings of bone deformity, reduction of intervertebral space, kyphotic

deformity and, frequently, presence of cold abscesses in the surroundings <sup>11</sup>. The exams of choice for diagnostic investigation are CT and MRI. However, the gold standard for the diagnosis of Pott's disease is CT-guided biopsy, leading the collected material to microbiological, molecular and histopathological studies <sup>12</sup>.

In immunocompetents patients, there is increased morbidity and mortality of both diseases, especially if the treatment is not submitted, and there may be permanent limitations to the patient <sup>13</sup>.

Treatment is with tuberculostatic: rifampicin + isoniazid + pyrazinamide + ethambutol for two months, followed by rifampicin + isoniazid for a maximum of 4, 6, 9, 12 or 18 months  $^{14}$ .

Surgical treatment is indicated when the patient evolves with increased spinal deformity, progressive neurological deficit, pain due to abscess or vertebral instability, when not responding to conservative treatment and uncertain diagnosis <sup>15</sup>.

Spinal TB manifestations are uncommon, but are more prevalent in immunocompromised patients. Delay in diagnosis makes it difficult to start treatment and may favor complicated forms of the disease, such as paraplegia. Knowing that Brazil is endemic area of TB, we should always suspect of patients with prolonged dorsal pain associated with the clinic.

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