

OSTEOARTICULAR MANIFESTATIONS IN TUBERCULOSIS: A LITERATURE REVIEW

Luísa Freire Sellaro

Centro Universitário Maurício de Nassau
Recife-PE, Brazil

Carol Andrade de Souza

Centro Universitário Maurício de Nassau
Recife-PE, Brazil

Gabriela Guedes da Fonte Dubeux

Centro Universitário Maurício de Nassau,
Recife-PE, Brazil

Mariana Portella Cavalcanti Valença

Centro Universitário Maurício de Nassau
Recife-PE, Brazil

Rafaela Ferraz Duque

Centro Universitário Maurício de Nassau
Recife-PE, Brazil

Maria Helena Queiroz de Araujo Mariano

Universidade Federal de Pernambuco
Recife- PE, Brazil

All content in this magazine is licensed under a Creative Commons Attribution License. Attribution-Non-Commercial-Non-Derivatives 4.0 International (CC BY-NC-ND 4.0).



INTRODUCTION: Bone tuberculosis, also known as osteoarticular tuberculosis, is a clinical manifestation of extrapulmonary tuberculosis. This condition occurs when the bacteria *Mycobacterium tuberculosis* spreads through the lymphatic or blood system following a primary lung infection or reactivation of a latent infection. Symptoms may appear years or decades after the initial infection. It is important to highlight that extrapulmonary cases are rare and are often not considered in the differential diagnosis, especially when there are chronic musculoskeletal complaints. Signs and symptoms, as well as radiographic findings, are not specific, which results in delays in diagnosis of more than a year after the first symptoms. The osteoarticular manifestation of tuberculosis can lead to the disabling destruction of bone, cartilage and surrounding soft tissue, which can be worsened by delays in diagnosis. **OBJECTIVES:** The study aims to analyze the main osteoarticular manifestations in tuberculosis, as this is a serious condition that can appear long after the primary or latent infection, showing manifestations in the osteoarticular system. **METHODOLOGY:** The exploratory research method was used in this work, through a bibliographic search to obtain references that expand knowledge of osteoarticular manifestations in tuberculosis. The research was based on scientific articles published between 2010 and 2023, selected from scientific bases such as Pubmed and SciELO. For the search, health descriptors relevant to the topic were used, such as “Extrapulmonary tuberculosis”, “*Mycobacterium tuberculosis*”, “Infectious arthritis”, “Miliary tuberculosis”, “Osteoarticular tuberculosis”. **RESULTS AND DISCUSSION:** The articles analyzed demonstrated that extrapulmonary manifestations of tuberculosis have been increasing and, in addition to this, in most

cases, it presents non-specific signs and symptoms, delaying diagnosis. Delay in diagnostic suspicion contributes to the emergence of serious changes in the joints involved, such as pre-auricular fistulas, ulcers, salivary gland involvement, osteomyelitis, infectious arthritis and otitis. Vertebral tuberculosis stands out as the most common form of bone tuberculosis, resulting in the destruction of the vertebral bodies and deformities of the dorsal column, whether or not associated with pulmonary disease. The vertebrae are the most affected bones, known as “Pott’s disease”, followed by the epiphyses of the long bones and the joints of knee and hip are generally affected. Among the deformities found in the spine, scoliosis and kyphosis stand out. Progressive kyphosis occurs most frequently when the affected area comprises the lower thoracic spine and the thoracolumbar transition. Spinal cord involvement is most common in the cervical and upper thoracic regions. Involvement of the cervical spine is rare and is associated with a high mortality rate, while involvement of three or more vertebrae represents a high risk of paraplegia. **CONCLUSION:** The osteoarticular manifestations of tuberculosis affect any bone or joint, however it is more common in the spine, hips and knees. Early diagnosis and appropriate treatment are essential to prevent serious complications, such as permanent deformities and joint dysfunction. More research is needed to improve understanding of the pathophysiology, diagnosis and management of osteoarticular tuberculosis, seeking more advanced diagnostic strategies and new therapeutic approaches.

Keywords: Extrapulmonary tuberculosis, *Mycobacterium tuberculosis*, Infectious arthritis, Miliary tuberculosis, osteoarticular tuberculosis.

REFERENCES

LI, X. R. et al. Complex Case Management of Mycobacterium Tuberculosis Extrapulmonary Manifestation to the Right Sacroiliac Joint. *Cureus*, v. 15, n. 1, p. e33789, 1 jan. 2023.

ANGERETT, N. R. et al. Rare septic arthritis of the wrist and carpus primary osteoarticular manifestation of *Mycobacterium tuberculosis*: A case report. *SAGE Open Medical Case Reports*, v. 10, p. 2050313X2211020, jan. 2022.

KABORE, C. et al. [Osteoarticular tuberculosis nosology and diagnostic pitfalls]. *Revue Medicale De Liege*, v. 73, n. 4, p. 191–196, 1 abr. 2018.

SCHETTINO, L. C.; CARELLI, L. E.; BARBOSA, M. O. Tuberculose vertebral: análise descritiva de uma série de casos submetidos a tratamento cirúrgico. *Coluna/Columna*, v. 9, n. 2, p. 119–125, jun. 2010.