

Abstract Template

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Relative lymphocyte count is lower when the etiological agent in Pott's disease is successfully isolated

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Introduction

Pott's disease is one of the oldest infectious diseases affecting humans and one of the top 10 global causes of death. [1-3] Many cases presenting specific clinical-radiographic scenarios are diagnosed late, through a positive therapeutic test, because isolating the etiologic agent is frequently unsuccessful. [2] The aim of this study is to describe the clinical/epidemiological, laboratory, and radiological characteristics of *tuberculous spondylodiscitis* in the Brazilian population, and to assess whether there are differences between patients with and without isolation of the etiological agent in Pott's disease.

Materials & Methods

Patients diagnosed with tuberculosis (TB) of the spine (Pott's disease) underwent follow-up between 2009 and 2019 at a quaternary hospital. The patients were divided into two groups: successful isolation (CI) of the etiological agent (bacilloscopy, culture, or positive molecular rapid test) and unsuccessful isolation (SI) of the etiological agent.

Results

From a total of 26 patients diagnosed with tuberculosis in the spine, 21 were male (80.7%) with a mean age of 40 ± 22.5 years. The average lymphocyte counts were higher in the SI group (25.35 ± 13.08 , $p = 0.025$) compared to the CI group (14.18 ± 7.48). Moreover, the monocyte/lymphocyte ratio was lower in the SI group (0.39 ± 0.22 , $p = 0.009$) in relation to the CI group (0.89 ± 0.65). Relative lymphocyte counts higher than or equal to 16.7, had a sensitivity of 76.9% and specificity of 62.5% for the SI group. Values higher than or equal to 0.58 for the monocyte/lymphocyte ratio showed a sensitivity of 84.6% and specificity of 75.0% for the SI group.

Conclusions

No differences were observed in relation to the clinical-epidemiological and radiological characteristics between the two experimental groups. However, the SI group had higher lymphocyte counts and a lower monocyte/lymphocyte ratio, implying that this group of patients may have a better immunological response.

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