Letter to Editor Regarding "Computed Tomography-Guided Spinal Biopsy in Suspected Infective Spondylodiscitis: An Institutional Review of Its Utility"

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We have read with interest the article by Ravichandran et al published in your highly valued journal, which evaluated the rate of positive computed tomography (CT)-assisted biopsy results in a large number of patients with clinically and radiologically suspected spondylodiscitis.[1] Such a study is valuable because the diagnosis is definitive when the causative organism is isolated, probable when at least one of the blood tests is consistent with the disease, and presumptive—if the typical CT and magnetic resonance imaging (MRI) features of the disease are present in the absence of any positive microbiological cultures.[2] Currently, CT-assisted biopsy is a recognized diagnostic tool that can provide isolation of the infectious pathogen, thus, allowing the initiation of adequate antibiotic therapy alone or after surgical intervention.

After a thorough overview of the article, we shared our opinion. The authors state that biopsies were performed in 259 patients with suspected infectious spondylodiscitis, but they did not specify what the clinical symptoms and MRI findings were, nor did they provide the values of blood parameters specific for spondylodiscitis (leukocyte count, erythrocyte sedimentation rate, and C-reactive protein).

It is not clear what content the authors put into the terms "chronic osteomyelitis" and "nonspecific chronic inflammation," which they had found in 35.1% of cases. We consider that there cannot be spondylodiscitis in the sacrum as there are no discs in this anatomical segment of the spine. Nonspecific chronic inflammation in the literature refers to the heterogeneous group of spondyloarthritis.[3] Chronic osteomyelitis, nonspecific chronic inflammation, and inflammation of the sacroiliac joint have nothing to do with spondylodiscitis.

We cannot agree with the treatment algorithm proposed by Ravichandran et al who suggested initiation of antibiotic therapy on a regular basis and only in case of conservative treatment failure to perform surgical intervention.[1] Recently, with the advances in the pharmaceutical industry, there is widely accepted view that conservative therapy can and should be applied in cases where there is no neurological deficit, spinal deformity, and segment instability.[4]

In our opinion, treatment of proven or suspected spondylodiscitis should be done after careful analysis of the patient's general condition, clinical symptomatology, imaging findings and consideration of the possible complications and after patient consent for treatment. According to the literature, the major indications for surgical stabilization in cases with spondylodiscitis are the presence of spinal instability, prevention of progressive spinal deformity, and neurological compromise.[5]

We fully agree that CT-guided biopsy is a standard medical practice and the gold standard for tissue and microbiological diagnosis in sporadic spondylodiscitis and should be practiced everywhere before initiating medical treatment for this disease.[6]

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Conflict of Interest
None declared.

References

1 Ravichandran RCA, Amritanand R, Moses V, et al. Computed tomography-guided spinal biopsy in suspected infective spondylodiscitis: an institutional review of its utility. Indian J Radiol Imaging 2023;33(03):289–294
2 Corrah TW, Enoch DA, Aliyu SH, Lever AM. Bacteraemia and subsequent vertebral osteomyelitis: a retrospective review of 125 patients. QJM 2011;104(03):201–207
3 Strand V, Singh JA. Evaluation and management of the patient with suspected inflammatory spine disease. Mayo Clin Proc 2017; 92(04):555–564
4 Gregori F, Grasso G, Iaiani G, Marotta N, Torregrossa F, Landi A. Treatment algorithm for spontaneous spinal infections: a review of the literature. J Craniovertebr Junction Spine 2019;10(01):3–9
5 Chen WH, Jiang LS, Dai LY. Surgical treatment of pyogenic vertebral osteomyelitis with spinal instrumentation. Eur Spine J 2007; 16(09):1307–1316
6 Singh DK, Mukund A. Tissue diagnosis in infective spondylodiscitis by CT-guided spinal biopsy: a standard practice before starting treatment. Indian J Radiol Imaging 2023;33(03):287–288

