CORRESPONDENCE

Current Diagnosis and Treatment of Spondylodiscitis

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Other Possible Pathogens

There are gaps in the list of possible pathogens. Patients can develop a systemic infection with *Brucella melitensis* after consuming certain foods, such as goat or sheep cheese. Preferentially, the reticuloendothelial system of the spleen, liver, and bone marrow is infected and this often leads to colonization of the vertebral bodies. This is often first suspected when a history is taken which includes a visit to the tropics, Sicily, or Turkey. Culture may remain negative after routine incubation for only 7 days! Nevertheless, antibodies can be detected in the serum. This infection requires specific treatment with doxycycline over the course of months (eventually combined with rifampicin); otherwise this spondylodiscitis is incurable.

A systemic infection with *Salmonella enterica* of the Typhi serotype can also induce osteomyelitis, followed by spondylodiscitis. This diagnosis too can be confirmed by serology. The specific therapy is then ciprofloxacin.

After a bite (particularly from a dog), *Eikenella corrodens*, *Hemophilus aphrophilus*, and *Pasteurella multocida* can also cause osteomyelitis and spondylodiscitis.

The term "fungi" is too vague. For example, the pathogen may be *Candida* species in drug addicts. If the patient is a tourist who has just visited Death Valley and Las Vegas, one has to think of dimorphic fungi, such as *Coccidioides immitis*. These can be detected by serum antibodies. In leukemia patients, the pathogen may even be a mold.

What is nonspecific spondylodiscitis? Maybe the authors are thinking of infections of unknown etiology?

As these infections are difficult to treat, it is important to remember that fosfomycin penetrates well. It is doubtful whether clindamycin is still of any use for calculated therapy, as many pathogens are resistant — for example, 20% of *Staphylococcus aureus*.

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Differential Diagnosis

It would have been necessary to describe and specify the differential diagnosis, particularly as it proved to be impossible to avoid the clinically confusing ambiguity of this

diagnosis in the title. The underlying problem was the assumption that the terms "spondylodiscitis" and also generally "osteomyelitis" and "spondylitis" exclusively imply bacterial or purulent pathogenesis and morphology, so that no other terms are needed for postinfectious (secondary) chronicity. This ignores the fact that non-bacterial (aseptic and sterile) primary chronic osteomyelitis, spondylitis, and spondylodiscitis exist—as rheumatologists have known for many years. In particular, "spondylodiscitis" has been recognized, at least since its detailed description in 1973 (1), as a noninfectious and nonbacterial symptom of Bechterew's disease and of spondyloarthritis (also known as spondyloarthropathy). This frequent and destructive complication is observed in affected motor segments of the spinal column and involves primary perivertebral tendinopathy. We identified abacterial osteomyelitis as "primary chronic osteomyelitis" in "chronic recurrent multifocal osteomyelitis" (CRMO) as an entity in patients of all ages. It was differentiated as part of the symptom spectrum of the „SAPHO syndrome“ (www.sapho-syndrom-crmo.de and Orphanet 2004, n ≥ 173). It has then been subjected to interdisciplinary analysis and the aseptic clinical course of the osteitis has been described as a plasma cell sclerotic process in three steps (2). About a third of all CRMO patients in all age groups develop clinically relevant involvement of the vertebral bodies. These cases of sterile spondylitis can then progress to spondylodiscitis. Thus CRMO is an important differential diagnosis for ankylosing spondylarthritis and one which has largely been ignored (3).

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