SAPHO Syndrome: Synovitis, Acne, Pustulosis, Hyperostosis, and Osteitis

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A 68-year-old woman with a history of breast cancer, who had undergone left quadrantectomy 24 years prior, had suffered from palmoplantar pustulosis (PPP) and pain in multiple joints and bones for 3 years. Technetium bone scanning showed increased uptake in the sternum, sternocostoclavicular joint, cervical vertebrae, lumbar vertebrae, and right knee (Picture 1, left). A radiograph of the lumbar spine showed osteosclerotic vertebral lesions and paravertebral hyperostosis (Picture 2, left). Coronal reformatted images of computed tomography (CT) of the lumbar spine revealed inflammatory spondylodiscitis with irregularity and erosions in the endplates, osteosclerotic vertebral lesions, and paravertebral hyperostosis (Picture 2, right). A diagnosis of synovitis,
acne, pustulosis, hyperostosis, and osteitis (SAPHO) syndrome was made based on the presence of synovitis in the knee joints, palmoplantar pustulosis, and these radiographical findings (1). The differential diagnosis includes osteosclerotic metastases of breast cancer (1). In accordance with a previous report of the successful treatment of SAPHO syndrome with an oral bisphosphonate (2), we administered alendronate, and her pain improved. Eleven months after the first bone scan, a second bone scan was performed. Because the findings of the second bone scan showed no remarkable change from the first (Picture 1, right), we considered that the possibility of bone metastasis of breast cancer had dropped even further. We plan to carefully monitor the bone lesions.

The authors state that they have no Conflict of Interest (COI).

References