

Bilateral Pleural Effusion as a Manifestation of Ankylosing Spondylitis: A Case Report

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Abstract

Background. Ankylosing spondylitis (AS) is a chronic seronegative spondyloarthropathy, which results in fusion (ankylosis) of the spine and sacroiliac (SI) joints, with the major histocompatibility antigen HLA B27. Although classically thought as a spinal disease, it can involve other organs such as eyes, lungs, and heart. Pleuroparenchymal involvement is uncommon and is seen in the later stages of the disease.

Case Report. A 55-year-old male smoking patient was referred to our hospital for the evaluation of bilateral pleural effusion etiology which was determined on a chest x-ray. His past medical history revealed that he had not a diagnosis of AS. On physical examination there

was kyphosis, loss of lumbar lordosis, and fixed bent-forward posturing. His chest X-ray was compatible with a pleural effusion on right sides and Contrast enhanced computed tomography of total body showed bilateral pleural effusion and vertebral lesions related to AS. He was positive for HLA-B27 antigen (95%). Diagnostic thoracentesis revealed that the bilateral pleural effusion was an exudate with a predominance of lymphocytes. He was diagnosed with AS based on the presence of inflammatory back pain, characteristic imaging findings consistent with sacroileitis, and HLA-B27 positivity. Based on these findings pleural effusion was suggested to be due to AS. Complete resolution of the bilateral pleural effusions was documented on chest

radiography and echocardiography one month after initiation of prednisolone and sulfasalazine therapy.

Conclusion. Pleural effusion is extremely rare extra-articular manifestation of AS, and its diagnosis requires a coordinated multidisciplinary approach involving pulmonologists, imaging specialists, and rheumatologists toward appropriated therapy and subsequent remission.

Keywords: Ankylosing spondylitis, pleural effusion, chest X-ray