

Primary or Secondary Synostosis: The Culmination of the Spondyloarthritis Form of Erosive Arthritis?

To the Editor:

When are synostoses congenital in origin and when are they secondary in origin, and the result of fracture healing or an inflammatory process? Maharaj and Chandran¹ suggested the publication of the first documented case of synostosis in psoriatic arthritis (PsA), a form of spondyloarthropathy (SpA). However, synostoses are well represented in the SpA record^{2,3,4}, and perhaps even facilitate consideration and recognition of the underlying pathology^{5,6}. Fusion of proximal radioulnar and tibiofibular joints are not only documented in current patients with SpA⁷, but have been documented in SpA-afflicted individuals in the archeologic and paleontologic record^{3,4,8}. Recognized in anatomical collections (e.g., Terry collection from the earliest 20th century, curated at the National Museum of Natural History, Smithsonian Institution, Washington, DC, USA), the archeologic record documents about a 5% prevalence of this phenomenon among individuals with SpA^{3,4,6,9}. A classic example is in the Tate Museum Columbian mammoth (Casper, Wyoming, USA). It clearly had erosions characteristic of SpA, but none present at the fused joint.

Synostoses appear to be part of the pathogenesis of the erosive joint disease characteristic of PsA¹⁰, so identification of synostosis in an individual with SpA does not necessarily indicate a congenital origin.

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J Rheumatol 2015;42:6; doi:10.3899/jrheum.141631