



UNIVERSITY of
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MEDICAL CENTER

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DEPARTMENT OF IMAGING SCIENCES

Imaging Sciences Interesting Cases

CASE 289

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CLINICAL PRESENTATION: Patient is a 20-year-old male with a painful, swelling lesion in the region of the right sternoclavicular joint, increasing for one year.

IMAGING FINDINGS: Expansion of the medial half of the clavicle with sclerotic changes involving predominantly the cortex and encroaching on the medullary space.



Figure 1: Frontal view of the right clavicle shows expansion of the medial half of the clavicle with sclerotic changes involving predominantly the cortex and encroaching on the medullary space.

DIAGNOSIS: Clavicular hyperostosis in SAPHO syndrome

DISCUSSION: This case demonstrates clavicular hyperostosis which can have a number of etiologies, including condensing osteitis of the clavicle, Caffey's disease, infectious osteomyelitis/spondylitis, osteosarcoma, Ewing sarcoma, Paget's disease, aseptic necrosis of the clavicle, and SAPHO (synovitis, acne, pustulosis, hyperostosis, osteitis) syndrome.

SAPHO syndrome includes a variety of musculoskeletal disorders with the essential component of an

inflammatory osteitis, which may or may not be associated with dermatological components usually with negative bacterial cultures. The main target area is the anterior chest wall, with lesser involvement of the spine and peripheral skeleton.

The hyperostosis and osteitis that are seen are manifestations of a chronic inflammatory reaction involving both the cortex and the medullary canal with associated endosteal and periosteal thickening. This results in diffuse cortical thickening and narrowing of the medullary canal with or without areas of osteolysis. Inflammatory enthesopathy is also a feature.

The diagnosis was made in this case based on clinical context, radiologic findings, negative bacterial cultures, and a non-infectious inflammatory pathology of multiple biopsies taken from the site of clavicular hyperostosis.

The prognosis is a chronic course with unpredictable exacerbations and remissions.

Treatment usually consists of non-steroidal anti-inflammatory drugs which are usually effective for the relief of pain.

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