

CLINICAL IMAGE

Septic arthritis of the sternoclavicular joint in a patient with human immunodeficiency virus infection

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Abstract

Septic arthritis is an unusual manifestation in patients with human immunodeficiency virus (HIV). The sternoclavicular joint is rarely affected, although it should be considered in immunosuppressed patients and users of intravenous drugs. *Staphylococcus aureus* is the most common pathogen detected and should be covered by empiric antibiotic therapy.

KEYWORDS

human immunodeficiency virus, intravenous drug abuse, septic arthritis, sternoclavicular joint

A 43-year-old man with a history of intravenous (IV) drug abuse and human immunodeficiency virus (HIV) infection was carried to the ER by the paramedics with altered mental status and loss of consciousness.

He refers to a history of intermittent diffuse back pain (5/10) for the last 2 days. He was afebrile and the white-cell count was 14.000 per cubic millimeter (reference range, 4.000-11.000). A phlegmon in both upper limbs and swelling in the medial border of the left clavicle was noted.

An ultrasound of the left sternoclavicular joint was made and showed a fluid collection adjacent to the left edge of the sternum, with multiple internal hyperechogenic areas (Figure 1). Contrast-enhanced chest CT showed a fluid collection in the left sternoclavicular joint, with peripheral enhancement, with marked bone destruction (Figure 2). Also, erosion and destruction of the T9 and T10 vertebrae were noticed, resulting in collapse (Figure 3).

The diagnosis of septic arthritis of the sternoclavicular joint was made, with isolation of *Staphylococcus aureus* after performing an arthrocentesis. It was an incidental

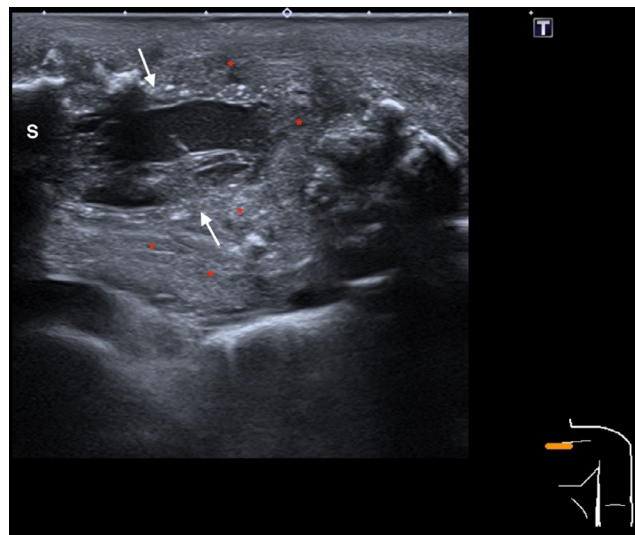


FIGURE 1 Ultrasound of the left sternoclavicular joint showing a fluid collection (arrows) adjacent to the left edge of the sternum (S), with multiple internal hyperechogenic areas and thickening of the surrounding soft tissues (*)

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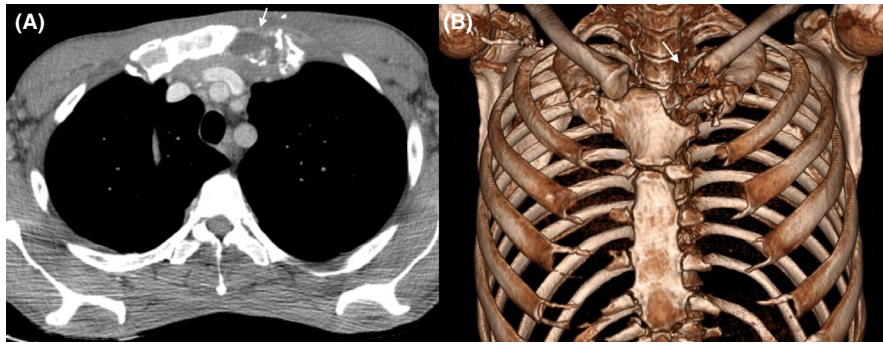


FIGURE 2 Contrast-enhanced chest CT (A) and a 3D reformation (B) showing a fluid collection in the left sternoclavicular joint and marked bone destruction (arrows)

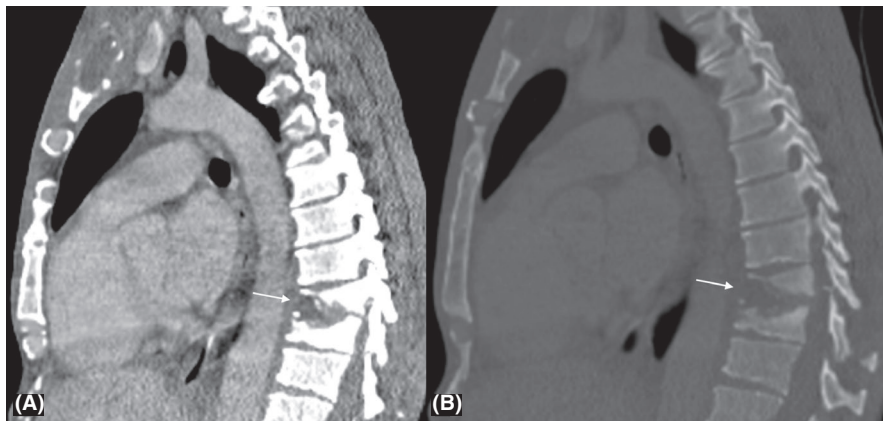


FIGURE 3 Sagittal contrast-enhanced chest CT in mediastinal window (A) and bone window (B) showing erosion and destruction of the anterior margin of T9 and T10 vertebra with consequent collapse

finding in the context of the patient's loss of consciousness due to drug abuse. Treatment with intravenous antibiotics was initiated with a good clinical outcome, although surgical debridement is a valid option in such cases. Due to the patient's discharge against medical advice, a follow-up appointment was not possible.

Septic arthritis in large joints, like hips and shoulders, is a disease of healthy children and adolescence. On the other hand, septic arthritis of the sternoclavicular joint is an unusual infection, especially in otherwise healthy adults¹. Therefore, in complex patients such as HIV patients, it is important to keep in mind unusual joint infections, even not subject to attention by the patient.²

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CONFLICT OF INTEREST

All the authors have no conflict of interest do declare.

AUTHOR CONTRIBUTIONS

Joana Pinto wrote the manuscript and select the radiological images. Willian Schmitt reviewed and edited the manuscript.

ETHICS APPROVAL

Informed consent for publication and related images has been obtained from the patient.

CONSENT

Written informed consent was obtained from the patient to publish this report in accordance with the journal's patient consent policy.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no datasets were generated or analyzed during the current study.

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