

STERNOCLAVICULAR SEPTIC ARTHRITIS: ATYPICAL PRESENTATIONS AND MICROBIOLOGICAL CONSIDERATIONS

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Introduction

Sternoclavicular joint infection (SCJI) is rare, accounting for <1% of septic arthritis cases, but may be **life-threatening** because of its proximity to mediastinal structures. Its non-specific presentation and variable microbiology pose **diagnostic and therapeutic challenges**.

Methods

Two cases of SCJI managed at a tertiary centre were reviewed, covering clinical presentation, imaging findings, surgical management, microbiology, and outcomes.

Results

Case 1

- 48-year-old male, no prior medical history.
- Closed **thoracic trauma**, initial assessment was unremarkable.
- Two weeks later, presented with **fever and local inflammatory signs** over SCJ.
- CT imaging revealed a sternoclavicular **abscess** with mediastinal and cervical extension.
- The patient underwent surgical debridement.
- Blood and surgical cultures identified ***Streptococcus anginosus***.
- Six weeks of targeted antibiotic therapy. **No signs of recurrence at 6 months of follow-up** (Constant score 90).



Fig. 1 – MRI showing left sternoclavicular joint destruction with adjacent abscess and soft-tissue oedema.

Case 2

- 83-year-old female.
- No history of trauma reported.
- Presented with **shoulder pain, fever**, and progressive local **inflammation** over SCJ.
- CT confirmed SCJI with a **periarticular abscess**.
- Surgical debridement was performed.
- ***Streptococcus intermedius*** was isolated from blood and intraoperative samples.
- Targeted antibiotic therapy was done. **No signs of recurrence at 2 years of follow-up** (Constant score 80).



Fig. 2 & 3 – Inflammatory changes over the right sternoclavicular joint at admission; MRI showing joint destruction and abscess formation.

Conclusions

SCJI may occur in patients **without classical risk factors and present with non-specific symptoms**, leading to diagnostic delay. Infection with Streptococcus group organisms may be associated with a more indolent course, allowing less aggressive surgical strategies, even in the presence of deep extension. **Early imaging, targeted antimicrobial therapy, and multidisciplinary management are essential to achieve infection control while preserving function.**

Literature

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