

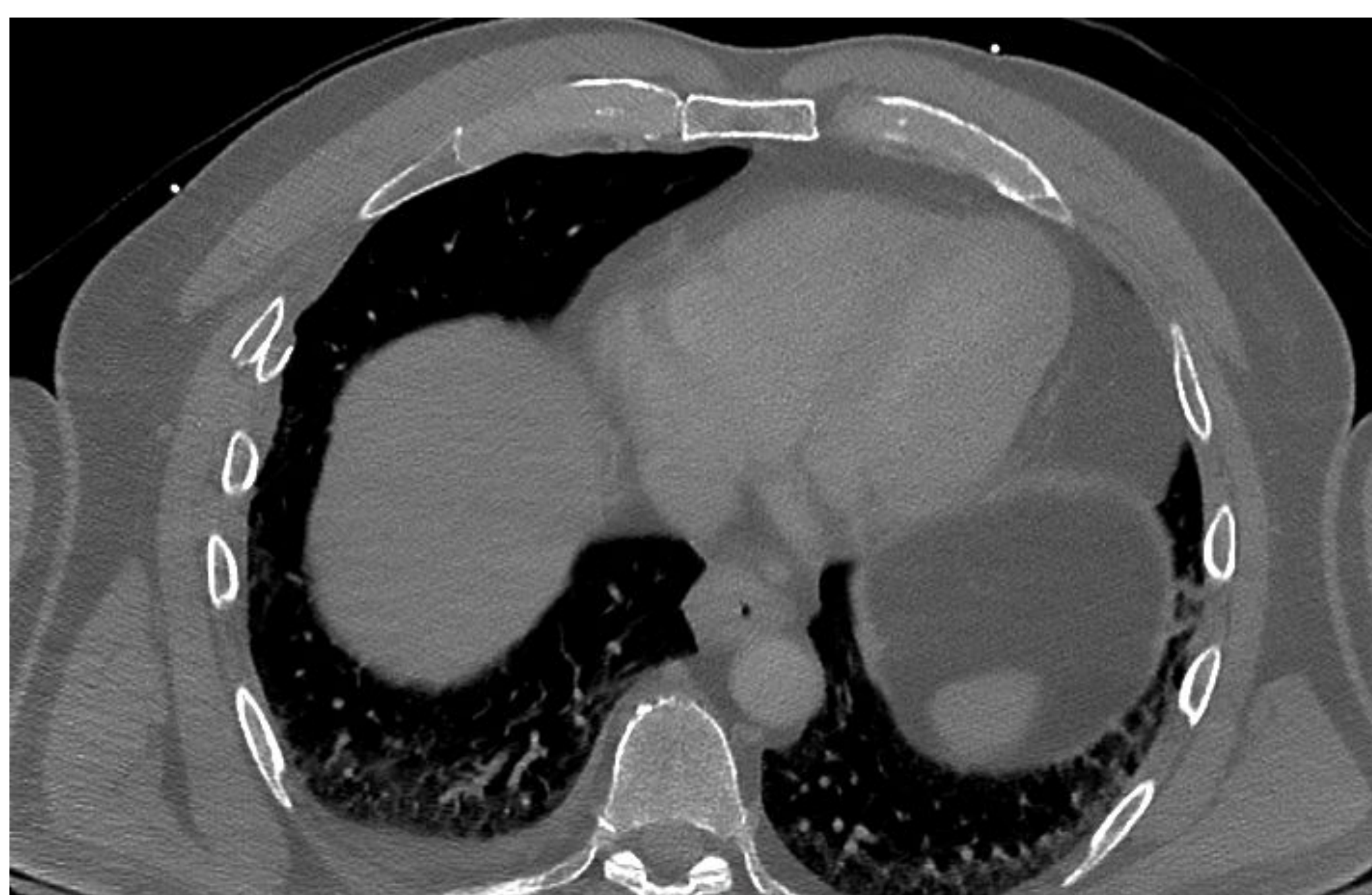
Infection After Surgical Stabilization of Rib Fractures: A Case Report

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BACKGROUND

Surgical stabilization of rib fractures (SSRF) is an increasingly commonly performed procedure with a hardware infection rate of roughly 4%.¹ While there is no standardized treatment protocol for infections following SSRF, common approaches include antibiotics, wound exploration with irrigation and debridement (I&D), negative pressure wound therapy (NPWT), staged wound closure, hardware removal, and antibiotic bead placement.¹

Despite guidelines proposed by Thiels et al. for managing suspected infections¹, no definitive evidence-based guidelines exist. The Surgical Infection Society and Chest Wall Injury Society have acknowledged the need for further research, as insufficient evidence prevents the establishment of concrete recommendations for managing surgical site infections (SSI) or implant-related infections after SSRF.²



CT Chest 2 hours post injury

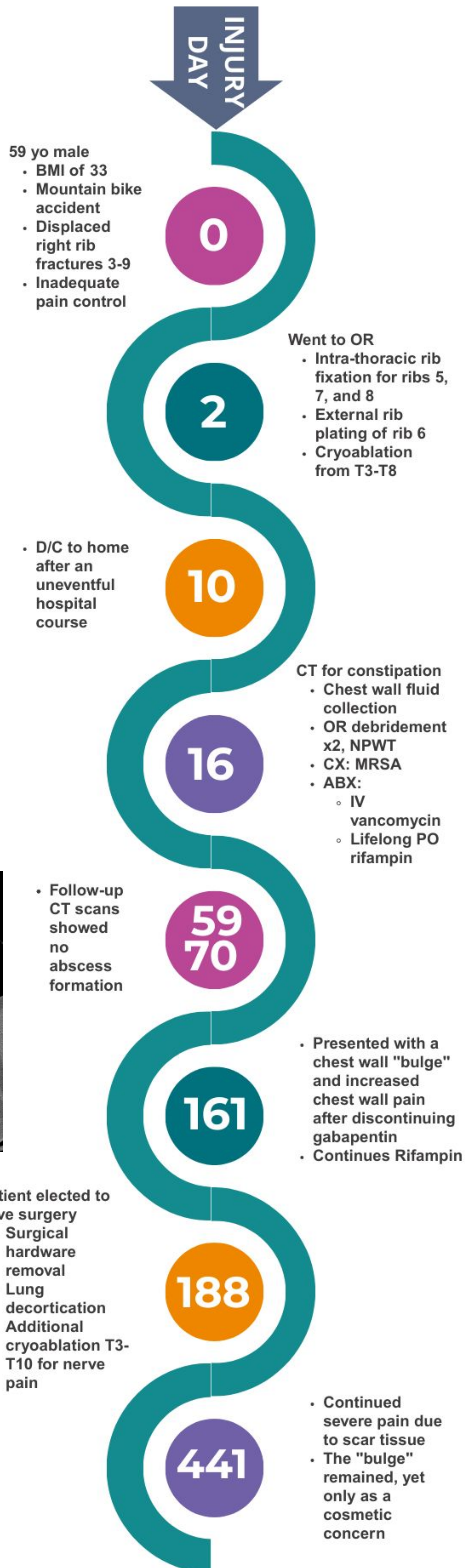
REFERENCES

1. Thiels CA, Aho JM, Naik ND, et al. Infected hardware after surgical stabilization of rib fractures: Outcomes and management experience. *J Trauma Acute Care Surg.* 2016;80(5):819-23.
2. Forrester JD, et al. Surgical Infection Society-Chest Wall Injury Society Recommendations for Management of Surgical Site or Implant-Related Infections After Surgical Stabilization of Traumatic Rib or Sternal Fractures. *Surg Infect (Larchmt).* 2023;24(5):414-424.

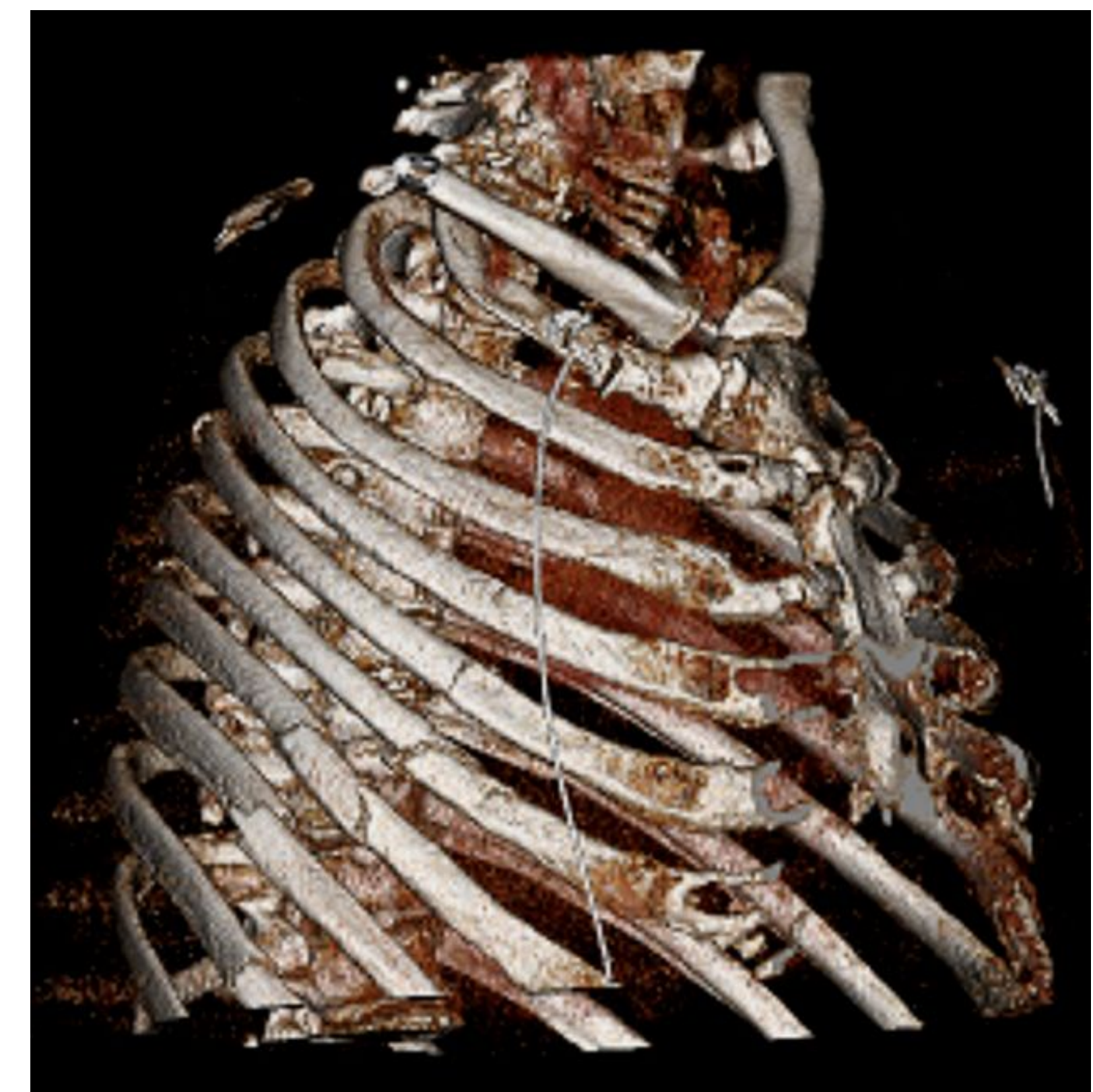
ACKNOWLEDGEMENTS

We want to thank this patient for his willingness to permit us to discuss his case. We also want to thank St. Anthony Hospital Trauma Department for their encouragement to participate in national dissemination and engagement.

PATIENT COURSE



IMAGING



3D Rendering of patient's right sided rib fractures prior to rib fixation.



X-Ray Image of rib plating postoperative day 5.

DISCUSSION

This case highlights the absence of established protocols for managing infections in SSRF patients, particularly in cases involving deep tissue infections. Hardware removal does not always alleviate pain and may lead to new complications, worsening pain, and further scarring. Conflicting clinical opinions can complicate treatment decisions and introduce unnecessary risks. Additional studies and collaboration with societies such as the Surgical Infection Society are needed to develop standardized guidelines for managing SSRF-related infections.

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