




A rare case of severe perimyocarditis caused by community acquired methicillin-resistant *Staphylococcus aureus*

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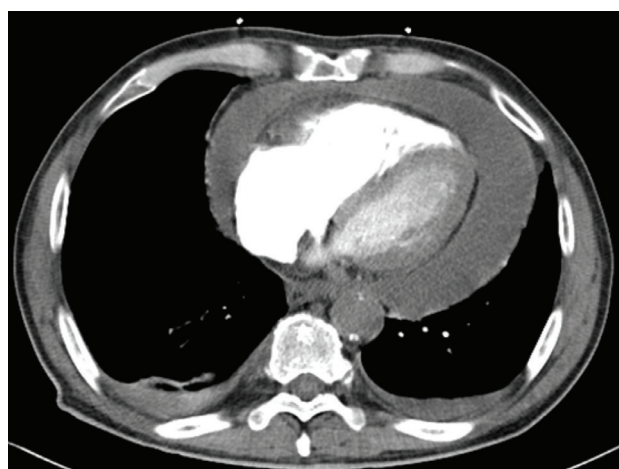


FIGURE 1. Chest CT scan showing large circumferential pericardial effusion.

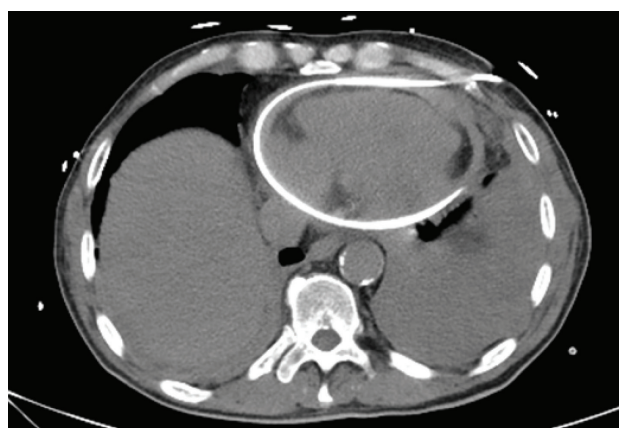


FIGURE 2. Chest CT scan after the pericardiocentesis.

Introduction: Community acquired methicillin-resistant *Staphylococcus aureus* (MRSA) is a microbiological agent that can lead to life-threatening infections. MRSA infection is most often associated with people who have been in a hospital environment, but in recent years there has been an increase in infections caused by community acquired MRSA. MRSA is a frequent cause of skin infections, pneumonia, and osteomyelitis. However, only half a dozen cases of pericarditis caused by MRSA have been reported in the literature so far^{1,2}.

Case report: 65-year-old patient was hospitalized due to a significant circumferential pericardial effusion followed by elevated inflammation markers and fever (**Figure 1**). At the admission, severe microcytic anemia (Hb 78 g/L), compensated respiratory alkalosis (pH 7.49), acute renal insufficiency with elevated lactates (5 mmol/L), inflammatory parameters (CRP 262 mg/L) and troponin (hsTnI 3673 ng/L) were monitored in laboratory findings. Upon arrival at Cardiac Intensive Care Unit, a diagnostic pericardiocentesis was performed via apical access (**Figure 2**). Hemorrhagic-purulent content was obtained, in total 750 ml of liquid. Microbiological analysis was performed, and community acquired MRSA was isolated from the punctate. In the further course of treatment, a significant left-sided pleural effusion developed, for which a Rocket drain was placed, while MRSA was also isolated from the punctate. Given that MRSA was also isolated from the blood culture, a transesophageal ultrasound was performed, and endocarditis was ruled out. Targeted antimicrobial therapy with vancomycin and linezolid was started with complete recovery after 3 weeks of therapy.

Conclusion: Perimyocarditis caused by MRSA is a rare condition especially in absence of recent in-hospital treatments. An infection like this often leads to a high patient mortality rate, especially if cardiac tamponade occurs. Community acquired MRSA has so far not been recognized as a frequent cause of community-acquired infections, but due to the increase in incidence, it is certainly a cause that we should keep in mind when treating patients with a clinical presentation of sepsis that occurred outside the hospital.

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LITERATURE

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