

Purulent Pericarditis and Streptococcal Toxic Shock Syndrome: A Rare Presentation of Streptococcus pyogenes Infection

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ABSTRACT

Purulent pericarditis (PP) is a potentially fatal localized infection of the pericardial space accompanied by suppuration. Antimicrobial therapy and pericardial drainage are the two main treatments for PP. One potential linked terrible consequence of PP is constrictive pericarditis (CP), a type of diastolic cardiac failure caused by an inelastic thickened pericardium. Gram-positive, beta-hemolytic, catalase-negative, and coagulase-negative streptococcus pyogenes cocci can be seen in pairs or chains. Streptococcus pyogenes is a significant bacterial pathogen that is unique to humans and can appear in a variety of ways. Invasive Streptococcus pyogenes-induced pericarditis has seldom ever been documented. Echocardiography revealed a significant pericardial effusion with tamponade physiology in a 61-year-old man who had been experiencing growing left-sided chest discomfort and an erythematous rash. The diagnosis of purulent bacterial pericarditis with streptococcal toxic shock syndrome was established after an emergency pericardial window produced purulent fluid and cultures verified Streptococcus pyogenes. Despite the fact that the bacteria were susceptible to antibiotic therapy, the patient died after receiving the proper antibiotics and intravenous glycemic injection. Rarely observed, S. pyogenes-induced PP primarily affects newborns and children and progresses quickly in immunocompromised people. The prognosis could be improved with an earlier diagnosis, appropriate drainage surgery, and efficient antibiotic treatment.

Keywords: purulent pericarditis, streptococcal, toxic shock syndrome, streptococcus pyogenes infection

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