

## IMAGES IN CARDIOLOGY



### Purulent Pericarditis with Pneumopericardium Caused by *Streptococcus milleri*

We report a case of purulent pericarditis due to *Streptococcus milleri*. A 54-year-old man was seen for symptoms of pericarditis, high fever, and cardiac tamponade. In view of findings in the chest radiograph suggestive of a possible pneumopericardium, an emergency CT was performed that confirmed the diagnosis. In Figure 1 can be seen the thoracic CT with cardiac contrast revealing severe pericardial effusion (arrowhead outline) with associated pneumopericardium (arrowhead).

The pericardial fluid was purulent and cultures were positive for *S. pneumoniae*, a habitual facultative aerobic microorganism of the oropharyngeal flora that can behave like an anaerobe and generate gas. The patient presented notable clinical improvement after pericardiocentesis and antibiotic treatment. In 7-10 days the amount of drainage fluid decreased. Severe effusion appeared again, with a thickened, septated pericardium associated with clinical and echocardiographic signs of hemodynamic impairment. In view of this situation,

intrapericardial urokinase was administered for the next 48 h, which increased the drainage volume, with which the effusion remitted and the clinical situation improved. Surgical drainage was later performed.

In a few days he presented a new clinical deterioration, with pericardial constriction but no associated effusion. This situation lasted 10-15 days, eventually remitting without need for pericardiectomy.

Purulent pericarditis is a rare disease that can course with pneumopericardium. Intrapericardial fibrinolysis is a therapeutic possibility for these pericardial effusions. It can evolve with a transitory constrictive phase, which is why pericardiectomy should only be indicated in the light of severe and persistent signs of constriction.

José J. Salazar González, Juan Sánchez-Rubio Lezcano and Pedro Merchante García

Servicio de Cardiología. Hospital Universitario Miguel Servet. Zaragoza. España.