



PNEUMOCOCCAL PNEUMONIA COMPLICATING PURULENT PERICARDITIS IN A PREVIOUSLY HEALTHY NINE MONTHS OLD FEMALE CHILD

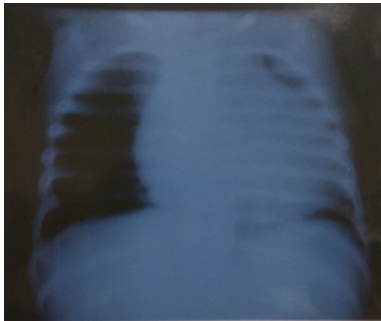
Rama Prasad G S	Professor and principal, Department of Pediatrics, Kurnool Medical College, Kurnool, Andhra Pradesh, India.
Rama Devi G V*	Professor and HOD, Department of Pediatrics, Kurnool Medical College, Kurnool, Andhra Pradesh, India. *Corresponding Author
Sarada G	Associate professor, Department of Pediatrics, Kurnool Medical College, Kurnool, Andhra Pradesh, India.
Chandra Mohan K	Postgraduate, Department of Pediatrics, Kurnool Medical College, Kurnool, Andhra Pradesh, India.

ABSTRACT **INTRODUCTION:** among all the microorganisms *Streptococcus pneumoniae* is the leading cause of morbidity and mortality in children less than five years of age.¹ The pathogen is the most commonly isolated bacterial etiology of pneumonia in children. Purulent pericarditis is rare, but it is associated with high mortality despite aggressive drainage and antibiotic therapy. In the pre-antibiotic era, *S. pneumoniae* was the most common pathogen of purulent pericarditis in children. After the introduction of antibiotics, *S. pneumoniae* pericarditis cases decreased from 51% of all cases to 9% and occurred mainly in adults.² Nowadays, infections of the pericardium are rare in children and are often related to underlying medical conditions such as immunodeficiency.³ Herein we describe a case of *S. pneumoniae* with purulent pericarditis in a previously healthy nine months old female child.

KEYWORDS : Purulent pericarditis, Tamponade, Pneumococcal pneumonia, pericardial drainage

CASE PRESENTATION:

A 9-month-old female presented to the emergency service room, with high-grade fever, shortness of breath, and grunting of 2 days duration. On examination, she had 38.5 degrees Centigrade of temperature, and she was conscious, tachycardic (189 beats/min), and tachypneic (74 breaths/min). The oxygen saturation was 90% with room air, and hepatomegaly noted. On auscultation, the first and second heart sounds were normal and no pericardial rub. A chest X-ray showed an enlarged heart silhouette. Electrocardiogram study was normal. The peripheral WBC count was 29100 cells per cumm of blood with 49% granulocytes. C-reactive protein was 65.3 mg/dl. An echocardiogram showed a large amount of pericardial effusion.



Percutaneous pericardial drainage performed with a pigtail catheter inserted via the subxiphoid approach. Catheter drainage continued for four days in conjunction with systemic antibiotics. Catheter patency maintained with antibiotic lavage. Immediate hemodynamic improvement followed the initial pericardial drainage. Fever, leukocytosis, and sepsis resolved during therapy. The catheter removed after three days when no collection of pus noted for 48 hours. There was no echocardiographic evidence of recurrent pericardial effusion during treatment and the following discharge from hospital on followup.

CHEST X-RAY :

Showing consolidation of the right upper lobe with Minimal pleural effusion and enlarged cardiac silhouette.

CONCLUSION: Purulent pericarditis secondary to pneumococcal pneumonia is a rare entity, and often underestimated despite being associated with a high mortality rate. *S. pneumoniae* purulent pericarditis in children is a rare but life-threatening disease. When the diagnosis made early, and treatment started promptly, the outcome may be favorable in most cases.

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