



# Symptomatic Pericardial Cyst: A Case Report with Diagnosis and Management

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## INTRODUCTION

- **Pericardial cysts** are one of the **most common primary benign lesions**, accounting for 33% masses found **in the mediastinum**<sup>1</sup>
- **75% of pericardial cysts are asymptomatic**. In the remaining cases, symptoms primarily arise due to the mass effect.<sup>1</sup>
- We present a case report of a symptomatic pericardial cyst in a patient who presented with chest pain. The diagnosis was confirmed through diagnostic imaging, and the subsequent management approach is discussed.

## CASE PRESENTATION

- A **70-year-old female** with history of smoking, HLP and emphysema presented with a **one-year history of dull, intractable without radiation chest pain that worsened when lying on the left side**. Physical examination did not reveal any notable findings
- **Initial diagnostic evaluations** including chest X-ray, echocardiogram, and EKG **did not reveal any abnormalities**. The nuclear stress test revealed no evidence of acute ischemia or a significant fixed defect
- **Chest computed tomography angiogram (CTA)** revealed
  - (1) A **stable pericardial cyst** measuring 22 x 17 mm at the level of the left atrium.
  - (2) A **low attenuating lymph node** adjacent to the left atrium
  - (3) **Bibasilar atelectasis** were observed.

These findings strongly indicate the presence of a **benign pericardial cyst**.

- The patient has been managed with conservative treatment with periodic imaging follow-up.

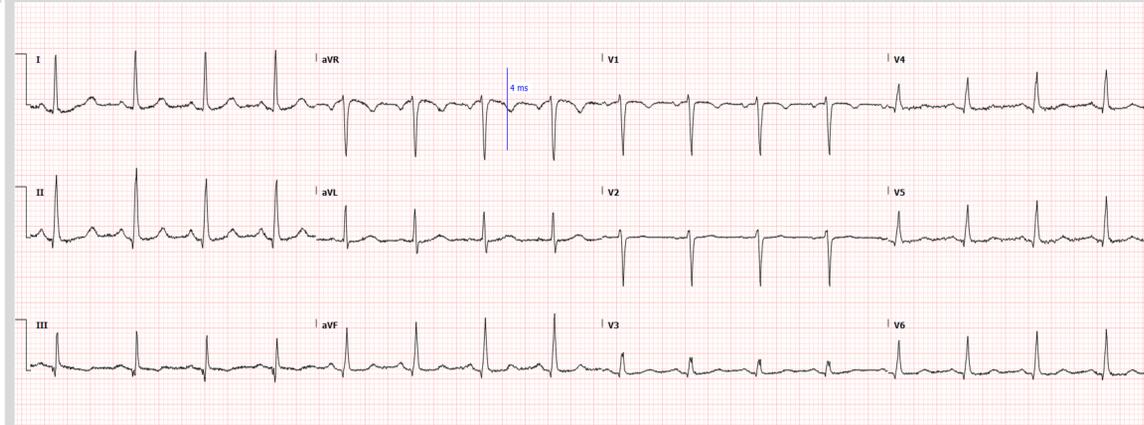


Figure 1: EKG without any abnormalities detected

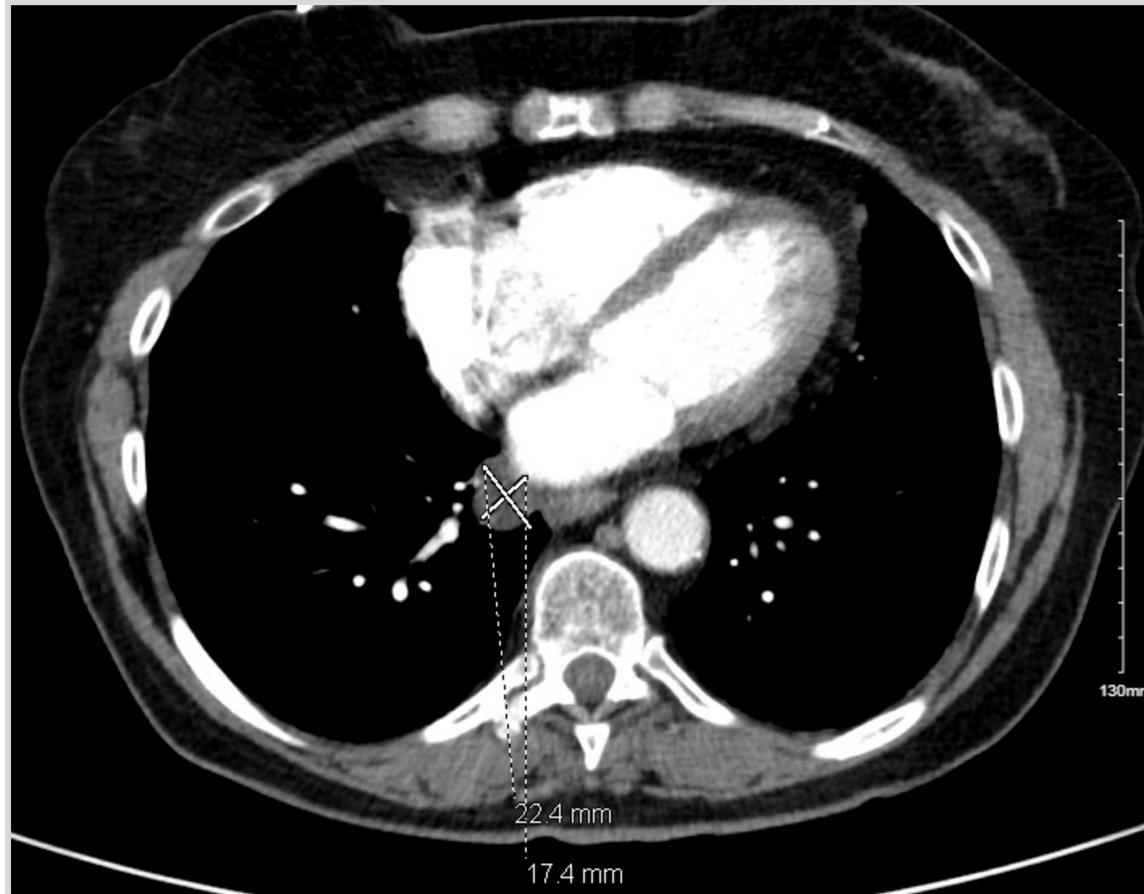


Figure 2: CT chest showing pericardial cyst measuring 22 x 17 mm (red arrow)

## DISCUSSION

- Mostly **asymptomatic**
- **Chest X-ray, CT scan, MRI, and echocardiography**: establish the diagnosis<sup>2</sup>
- **Systematic approach is essential** when selecting treatment
- Treatment options available:
  - Conservation and follow-up**
  - Percutaneous aspiration, ethanol sclerosis**
  - Surgical excision**.<sup>3</sup>
- **Cardiac investigation for CAD is necessary** for patients with high-risk factors.
- **Surgical excision may not be needed** for small, non-life-threatening cysts
- In conservative management, **reassurance is crucial** to alleviate patient stress
- **Long-term follow-up is important** to monitor patient recovery, potential recurrence, and complications.

## CONCLUSION

- Pericardial cysts might be one of the **etiologies** for chest pain symptom
- **Chest CT scan and transthoracic echocardiography (TTE)** play a crucial role in establishing the diagnosis
- **Surgical excision** is recommended for large symptomatic cysts or potential for life-threatening risks<sup>4</sup>
- **Conservative management** may be appropriate for small symptomatic cysts<sup>4</sup>
- **Long-term follow-up with periodic imaging surveillance** is crucial to monitor patient.

