Pericardial cyst: a benign anomaly

Krishnananda Nayak,1 Ranjan K Shetty,2 G Vivek,2 Umesh M Pai1

1Department of CVT, MCOAHS, Manipal, Karnataka, India
2Department of Cardiology, Kasturba Medical College, Manipal, Karnataka, India

Correspondence to Dr G Vivek, vivekgraman@gmail.com

DESCRIPTION

A 54-year-old asymptomatic man was detected to have a prominent left heart border on a routine chest x-ray done during his annual health check (figure 1, arrows). Echocardiogram revealed a cystic lesion occupying the space antero-lateral to the right ventricular outflow tract (RVOT; figure 2). The cystic cavity did not produce any compression of the RVOT. CT of the chest showed a 6×4 cm homogeneous smooth-walled cyst with no evidence of contrast enhancement or calcification (figures 3 and 4) confirming a pericardial cyst. Repeat echocardiogram done 6 months later did not show any progression of size.

Pericardial cysts are rare congenital anomaly located in the mediastinum.1 They are usually asymptomatic; but rarely produce symptoms based on their location and size.2 Commonly they are located in the right cardiophrenic angle, followed by the left, antero-superior and posterior mediastinum.3 They are usually unilocular, well-marginated, spherical-shaped cysts lined with a single layer of mesothelial cells histologically.4 Most of the cysts are asymptomatic but occasional complications include obstruction of the RVOT, obstruction of the main bronchi and atelectasis, cardiac tamponade and sudden death.5 Imaging modalities include echocardiography, CT and MRI.1 Usually close follow-up is sufficient in asymptomatic patients. Percutaneous drainage and surgical resection are the usual treatment modalities for symptomatic individuals.
Learning points

- Pericardial cysts are rare benign mediastinal masses usually detected in asymptomatic individuals.
- Rare complications include compression of the bronchi, ventricular outflow tract, rupture with tamponade and sudden death.
- Treatment in symptomatic individuals includes surgical resection or percutaneous aspiration.

Competing interests None.
Patient consent Obtained.

REFERENCES

Figure 4  Contrast-enhanced CT of the chest, coronal section showing the relationship of the cyst (Cy) to the pulmonary artery (P) and aorta (A).