A 67-year-old man complained of exertional dyspnea, shortness of breath and a dry cough. Clinical examination revealed signs of a left-sided pleural effusion. Chest-wall expansion and basal air entry were reduced; percussion over the lower chest produced a dull note. A posteroanterior chest film demonstrated a left pericardial mass (Fig. 1, arrows). Computed tomography of the chest disclosed an extracardiac mass filled with fluid. The patient remained asymptomatic for 6 months then noticed increasing exertional dyspnea. Through a left anterolateral thoracotomy, a cyst, measuring $9 \times 7$ cm, was totally excised (Fig. 2, arrows). Its origin from the pericardium was confirmed. The patient was discharged 5 days postoperatively. Chest radiography 6 weeks postoperatively gave normal findings, and the patient reported that his symptoms had resolved.

Histopathological examination demonstrated that the cyst was lined by a single layer of cuboidal, columnar cells. Between the cells there was laminated fibrous tissue, fat, vessels and a patchy lymphocytic infiltrate, features consistent with a simple pericardial cyst (Fig. 3).

Pleuropericardial cysts are common benign abnormalities with an estimated prevalence of 0.01%. Their occurrence in mediastinal tumours is approximately 7%. They rarely provoke symptoms so they are usually detected by chest radiography or computed tomography done for other reasons. Histologically, these cysts are lined with a single layer of mesothelial cells in a stroma of connective tissue. They contain a clear, water-like fluid, giving rise to the term “spring water cysts.” They vary from 2 to 15 cm in dimension and are commonly located in the anterior mediastinum at the cardiophrenic angle. Pleuropericardial cysts follow a benign course in the majority of cases. Nevertheless complications have been reported, including cyst rupture, compression of the heart or the main bronchus, and sudden death. Complete cyst resection by open thoracotomy or video-assisted thoracoscopy is the only effective management.

References