Soft-tissue images. Pleuropericardial cyst

67-year-old man complained of exertional dyspnea, shortness of breath and a dry cough. Clinical examination revealed signs of a leftsided 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 9×7 cm, was totally excised (Fig. 2, arrows). Its origin from the peri-

FIG. 1.

cardium 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 uncommon 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

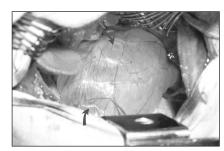


FIG. 2.

term "spring water cysts." They vary from 2 to 15 cm in dimension¹ 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.² Complete cyst resection by open thoracotomy¹ or video-assisted thoracoscopy³ is the only effective management.

References

- Satur CM, Hsin MK, Dussek JE. Giant pericardial cysts. Ann Thorac Surg 1996; 61:208-10.
- Szinicz G, Taxer F, Riedlinger J, Erhart K.. Thoracoscopic resection of a pericardial cyst. *Thorac Cardiovasc Surg* 1992; 40(4):190-1.
- 3. Mouroux J, Elkaim D, Maalouf J, Padovani B, Richelme H. [Pleuropericardial cysts: treatment by video-assisted surgery.] *J Chir (Paris)* 1993;130:522-4.

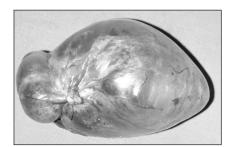


FIG. 3.

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