



Primary epithelioid angiosarcoma of the chest wall complicating calcified fibrothorax and mimicking empyema necessitatis

Luis Gorospe¹, Ana Patricia Ovejero-Díaz², Amparo Benito-Berlinches³

We describe the case of a 72-year-old male patient with primary epithelioid angiosarcoma of the chest wall (PEACW). The patient complained of a painful lump in his chest. His medical history was consistent with calcified fibrothorax secondary to a tuberculous infection during childhood. Empyema necessitatis (EN) was initially suspected. An X-ray of the chest (Figure 1A) showed characteristics similar to those seen on previous X-rays. A CT scan demonstrated a heterogeneous mass that focally destroyed a rib and invaded chest wall muscles (Figure 1B). A CT-guided biopsy of the mass (Figure 1C) revealed a high-grade PEACW. Unfortunately, the

patient died from brain and pulmonary metastases three weeks later.

The development of a chest wall lump in a patient with chronic calcified fibrothorax of tuberculous origin should prompt the possibility of EN. However, only a few cases of PEACW developing in patients with a chronic calcified fibrothorax have been published in the literature.⁽¹⁻³⁾ To our knowledge, there have been no reported cases in which PEACW complicating calcified fibrothorax was accurately diagnosed on the basis of percutaneous biopsy. Despite its rarity, PEACW should be suspected in patients with chronic calcified fibrothorax that develops as a chest wall mass.



Figure 1. In A, a posteroanterior chest X-ray showing right calcified fibrothorax (asterisks). In B, axial contrast-enhanced CT of the chest scan showing a heterogeneous hypervascular mass (asterisk) infiltrating the right serratus anterior and pectoralis muscles, as well as the fourth rib (long arrow). Note the extensive calcified fibrothorax on the right. In C, axial CT of the chest, with maximum intensity projection, showing a large-core needle biopsy (14-gauge) traversing the chest wall for histological analysis of the mass (asterisk).

RECOMMENDED READING

1. Hattori H. Epithelioid angiosarcoma arising in the tuberculous pyothorax: report of an autopsy case. *Arch Pathol Lab Med.* 2001;125(11):1477-9.
2. Maziak DE, Shamji FM, Peterson R, Perkins DG. Angiosarcoma of the chest wall. *Ann Thorac Surg.* 1999;67(3):839-41. [https://doi.org/10.1016/S0003-4975\(99\)00073-9](https://doi.org/10.1016/S0003-4975(99)00073-9)
3. Aozasa K, Naka N, Tomita Y, Ohsawa M, Kanno H, Uchida A, et al. Angiosarcoma developing from chronic pyothorax. *Mod Pathol.* 1994;7(9):906-11.

1. Departamento de Radiología, Hospital Universitario Ramón y Cajal, Madrid, España.
2. Departamento de Cirugía Torácica, Hospital Universitario Ramón y Cajal, Madrid, España.
3. Departamento de Patología, Hospital Universitario Ramón y Cajal, Madrid, España.