An Often-Overlooked Etiology of Pleuritic Chest Pain

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An 80-year-old man with history of coronary artery disease (CAD) and deep vein thrombosis (DVT) was admitted for left-sided pleuritic chest pain. Physical exam, ECG, CBC, electrolytes, and troponin were unrevealing. Chest CT with contrast demonstrated a swirling soft tissue density in the anterior mediastinum, with prominent epipericardial fat stranding extending inward to the pericardial surface with inflammatory changes of the left posterior pericardium itself,

consistent with epipericardial fat necrosis (EPFN). Ibuprofen was started, and at 3-month follow-up, chest pain had resolved and CT showed near complete resolution of the initial radiographic findings (Fig. 1).

EPFN is an often-overlooked etiology of pleuritic chest pain in patients with a negative cardiopulmonary workup.¹ Onset is usually acute, but can persist up to a year. ECG and lab tests are usually normal. CXR often shows a paracardiac opacity, occasionally with an associated pleural effusion. CT shows an ovoid density in the juxtapericardial fat, with prominent stranding extending to the pericardial surface with inflammatory changes of the pericardium.² The triad of pleuritic chest pain, classic CT findings, and negative cardiopulmonary work-up is highly suggestive of EPFN.³ Because of its self-limiting nature, the treatment is conservative management with NSAIDs.⁴ Follow-up imaging is recommended to confirm resolution and exclude neoplastic diseases such as liposarcoma.

Fig. 1 The patient's chest CT showing characteristic radiographic findings of epipericardial fat necrosis

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