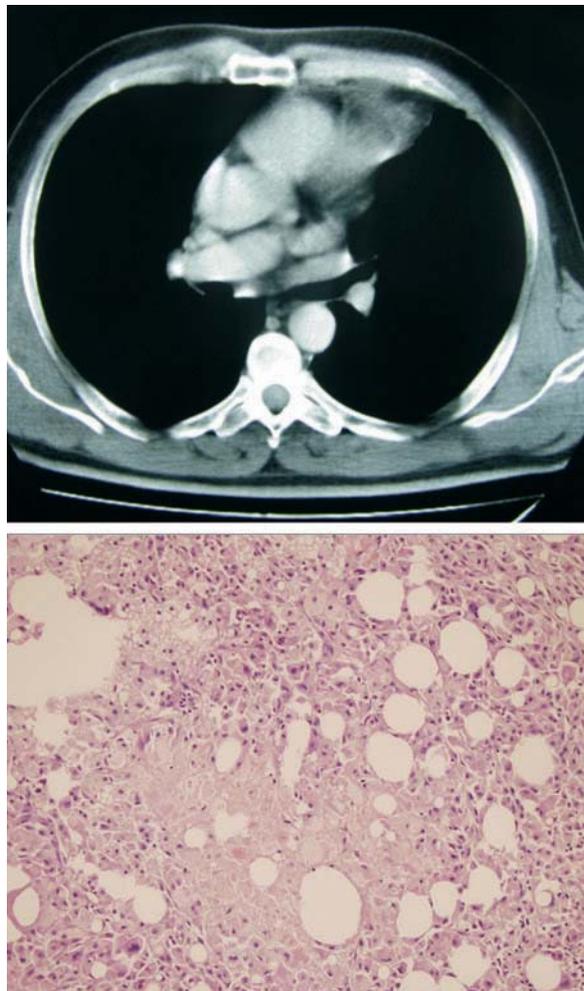


### Mediastinal Panniculitis

**To the Editor:** The term panniculitis refers to a group of diseases characterized by an inflammation of adipose tissue. Although it usually involves the skin, some of its variants may exceptionally exhibit extracutaneous disease in the form of involvement of visceral fat. Such is the case of the controversial Weber-Christian disease or mesenteric panniculitis. Few publications mention pleuropulmonary involvement in panniculitis,<sup>1,2</sup> and even fewer mention mediastinal involvement (only 3 are available in the literature).<sup>3-5</sup> We present the case of a patient with a mass in the anterior mediastinum who was finally diagnosed with nonsuppurative mediastinal nodular panniculitis.

The patient was a 48-year-old man who smoked 3 to 4 cigarettes a day. He had a clinical history of pyelonephritis and 2 previous episodes of poisoning by organic phosphate insecticides. He was referred to our clinic for evaluation of a mediastinal mass that was discovered after a cold. He presented a 4-month history of pleuritic chest pain accompanied by moderate effort dyspnea. Physical examination on admission was unremarkable. Laboratory workup, baseline arterial gas values, and the electrocardiogram were normal. The tumor markers analyzed (carcinoembryonic antigen, prostate-specific antigen, enolase, squamous cell antigen) were normal, and the results of both the Mantoux test and sputum cultures were negative. Computed tomography of the chest revealed a 5 × 4-cm mass of mixed formation containing fatty tissue and more solid densities of septate appearance. The mass was situated on the left anterior mediastinum and extended toward the chest wall (Figure). Selective pulmonary angiography was performed and enabled us to rule out vascular abnormalities of the pulmonary arterial and venous tree, as well as the thoracic aorta. Transthoracic needle biopsy was not performed in the patient's referral hospital because of the presence of vessels in the mass. Finally, surgical exploration by left anterior thoracotomy revealed a tumor measuring 7 × 4 cm in the anterior mediastinum, from where it extended to the pericardium, lingula, and anterior chest wall. Block resection was performed from segments next to the fourth and fifth anterior ribs. The chest wall was reconstructed with expanded polytetrafluoroethylene mesh (Gore Tex, WL Gore y Asociados, SL, Sant Joan Despí, Barcelona, Spain). The patient progressed satisfactorily in the postoperative period and continues to have periodic checkups at the clinic 3 years after surgery. Microscopy of the sample revealed abundant cytoosteonecrosis phenomena with a large quantity of histiocytes and foam cells accompanied by multinucleated giant cells (Figure). In addition to mediastinal involvement, the lesions affected the surface of the lung, the pericardium, and the chest wall. Pathology provided a diagnosis of nonsuppurative nodular panniculitis. With this

**Figure.** Computed tomography of the chest showing a mass in the left anterior mediastinum extending to the chest wall. In the lower panel, microscopy of the lesion showing adipose tissue with areas of central steatonecrosis accompanied by a dense inflammatory infiltrate composed predominantly of histiocytes and foam cells together with multinucleated giant cells (hematoxylin-eosin, ×20)



diagnosis, the study of this patient was concluded to rule out a possible secondary origin such as infectious disease, pancreatic disease, or  $\alpha_1$ -antitrypsin deficit. Thus, the condition was considered idiopathic.

Mediastinal involvement in panniculitis is exceptional. We found 3 cases in the literature. The first is considered a systemic variant of Weber-Christian disease.<sup>3</sup> The second was a case of xanthogranulomatous panniculitis with an intracranial lesion and retroperitoneal, pericardial, and mediastinal involvement.<sup>4</sup> The last was a case of secondary panniculitis and disseminated infection by *Mycobacterium avium-intracellulare*, and, in addition to the mediastinum, the spleen, liver, and gastrointestinal tract were infected.<sup>5</sup> In the case we report, no possible etiologic agent was found; therefore, the panniculitis was considered idiopathic. As for the history of pesticide poisoning, no possible association with panniculitis has been reported in the literature. This exposure has been reported as a cause of severe pulmonary fibrosis<sup>6</sup> and it has been related to a potential carcinogenic effect, thus increasing the risk—according to some studies—of lung cancer, leukemia, and non-Hodgkin lymphoma.

In conclusion, we present an exceptional case of mediastinal panniculitis with involvement

of the parenchyma, lungs, pericardium, and chest wall.

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