

Cold Abscess of the Chest Wall 58 Years After Thoracoplasty

To the Editor: Cold abscess of the chest wall is a rare form of tuberculosis^{1,2} that accounts for 1% to 3% of musculoskeletal forms of the disease.^{2,3} Pyogenic abscesses and chest wall tumors should be included in the differential diagnosis, which is often difficult in view of the low diagnostic yield of fine-needle aspiration of lesion material.^{1,2} More than half the patients with this disease have a history of pulmonary tuberculosis.⁴ Surgery and chemotherapy combined give the best therapeutic results.^{1,2}

Thoracoplasty was a widespread treatment for tuberculosis in the 1930s and 1940s until use declined with the development of new collapse therapy techniques, routine lung resection, and especially chemotherapy.⁵ However, surgical complications may develop decades later.⁶

We describe the case of an 80-year old man whose medical history included right upper thoracoplasty to treat pulmonary tuberculosis 58 years earlier. The patient had been asymptomatic until he presented with a paravertebral mass that was underneath the previous scar and that had been growing for 1 month. A chest computed tomography scan revealed a heterogeneous mass (17×11 cm) with a calcified wall affecting the right trapezius and subscapular muscles (Figure). Fine-needle aspiration was performed and Ziehl-Neelsen stains were negative, as were cultures for both aerobic and anaerobic microorganisms. A solid medium culture was positive for *Mycobacterium tuberculosis*.

Having diagnosed cold abscess of the chest wall, we incised the previous scar tissue and debrided 3 abscesses in the parascapular and subscapular regions. The presence of acid-alcohol fast bacilli in the contents of the abscesses was confirmed. There were no postoperative complications. As a complement to surgical treatment, isoniazid (300 mg/d) and rifampin (600 mg/d) were administered

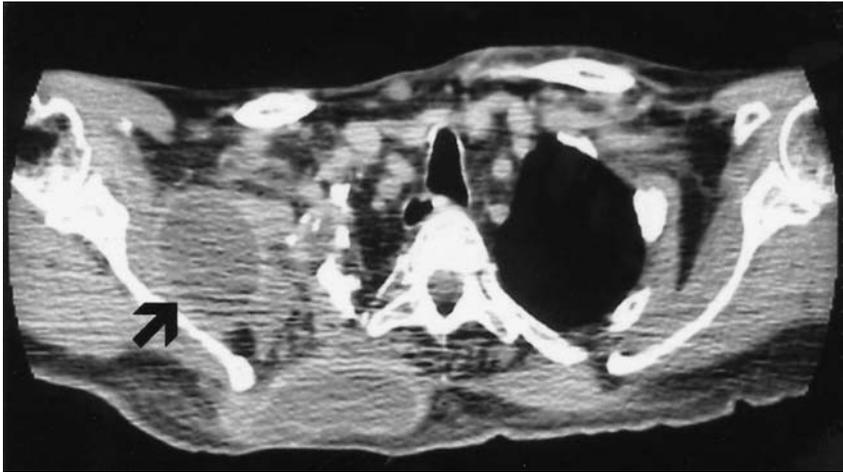


Figure. Computed tomography of the chest showing heterogeneous mass with a calcified wall in the subscapular region.

for 6 months, together with pyrazinamide (2 g/d) for the first 2 months, with good compliance and tolerance. Eighteen months after surgery the patient was asymptomatic and with no radiographic evidence of the lesion.

Cold abscess of the chest wall is a rare complication of thoracoplasty. In the 31 cases of complications of collapse therapy in the series reported by Weissberg and Weissberg,⁵ infections were found to be the most frequent complication. Pyogenic empyema was present in 24 patients and tubercular empyema in none. In his series, Shepherd⁶

observed mycobacterial infection of collapse therapy materials and empyema necessitatis 30 years or more after surgery. However, to our knowledge there has been no previous case of primary infection of the chest wall by mycobacteria related to thoracoplasty.

The patient's age was unusually advanced, given that the mean age at which cold abscess of the chest wall develops is about 45 years, with the upper limit around 70 years.¹⁻⁴ Also unusual was the 58-year period during which the patient was disease-free, far longer than the 30 years reported by Shepherd.⁶

A history of thoracoplasty, advanced age, and a long disease-free period are extraordinary circumstances accompanying a form of tuberculosis—cold abscess of the chest wall—which, while rare, should never be overlooked in the differential diagnosis of any chest wall mass.

**J.E. Rivo Vázquez,^a
A. Fernández Villar,^b
and M.A. Cañizares Carretero^a**

^aServicio de Cirugía Torácica, Complejo Hospitalario Xeral-Ciés, Vigo, Pontevedra, Spain.

^bUTB, Servicio de Neumología, Complejo Hospitalario Xeral-Ciés, Vigo, Pontevedra, Spain.

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