Spontaneous Hemorrhage of an Ectopic Mediastinal Thyroid

To the Editor:

We wish to report an unusual cause of chest pain and hemoptysis. A 62-year-old woman presented with persistent cough and mild substernal chest discomfort. She had previously noted one episode of blood-tinted sputum. Physical examination was completely normal. Initial laboratory data included a normal CBC, chest x-ray film, and sputum analysis. Bronchoscopy revealed the anterior mid-trachea to be erythematous and ecchymotic, with intact mucosa. Washings were normal. Mild chest discomfort persisted, and a CT of the thorax revealed an anterior mediastinal mass measuring 2.4 cm. Mediastinoscopy was performed, with removal of a multinodular mass from the anterior mediastinum. Pathologic review of the material revealed multifocal hemorrhage and thyroid tissue with areas of degeneration but no malignancy. The patient has no further hemoptysis, and her chest pain resolved postoperatively. Thyroid scan with 111In revealed a normal cervical thyroid. CT of the thorax 20 months later revealed no abnormalities, and the patient has remained asymptomatic.

There are a great variety of tumors and cysts that occur in the mediastinum.1-4 Ectopic thyroid tissue solely within the mediastinum constitutes less than one percent of surgically-removed goiters.3 These are usually asymptomatic thyroid adenomas, but may be associated with signs and symptoms of compression or hyperthyroidism. True intrathoracic thyroid tissue, or an ectopic mediastinal thyroid, occurs rarely and should not be confused with the common mediastinal extension of cervical goiter.5-6 Intrathoracic goiter, as defined by the whole or bulk of the goiter within the mediastinum, is almost always an extension of thyroid tissue in the neck. They generally arise from the lower pole or isthmus of the thyroid, with 75 percent located in the anterior mediastinum. Patients usually are asymptomatic, but may have symptoms of compression, or rarely may be hyperthyroid.

Degenerative changes such as hemorrhage, cyst formation and calcifications are demonstrable in approximately 50 percent of goiters. Females predominate by 3:1, are most often in their 60s, and are usually euthyroid. The patients are noted to have a palpable thyroid gland in the neck, and chest x-ray examination usually reveals an anterior mediastinal mass. Treatment for the symptomatic patient is total excision of the goiter. A mediastinal thyroid could represent all of the patient's thyroid tissue, therefore scanning of the neck post administration of 111In is suggested to confirm a normal cervical gland.

This patient had a unique presentation of a primary anterior mediastinal thyroid with chest pain and hemoptysis. Routine chest x-ray was normal, but CT of the thorax revealed an anterior mediastinal mass, and pathologic review post-excision demonstrated acute hemorrhage and necrosis. Although rare, ectopic thyroid tissue in the anterior mediastinum should be considered as a cause of hemoptysis or chest pain.

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HIV Infection in Not-at-risk Tuberculous Patients in Spain

To the Editor:

The coexistence of greater HIV seropositivity in patients with tuberculosis who are not at risk for HIV infection has been recently raised in Central Africa.1 Although the route of transmission is unknown, extra care in the sterilization of syringes is suggested to prevent HIV transmission through daily streptomycin injections. This should be of great concern in developed countries where tuberculosis has increased since 1985,2 especially in areas with a higher prevalence of HIV infection.

We have prospectively searched for the presence of anti-HIV antibodies (HIV-Enzymogent, Behring, FDR; confirmed by Immunoblot, Du Pont, USA) in 101 consecutive unselected adult patients (81 men, 20 women) with proven tuberculosis (91 pleuropulmonary, six lymphadenoplastic, two renal, one meningeal, one auricular). The mean age was 37.3 years. We used 270 voluntary blood donors as a control group.

The rate of seropositivity in our tuberculous patients has been 5.9 percent (six of 101), while all patients in the control group were anti-HIV negative (p<0.001). Of importance, all the HIV-infected patients with tuberculosis had a predisposing factor for AIDS (all six were drug abusers).

Although our results confirm that the prevalence of HIV infection is greater in individuals with tuberculosis, this must be interpreted with caution in Europe because in fact all anti-HIV positive patients belonged to known risk groups. In some high risk groups (especially drug abusers), the incidence of Mycobacterium tuberculosis infection is increased previous to HIV exposure; this could simply reflect the deficient sanitary conditions of an economically disadvantaged population. The absence of HIV infection in a population with proven tuberculosis not at risk for AIDS is quite encouraging when tuberculosis persists as a major public health problem worldwide and the AIDS epidemic has the potential for spreading Mycobacterial infection to the rest of the community.

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