Resolution of Symptoms of Esophageal Compression Due to Mediatinal Tuberculosis After Treatment with Corticosteroids

Str—We appreciate the excellent review article by Dooley et al. [1] concerning adjunctive corticosteroid therapy for treatment of tuberculosis. We note, however, that the authors do not mention any case of clinical resolution of local obstructive complications after treatment with corticosteroids. We describe a patient whose primary tuberculosis worsened during the first month of tuberculo-static chemotherapy and who presented with dysphagia and odynophagia due to esophageal compression by enlarged mediatinal lymph nodes; all these symptoms resolved after the addition of corticosteroid treatment.

A 30-year-old man was admitted to the hospital in April 1997 for evaluation of a 5-day history of fever (temperature, 38°C–39°C), chills, night sweats, malaise, and pleuritic retrosternal pain. There was no history of tuberculosis and no known contact with tuberculosis patients. On clinical examination the temperature was 37.5°C; there was no rash or lymphadenopathy noted. The lungs, heart, and abdomen were normal. Laboratory studies revealed the following values: WBC count, 11,900/mm³ (7.6% monocytes); and alanine aminotransferase level, 53 U/L. Findings on a chest radiograph and a chest CT revealed mediastinal lymph nodes and a consolidation in the 6th right pulmonary segment. A tuberculin skin test was positive (induration, 11 mm). A bronchoscopic evaluation was macroscopically normal. A bronchoalveolar lavage (BAL) specimen showed 15% lymphocytes. Ziehl-Neelsen staining for acid-fast bacilli did not reveal granulomas. Serology for antibodies to HIV was negative.

Antituberculosis treatment was begun, and the patient was discharged from the hospital. Four weeks later he was readmitted to the hospital with progressively worsening retrosternal pleuritic chest pain, marked dysphagia, and odynophagia. The pharyngeal examination was normal. A barium swallow was performed that showed large extrinsic compression of the mid-esophagus (figure IA). Esophagoscopy revealed normal esophageal mucosa with severe extrinsic compression. Treatment with prednisone (1 mg/kg) was introduced. Within 72 hours the dysphagia abated. Two weeks later the patient was entirely symptom free. The dose of prednisone was gradually tapered over 6 weeks. A new barium swallow after 1 month of corticosteroid therapy showed spectacular improvement (figure 1B). Cultures of the BAL specimen in Lowenstein-Jensen medium yielded \textit{M. tuberculosis}.

Tuberculous mediastinal lymphadenitis rarely causes local symptoms in adults. There have been cases, however, of symptomatic tracheoesophageal involvement: tracheal compression causing or not causing tracheoesophageal fistula [2], cardiac tamponade and a tension pneumopericardium [3], and esophageal compression and invasion by mediastinal tuberculosis, sometimes with esophagomediastinal fistula formation [4, 5]. The symptoms of compression due to enlarged intrathoracic lymph nodes may appear from the beginning and, sometimes, during the first weeks of chemotherapy, as has been described for tuberculosis of the peripheral lymph nodes [6]. The clinical benefit of steroids in this context has not been addressed specifically for adults: a prospective randomized study [7] with a small number of patients (all children) with primary tuberculosis showed that the size of the lymphadenopathy decreased rapidly according to chest radiographs among patients receiving corticosteroids. In a larger pediatric study, Nemir et al. [8] showed on bronchoscopy that abatement of the bronchial extension of lymphadenopathies was more dramatic in patients treated with corticosteroids.

We suggest that the symptoms of esophageal compression in a patient with mediastinal tuberculosis that worsen or do not respond to antituberculous treatment can be resolved rapidly with the addition of corticosteroids.

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