Clinical Image

Necrotizing Granulomatous Inflammation With Airway Tissue Destruction

Inflamación granulomatosa necrosante con destrucción de la vía aérea

María Dolores Almenara Escribano,∗ Agustín Colodro Ruiz, María Martín Armada

Servicio de Medicina Interna, Complejo Hospitalario Ciudad de Jaén, Jaén, Spain

We report the case of a 24-year-old man who was treated for pulmonary tuberculosis (histological diagnosis) at the age of 16. He subsequently presented acute mumps which improved with corticosteroids. When he was 19, he was admitted for monoarthritis of the ankle and a pulmonary nodule (“chronic necrotizing granulomatous inflammation”) with negative cultures and autoimmune testing. During admission, he developed a clinical picture consistent with granulomatous meningoencephalitis (microbiology study negative) and response to steroids.

In 2017, he was admitted for fever and respiratory symptoms, with mediastinal lymphadenopathy conglomerates visualized on the chest computed tomography (CT). Successive sputum stains/cultures for mycobacteria and fungi and autoimmune markers were negative. The patient was treated with antibiotics and the corticosteroid dose was increased. Radiological images of the chest lesions showed deterioration, with thickening of the tracheal wall and necrotic masses, predominantly in the right hemithorax1,2 (Fig. 1A and B). Bronchoscopy (Fig. 1C and D) showed extensive areas of inflammation/necrosis in the main airways, with loss of wall structure and protruding fragments of cartilage. The pathology study reported granulomas, extensive necrosis, and hyaline membranes.2 Cultures for bacteria, mycobacteria, fungi, and panfungal PCR were negative.

A prosthetic trachea was ruled out due to the severity of the lesions. In view of suspected granulomatous vasculitis (Wegener’s granulomatosis),1,2 steroids and cyclophosphamide were administered by intravenous bolus, but progress was unfavorable and the patient died due to massive hemoptysis.

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References