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Images in Infectious Diseases

Bronchial stenosis secondary to systemic paracoccidioidomycosis

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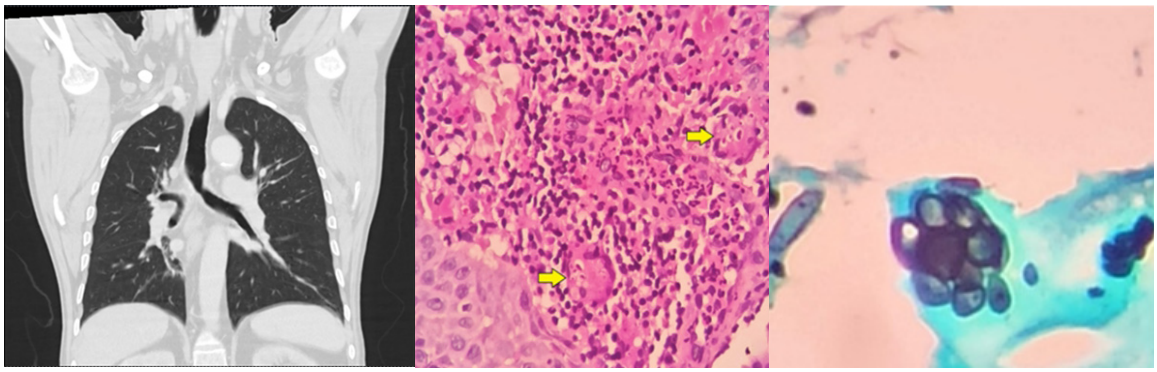

FIGURE 1: Chest tomography. Evidence of total stenosis of the right source bronchus.

FIGURE 2: Microphotograph of mucosa of the nasal septum (400×). Granulomas with multinucleated giant cells and multigerm yeast inside (arrows).

FIGURE 3: Morphological details of *Paracoccidioides* spp. revealing a distinctive "ship's wheel" morphology, as observed using Grocott's methenamine silver stain.

A 65-year-old man presented with dyspnea during moderate physical exertion, a persistent nonproductive cough, and progressive clinical deterioration. Upon examination, a perforated nasal septum was observed, along with decreased breath sounds on the right side and expiratory stridor. Paraclinical tests revealed a high neutrophil count in the blood, and contrast-enhanced chest tomography showed total stenosis of the right main bronchus (**Figure 1**). Further investigations, including spirometry, bronchoscopy, and nasal mucosa biopsy, confirmed the presence of *Paracoccidioides* spp. (**Figure 2 and 3**). The patient was treated with amphotericin B deoxycholate, followed by a 6-month course of itraconazole. Follow-up assessments indicated satisfactory progress, with improved symptoms and no need for supplemental oxygen at the time of hospital discharge.

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Paracoccidioidomycosis, a systemic fungal infection caused by *Paracoccidioides* spp., is primarily contracted through the inhalation of spores[1]. The infection can manifest as an acute/subacute form affecting 5-25% of those infected, or as a chronic form, which manifests gradually with symptoms such as cough, dyspnea, and physical manifestations including skin and oral lesions[2]. Notably, right source bronchus stenosis as a manifestation of Paracoccidioidomycosis is exceedingly rare. Although Paracoccidioidomycosis is more prevalent in South America, particularly in Colombia and Brazil, it has been reported globally, albeit in limited cases[3]. Recognizing this systemic manifestation is crucial in the differential diagnosis of respiratory conditions or granulomatous diseases involving the airways.

ETHICAL CONSIDERATIONS

The study was approved by the Hospital Universitario de Santander Ethics Committee.

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