

# Sarcoidosis Causing Mid-Esophageal Traction Diverticulum

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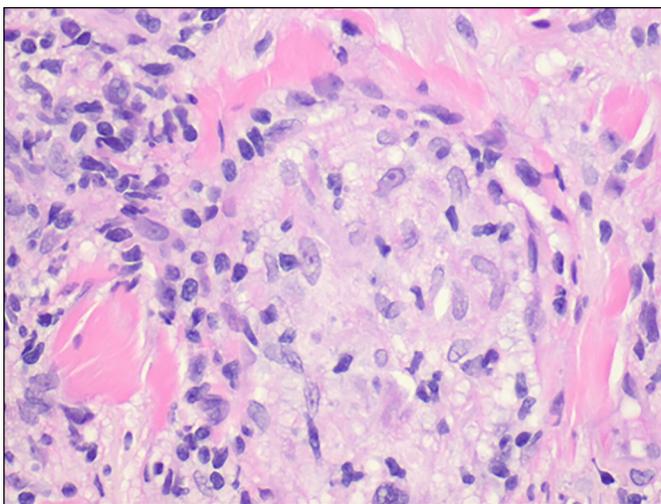
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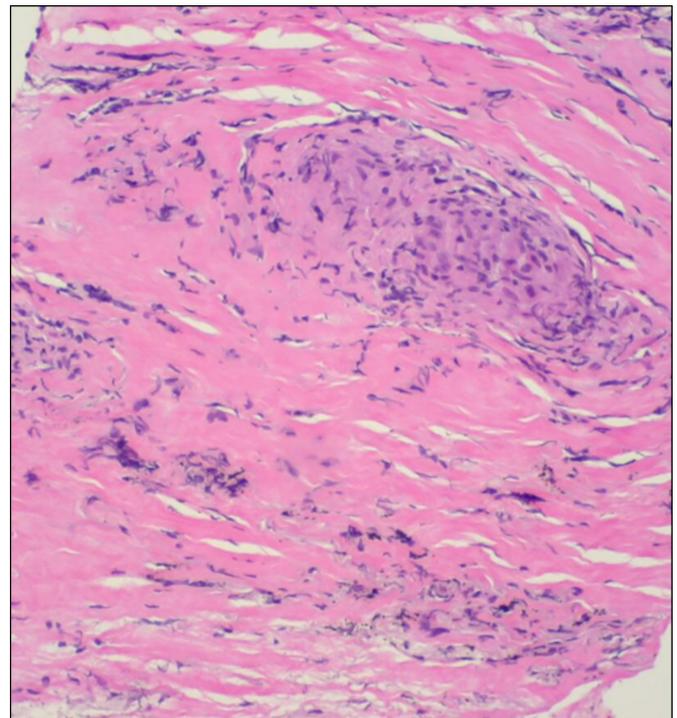
## CASE REPORT

A 78-year-old man presented to the outpatient clinic with progressive dysphagia with solid food for a few years. He had the feeling that food got stuck in his chest when swallowing. He denied any fevers, unintentional weight loss, hemoptysis, sore throat, odynophagia, shortness of breath, or wheezing. On examination he was hemodynamically stable. Chest exam revealed lower left lung crackles. He reported a medical history of bronchial asthma, allergic rhinitis, pulmonary hypertension, and sarcoidosis. Sarcoidosis was diagnosed in 2007 when he presented with a face lesion proved to be lupus pernio by skin biopsy (Figure 1). Computed tomography scan of the chest in 2012 after an asthma attack was concerning for bilateral pulmonary stellate opacities, pleural-based opacities, and mediastinal and hilar lymphadenopathy. Infrared-guided biopsy obtained at that time showed histological findings of sarcoidosis (Figure 2). Esophagram showed an esophageal diverticulum in mid-esophagus measuring 1.5 cm in diameter (Figure 3). Absence of esophageal motility abnormality and presence of lung and mediastinal lymph node fibrosis noted with radiological and histological means indicated a diagnosis of traction mid-esophageal diverticulum. Despite the presence of symptoms, the patient was a poor surgical candidate.

Diverticula occur in the esophagus quite rarely compared to other areas of the body, with an estimate of less than 1% of all barium gastrointestinal radiographs and likely less than 5% of all cases of dysphagia exhibiting diverticula.<sup>1</sup> Esophageal



**Figure 1.** Skin biopsy showing isolated and confluent granulomas associated with mixed inflammation. Giant cell formation is rare, but fused histiocytes are present.



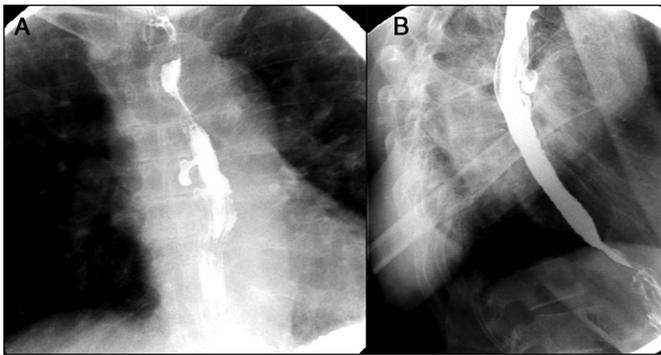
**Figure 2.** Lung biopsy showing dense fibrosis encasing hard granulomas composed of epithelioid histiocytes.

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**Figure 3.** Esophagram in (A) anteroposterior and (B) lateral view showing mid-esophageal diverticulum.

diverticula are classified into three groups: pharyngoesophageal, parabronchial, and epiphrenic. Diverticula of the esophageal body are classified as pulsion and traction. Traction diverticula result from granulomatous inflammation of mediastinal lymph nodes. The resultant desmoplastic reaction in the paraesophageal tissue causes full thickness pinching on the esophageal wall, which leads to a localized diverticulum. Tuberculosis and histoplasmosis are known etiologies of this condition.<sup>2</sup>

Traction esophageal diverticula occurring secondary to sarcoidosis has been reported once in the literature.<sup>3</sup> We present the second case with traction esophageal diverticulum in a male who presented with progressive dysphagia. Traction esophageal diverticulum is often asymptomatic and thus doesn't require treatment. If symptomatic, surgical or

endoscopic treatment should be attempted, although endoscopy can cause perforation of the esophagus.<sup>4</sup> If endoscopic treatment is not feasible, then relieving methods such as modifying the diet to less solid forms can be attempted. Clinicians should be aware of the possibility of traction mid-esophageal diverticulum in sarcoidosis patients with progressive dysphagia. A simple diagnostic test like an esophagram provides early diagnosis even if clinical consideration is lacking, which can avoid possible morbidity and mortality.

## DISCLOSURES

Author contributions: S. Guirguis reviewed the literature, wrote the manuscript, and is the article guarantor. S. Azeez edited the manuscript. S. Amer obtained the images and reviewed the manuscript.

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Informed consent was obtained for this case report.

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