

## Medical Image of the Week: Massive Esophagus

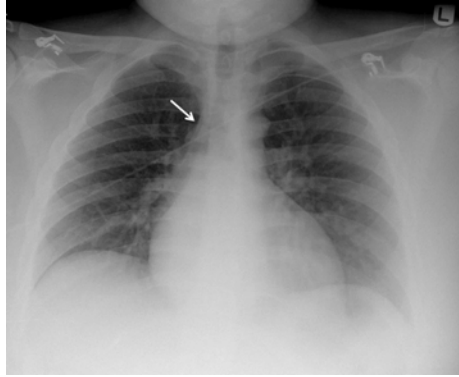


Figure 1. Chest x-ray taken 10 years prior to admission showing mild thickening of the right paratracheal stripe (arrow).

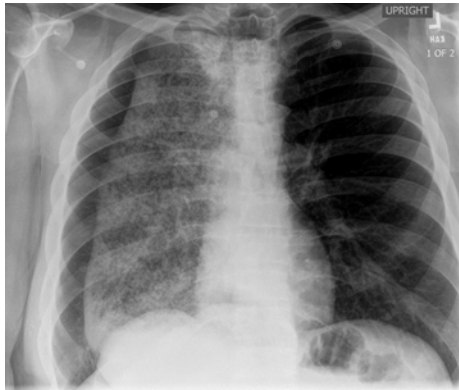


Figure 2. Admission chest x-ray showing a mass with mixed density silhouetting the right pulmonary artery and right paraspinal stripe.



Figure 3. Coronal view of the thoracic CT scan showing the mass is a massive esophagus.

A 34 year-old male inmate presents with chest pain 10 years prior to admission. His prior chest x-ray shows only mild thickening of the right paraspinal stripe (Figure 1). Chest x-ray on admission 10 years later shows a large right mixed density paramediastinal mass silhouetting the right pulmonary artery and right paratracheal stripe (Figure 2). This was confirmed to be a massive esophagus on thoracic CT scan (Figure 3). The patient was eventually diagnosed with achalasia.

A number of disorders can present with a massive esophagus including achalasia, esophagectomy with colonic interposition, scleroderma, esophageal carcinoma with stricture, and esophagitis with stricture (1). Diagnostic imaging findings using fluroscopy, CT and X-ray can help differentiate these disorders. A massive esophagus due to achalasia is smooth walled with symmetric tapering to a "bird-beak" deformity and a chest x-ray may initially be normal. Colonic interposition is evident by colonic haustra. A dilated esophagus due to scleroderma is normal above aortic arch (striated muscle) but atonic below the aortic arch (smooth muscle). On an upper GI series there is dilated jejunum with thin, crowded folds that are pathognomonic (Hobdoun sign) for scleroderma. Esophageal carcinoma shows a fixed irregularity with disruption of normal mucosal pattern. Esophagitis has fine nodularity with an ulcerated mucosa on fluroscopy.

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### ***Reference***

1. Cole TJ, Turner MA. Manifestations of gastrointestinal disease on chest radiographs. *Radiographics*. 1993;13(5):1013-34. [\[PubMed\]](#)