



Acquired Dextrocardia?: A Striking Consequence of Sigmoid Volvulus

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Background

- Dextrocardia is a rare variation of cardiac embryology, often confused with mechanical malposition of the heart (dextroposition)
- This case illustrates cardiac dextroposition due to a sigmoid colon volvulus
- It serves as a reminder of the presentation, management, and an uncommon complication of the condition

Case Description

HISTORY

- 97 M with COPD on home O₂, atrial fibrillation, and chronic constipation
- Chief Concern: Shortness of breath for 4 days

PHYSICAL EXAMINATION

- SpO₂: 84% on room air, improved with home O₂
- Vital signs otherwise unremarkable
- Diminished breath sounds bilaterally
- No wheezing

INITIAL COURSE

- Chest x-ray with no acute abnormality **(a)**
 - Unchanged left hemi-diaphragmatic elevation from prior episode of volvulus
- Treated empirically for COPD exacerbation

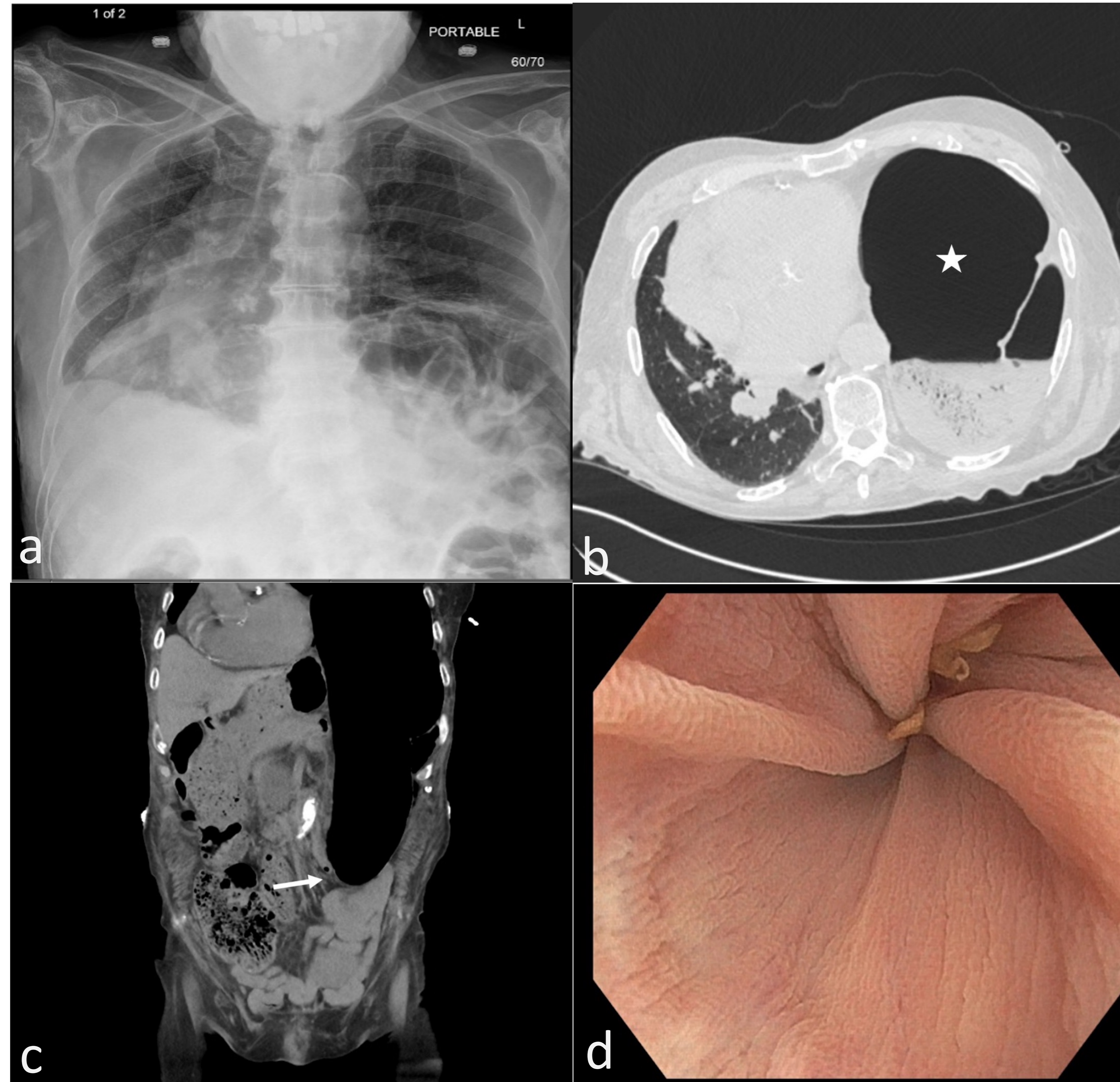


Figure Legend

- (a)** Chest x-ray demonstrating rightward deviation of the heart
(b) Axial CT scan demonstrating left hemi-diaphragmatic elevation and colonic loops in the chest (star)
(c) Coronal CT scan demonstrating extent of distended bowel above a sigmoid volvulus (arrow)
(d) Endoscopic appearance of the patient's sigmoid volvulus prior to decompression

Case Continued

COURSE CONTINUED

- On the first night of admission, he developed acute abdominal pain and vomiting
- CT Abdomen **(b,c)**:
 - Colonic loops in chest **(star)**
 - Sigmoid volvulus **(arrow)**
 - Cardiac dextroposition
- Transferred from outside hospital for urgent endoscopic decompression of sigmoid volvulus **(d)**, with expulsion of voluminous stool
- Definitive surgical management deferred given age and comorbidities
- Maintained on strict bowel regimen after discharge

Key Points

- Acute sigmoid volvulus presents with abdominal pain, bloating, vomiting, and constipation
- Bowel obstruction from volvulus is a gastrointestinal emergency
- Surgical resection is often recommended in patients who achieve successful endoscopic decompression
- Though uncommon, a large sigmoid volvulus can cause massively distended bowel and compression of the ipsilateral lung with cardiac dextroposition, resulting in dyspnea