

# TRACHEAL COMPRESSION AS AN INITIAL PRESENTATION OF ACHALASIA

Gabriel Bustamante MD<sup>1</sup>, Chaitra Banala MD<sup>1</sup>, Codey Pham MD<sup>1</sup>, Anthony Xu MD<sup>2</sup>

<sup>1</sup>Department of Internal Medicine, Baylor College of Medicine (BCM), Houston, TX; <sup>2</sup>Department of Gastroenterology and Hepatology, BCM, Houston, TX

## Objectives

Achalasia is a common condition that is often insidious in onset. We present a case of an elderly patient with acute respiratory failure secondary to tracheal compression by the esophagus as the initial presentation of achalasia.

## Case Presentation

### History of Present Illness

- An 80-year-old female with degenerative cerebellar ataxia and previously treated breast cancer presents with acute hypoxemic respiratory failure.
- The patient reported mild coughing following meals without symptoms of dysphagia or reflux the week prior to presentation.
- On the day of presentation, the patient experienced sudden onset and rapidly progressive dyspnea.
- At an outside hospital, patient was found to be in acute respiratory distress requiring intubation and was transferred to our intensive care unit for further management.

### Past Medical History

- Hereditary degenerative cerebellar ataxia resulting in wheelchair-dependence.
- Breast cancer that was treated with radiation and resection 30 years prior.

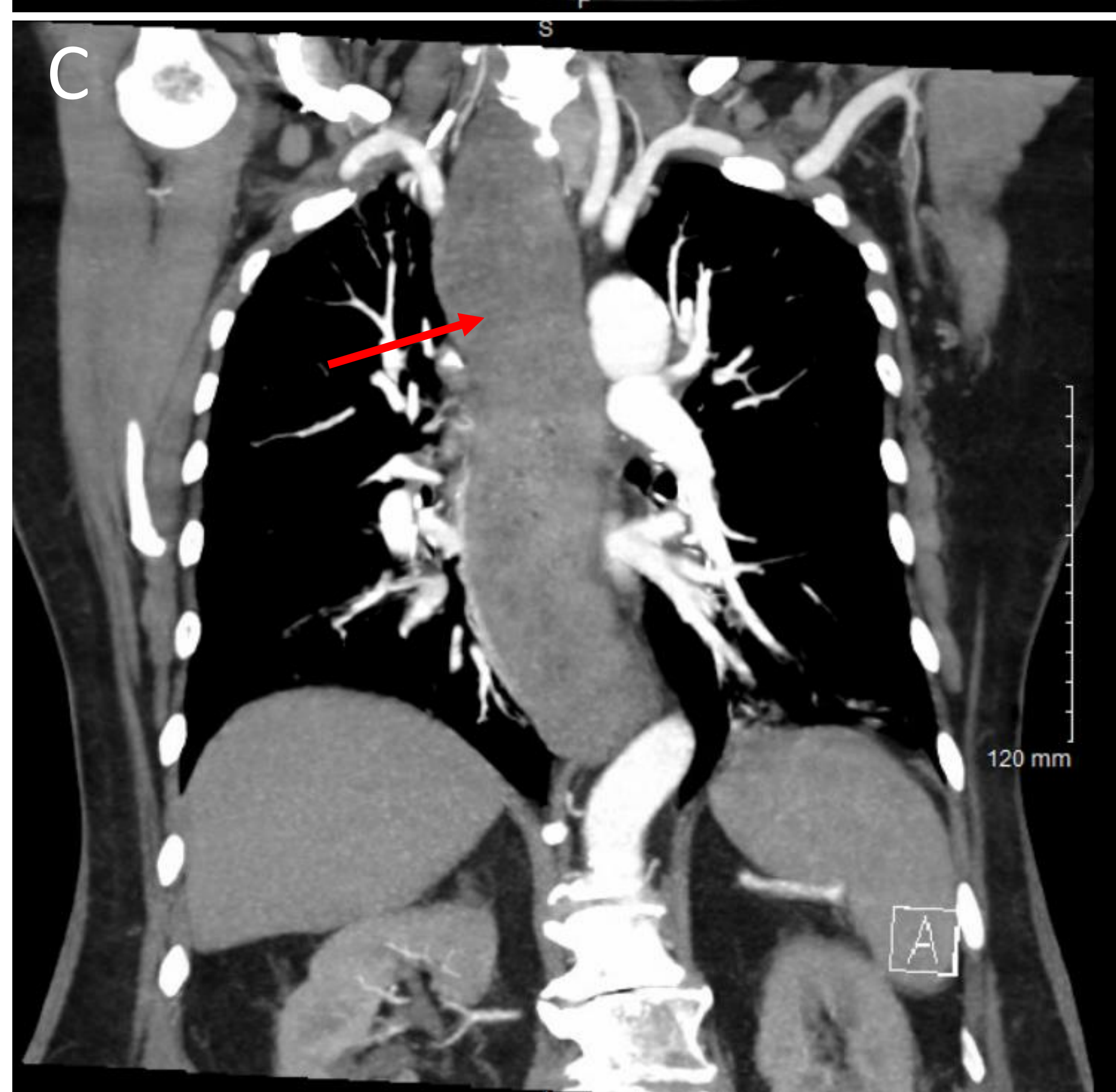
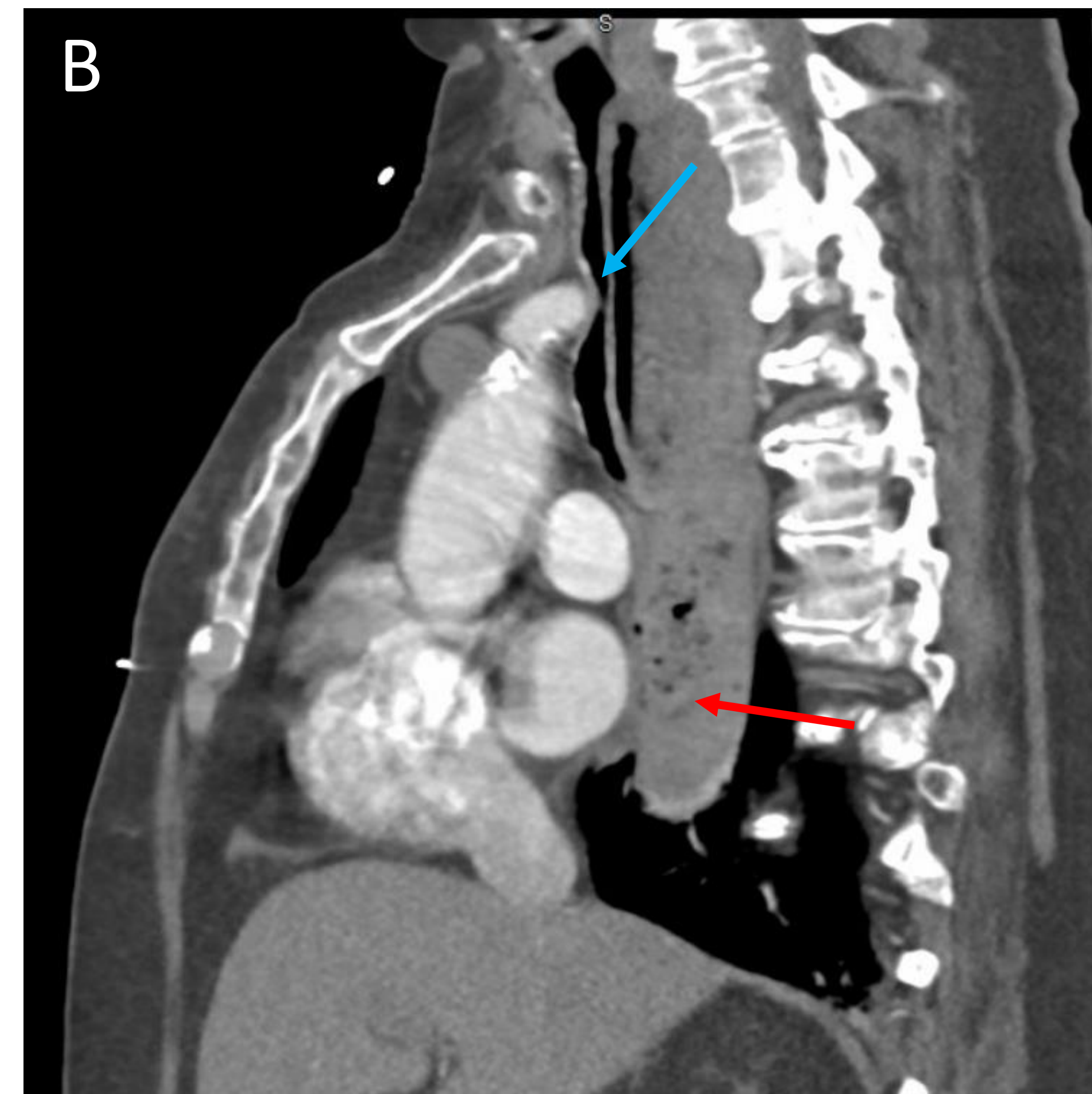
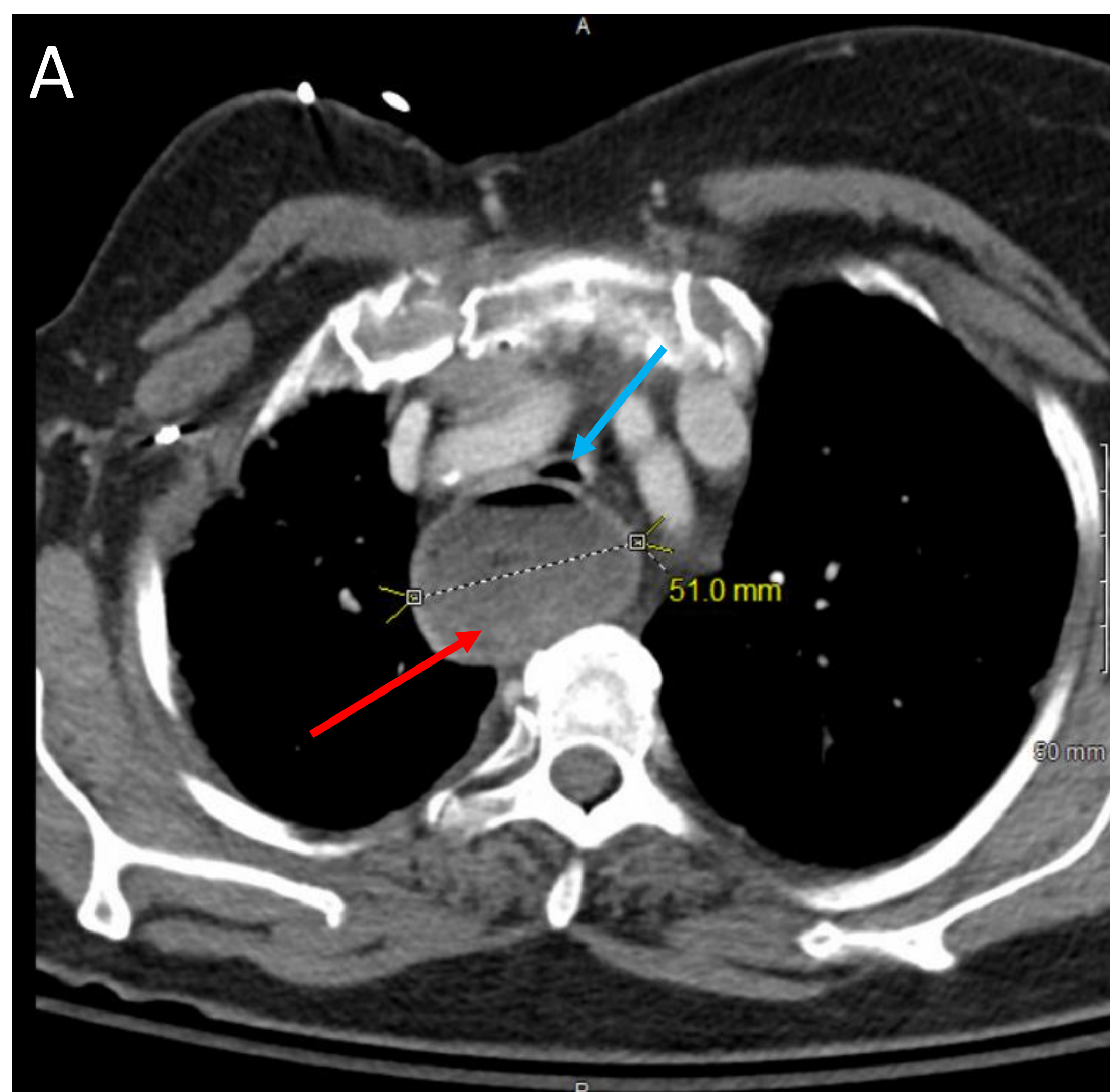
### Physical Exam

- T: 98.5° F HR: 98 bpm BP: 132/63 RR: 20 O<sub>2</sub> Sat: 99%
- Exam: intubated and sedated, otherwise an unremarkable exam

### Laboratory Data

13	140	107	18	270
16.6	4.2	20	0.77	
41.6				

Lactic Acid: 3.55 mmol/L  
Blood Cultures: No growth



**Figure A:** Axial cut of the computed tomography (CT) showing a 5cm food-filled esophagus (red) and a compressed trachea (blue).

**Figure B:** Sagittal cut of the CT scan showing posterior compression of the trachea by the esophagus.

**Figure C:** Coronal cut of the CT scan showing a dilated, food-filled esophagus.

## Hospital Course

- CT showed a large dilated, food-filled esophagus with tracheal compression.
- Esophagogastroduodenoscopy (EGD) revealed:
  - Food in the esophagus
  - Dilated esophagus
  - Hypertonic lower esophageal sphincter
- The lower esophageal sphincter was serially dilated to 10mm using balloon dilation.
- Repeat EGD during this admission was done with injection of botulinum toxin into the lower esophageal sphincter.
- The patient was extubated and diet was advanced to full diet by time of discharge.

## Discussion

- Achalasia often presents as progressive dysphagia and is typically insidious in onset.
- Respiratory symptoms are uncommon manifestations of achalasia and are usually due to aspiration.
- Here we present a rare case of extrinsic tracheal compression and acute respiratory distress as the initial presentation of achalasia.
- Our patient presented with symptoms at an older age than the traditional age of onset of achalasia.
- Achalasia can be associated with hereditary cerebellar ataxia, as was the case in this patient.

## Conclusion

Early identification of achalasia and atypical manifestations is important to prevent life-threatening complications such as tracheal compression.

## References

- Murphy MS, Gardner-Medwin D, Eastham EJ. Achalasia of the cardia associated with hereditary cerebellar ataxia. *Am J Gastroenterol.* 1989;84(10):1329-1330.
- Kathys JM, Foltys DB, Scheuermann U, et al. Achalasia with megaesophagus and tracheal compression in a young patient: A case report. *Int J Surg Case Rep.* 2015;14:16-18. doi:10.1016/j.ijscr.2015.06.020