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An Elderly Female with Dyspnea and Abdominal Pain

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ABSTRACT:

**History of present illness:** A 55-year-old female presented via transfer from a referring hospital with 48 hours of abdominal pain, vomiting and dyspnea. She was found to be in severe distress. Her temperature was 37.5°C (99.5°F), heart rate 130 beats per minute, respiratory rate 47 breaths per minute, blood pressure 80/48, and oxygen saturation of 95% on a non-rebreather mask. She had distended neck veins, diminished breath sounds on the left hemi-thorax, and a distended abdomen. A chest x-ray that had been obtained at the referring hospital was immediately reviewed. The decision was made to intubate the patient. Following intubation, a nasogastric tube was placed with marked improvement in her hemodynamics. An abdomen-pelvis CT was obtained which showed a para-esophageal hernia with the majority of the stomach located in the left hemi-thorax and evidence of a bowel obstruction.

**Significant findings:** Radiography shows a dilated, gas-filled structure that fills nearly the entire left hemi-thorax. Lung markings are visible in the uppermost portion of the left hemi-thorax. There is mediastinal shift to the right. In the visualized portion of the abdomen, dilated loops of bowel are also visualized. This constellation of findings is consistent with a tension gastrothorax.

**Discussion:** Tension gastrothorax is a rare complication of blunt trauma, diaphragmatic hernias, and certain surgical procedures.\(^1,2\) Clinically, a tension gastrothorax may mimic that of a tension pneumothorax, making it difficult to diagnose.\(^3,4\) Stabilizing treatment includes decompressing the stomach by means of a nasogastric (NG) tube.\(^2\) Placement may be difficult due the intra-thoracic position of the stomach leading to kinking of the tube. The attempt to place an NG tube can lead to hyperventilation and air swallowing, which can aggravate gastric distention.\(^4\) Failure to decompress the stomach, however, may lead to patient decompensation and cardiac arrest.\(^5\) Definitive treatment is surgical repair.\(^2\)

**Topics:** Tension gastrothorax, GI, gastroenterology, cardiothoracic, radiograph, CXR, abdominal, dyspnea, shortness of breath.

**References:**