An Elderly Female with Dyspnea and Abdominal Pain

Jon Van Heukelom, MD*

*University of Iowa Carver College of Medicine, Iowa City, IA

Correspondence should be addressed to Jon Van Heukelom, MD at jon-vanheukelom@uiowa.edu

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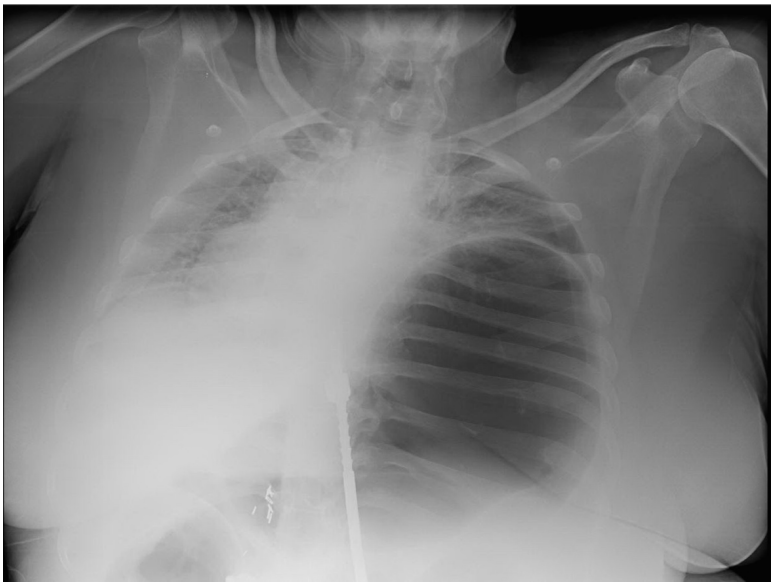

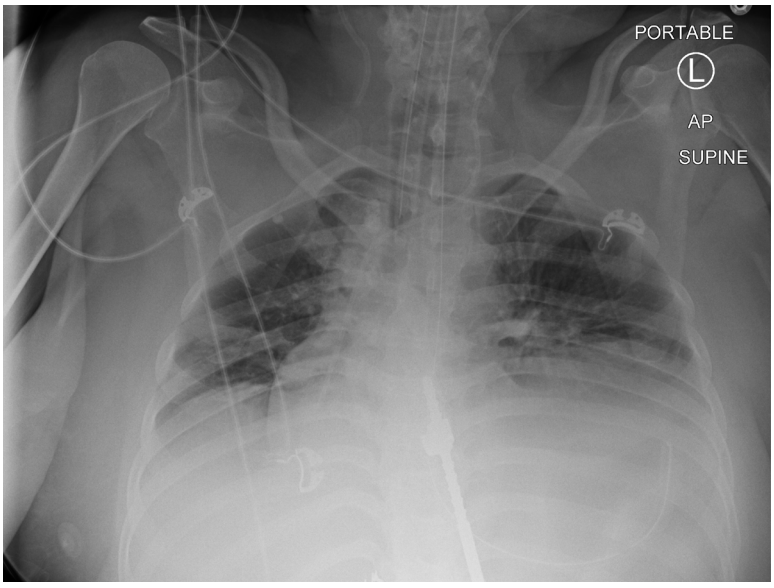

History of present illness: A 55-year-old female presented via transfer from a referring hospital with 48 hours of abdominal pain, vomiting and dyspnea. She was found to be in severe distress. Her temperature was 37.5°C, heart rate 130/minute, respiratory rate 47/minute, blood pressure 80/48 mmHg, and 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 computed tomography (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.

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