

## CLINICAL PRACTICE

## Clinical Images

## Massive Paraesophageal Hernia Mimicking Pulmonary Embolus

James J. Lamberg, DO<sup>1</sup>, Michael Farbaniec, MD<sup>2</sup>, and Ethan F. Kuperman, MD<sup>2</sup><sup>1</sup>Department of Anesthesiology, Pennsylvania State University Milton S. Hershey Medical Center, Hershey, PA, USA; <sup>2</sup>Department of Internal Medicine, Pennsylvania State University Milton S. Hershey Medical Center, Hershey, PA, USA.

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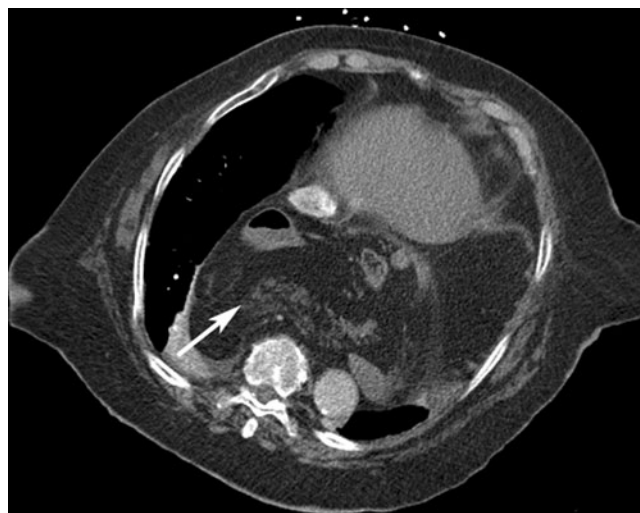
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**Figure 1.** Massive paraesophageal hernia—coronal view. *Black arrow:* pancreas. The pancreatic head is adjacent to the right diaphragm, and the associated pancreatic vasculature can be seen inferior to the pancreas. *White arrow:* stomach. The stomach is adjacent to the carina and left mainstem bronchus. *White star:* splenic flexure of the colon.

An 87-year-old woman presented with a traumatic fracture of her right femoral neck. After admission she became tachypneic, tachycardic, and had increased oxygen requirements. Computed tomography showed no pulmonary embolism, but revealed a 17×10-cm type-IV paraesophageal hernia (Figs. 1 and 2). The hernia included the entirety of her stomach, majority of the pancreas, portions of the duodenum, the splenic flexure of the colon, and associated vasculature. Fewer than 5% of paraesophageal hernias involve viscera beyond the stomach,<sup>1</sup> and pancreatic involvement is especially rare.<sup>2,3</sup> Her acute dyspnea was attributed to immobility, atelectasis, and the massive hernia. She ultimately had a right hip hemiarthroplasty with successful postoperative extubation. She was weaned off oxygen and was asymptomatic at discharge.

Elective surgery of asymptomatic paraesophageal hernias was historically thought to be required to prevent the development of life-threatening complications.<sup>4</sup> However,



**Figure 2.** Massive paraesophageal hernia—axial view. *White arrow:* pancreas. The majority of the pancreatic outline can be seen in this view.

the mortality rate from elective laparoscopic repair is approximately 1.4%, while the lifetime risk of death from watchful waiting is estimated to be approximately 1%.<sup>4</sup> The lifetime risk of developing acute symptoms requiring emergency surgery also decreases exponentially after 65 years of age.<sup>4</sup> Thus, watchful waiting appears to be a reasonable strategy for some minimally symptomatic or asymptomatic paraesophageal hernias.

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**Corresponding Author:** James J. Lamberg, DO; Department of Anesthesiology, Pennsylvania State University Milton S. Hershey Medical Center, 500 University Drive, Hershey, PA 17033, USA (e-mail: jlamberg@hmc.psu.edu).

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