

# Acute gastric volvulus presenting as a pseudo cardiac tamponade

Francisco Fanjul, Gloria Sampérez

Infectious Diseases, Hospital Universitari Son Espases, Palma de Mallorca, Spain

**Correspondence to**  
Dr Francisco Fanjul,  
franciscoj.fanjul@ssib.es

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## DESCRIPTION

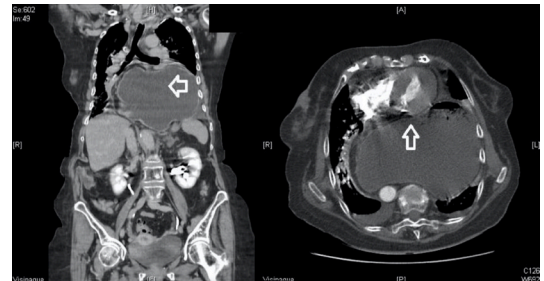
Gastric volvulus is defined as rotation of the stomach or part of the stomach by more than 180°, creating a closed loop obstruction. Typically, its clinical presentation includes abdominal pain, distension, nausea and vomiting. Diagnosis requires a high suspicion index as it can be easily misdiagnosed with other abdominal problems such as stomach distension or subocclusive syndrome. CT scan has proven to be both highly sensitive and specific when differentiating these processes.<sup>1</sup>

A woman in their early 80s with no relevant medical background presented at out hospital with nausea and progressive dyspnoea for 3 days. She did not mention chest pain, cough, fever or other symptoms. Physical examination revealed tachycardia (122 bpm), tachypnoea (35 bpm), low arterial pressure (90/67 mm Hg), diminished heart sounds, jugular ingurgitation and basal left hypophonesis. Chest radiography (figure 1) showed massive hiatal hernia and urgent tomography (figure 2) confirmed hiatal hernia and an intrathoracic gastric volvulus, which partially compressed the heart.

A nasogastric catheter was inserted, obtaining a drainage of 800 mL, which rapidly improved the haemodynamic state of the patient. She was then referred for surgery that comprised Nissen fundoplication and reduction of the hiatal hernia with good outcome.

Emergent surgery in these cases is required in order to re-establish transit and perfusion as the volvulus can lead to ischaemia, perforation and death.

Pseudo cardiac tamponade due to external compression is a rare form of presentation of



**Figure 2** CT scan showing acute gastric volvulus compressing the heart. Left arrow, Intrathoracic gastric volvulus; Right arrow, Heart compression due to volvulus.

## Learning points

- ▶ Acute gastric volvulus requires an emergent surgical approach in order to avoid ischaemia, perforation or death.
- ▶ Intrathoracic masses that compress the heart can mimic classical cardiac tamponade in the absence of pericardial effusion.

intrathoracic masses where patients present with typical tamponade symptoms such as the Beck's triad,<sup>2</sup> namely low arterial blood pressure, dilated neck veins and muffled heart sounds, in the absence of pericardial effusion. Most often, it is caused by malignant neoplasms, but sometimes it can appear associated with non-tumorous masses as in the case we present.

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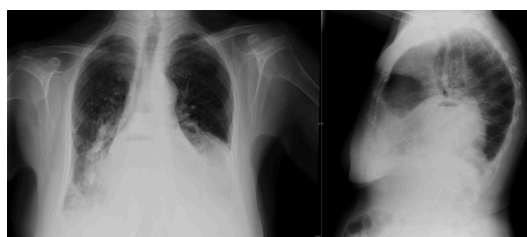
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- 1 Millet I, Orliac C, Alili C, et al. Computed tomography findings of acute gastric volvulus. *Eur Radiol* 2014;24:3115–22.
- 2 Beck CS. Two cardiac compression triads. *JAMA: The Journal of the American Medical Association* 1935;104:714.



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**Figure 1** Chest X-ray posterior anterior and lateral view showing hiatal hernia.

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