

## Boerhaave Syndrome

Boerhaave syndrome is described by rupture of the esophageal wall, which can be a result of violent retching or iatrogenic injury. It can present with chest pain, subcutaneous emphysema, odynophagia and shock. This is a surgical emergency that requires immediate treatment.



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### Pathophysiology

#### Esophageal Rupture

##### [Sarcophagus with rupture](#)

In contrast to Mallory-Weiss tears (which are mucosal), Boerhaave syndrome is described by rupture or perforation of the esophagus (through the mucosal and muscular layers).

#### Increased Esophageal Pressure while Vomiting

##### [Sarcophagus vomiting with increased-pressure](#)

This rupture is caused through a sudden rise of internal esophageal pressure during vomiting, and can stem from excessive food and alcohol intake, or bulimia. Another common cause of this syndrome is iatrogenic perforation.

#### Lower 1/3 of Esophagus

##### [Lower Third-of-sarcophagus](#)

Most cases of Boerhaave's syndrome occur at the distal (lower-third) esophagus.

### Signs and Symptoms

#### Chest Pain

##### [Chest Pain-bolt](#)

After vomiting, or a procedure, patients may display excruciating retrosternal chest pain, and possibly upper abdominal pain.

#### Odynophagia

##### [O-dino-fajita](#)

In less evident cases, where Boerhaave's is suspected, the caregiver may find that the patient presents with odynophagia, or painful swallowing of liquids and foods.

#### Subcutaneous Emphysema

##### [Sub-q-tip M-Fist-Zebra](#)

Though not a very important diagnostic finding, due to its lack of sensitivity, patients with this syndrome can develop subcutaneous emphysema, or crepitus, near the mediastinum.

## Management

### Shock

#### Electric-shock

If there is bleeding from the esophageal rupture, patients may go into hypovolemic shock from blood loss.

### Surgical Emergency

#### Emergency Surgeon

This condition is usually a surgical emergency. Due to its high morbidity and mortality, potential for rapid clinical deterioration and fatal outcome without treatment, all patients suspected of having Boerhaave syndrome should have surgical consultation.