

Letters to the Editor

Rupture of esophagus by compressed air

Key words: Spontaneous oesophageal rupture. Oesophageal injury. Compressed air.

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Dear Editor,

Currently, beverages containing compressed air such as cola and champagne are widely used in our daily life. Improper ways to unscrew the bottle, usually by using the teeth, could lead to an injury, even a rupture of the esophagus.

Case report

A 52-year-old woman came to our hospital with neck and chest pain for two days. She got this pain due to an air blast from a bottle of traditional Chinese wine containing enormous compressed air when she was unscrewing it using her teeth. She also suffered from minor bleeding from the mouth and nose, but the bleeding stopped spontaneously. There was no fever, hematemesis, or other gastrointestinal symptoms. Physical examination was not remarkable. Laboratory tests showed increased level of inflammatory markers. Computed tomography (Fig. 1A) revealed mediastinal and cervical emphysema. Bronchoscopy was normal. She was kept fasting, and intravenous proton pump inhibitors and antibiotics were used.

Esophagogastroduodenoscopy performed 12 days later revealed a rupture at the entrance of the esophagus and a 5-cm longitudinal, tear scar at approximately 25-30 cm from the inci-

sors (Fig. 1 C and D). A nasojunal feeding tube was placed to support her nutrition. Her pain relieved and repeated computed tomography (Fig. 1B) showed absorption of mediastinal and cervical emphysema. The rupture healed after a conservative management of 42 days, and the nasojunal tube was removed.

Discussion

Spontaneous rupture of the esophagus is rare, and it can be caused by excessive vomiting, children birth, seizures, etc. (1). Among the different causes, compressed air is a rare one (2-4).

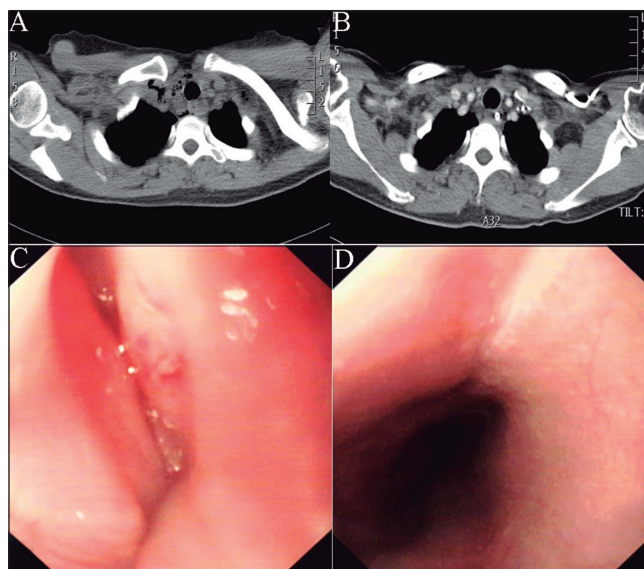


Fig. 1. A. Computed tomography revealed mediastinal and cervical emphysema. B. Repeated computed tomography showed absorption of mediastinal and cervical emphysema. C-D. Endoscopic view of rupture: at the entrance of esophagus (C) and a 5-cm longitudinal, tear scar at approximately 25-30 cm from the incisors (D).

Surgery intervention is usually recommended for diagnosed rupture (5). In the present case, an air blast injury was observed and two segments of the esophagus were involved. The rupture healed with conservative treatment without resorting to surgery.

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