Endoscopic continuity-preserving therapy for esophageal stenosis and perforation following colliquative necrosis

Colliquative necrosis after ingestion of an alkaline solution is a very rare and lifethreatening clinical picture, which in adults is mainly caused by ingestion either accidentally or with suicidal intent. In cases where severe corrosive injury with transmural necrosis has occurred, esophageal resection may be inevitable. If esophageal salvage is possible, consecutive stenosing scar formation can become a long-term complication. Therefore, timely bouginage is recommended but is also associated with an increased risk of esophageal perforation.

We report on a 55-year-old man who mistook a bottle of convection-oven cleaner for a bottle of white wine and accidentally ingested a large swig of the alkaline solution. After he was admitted to our hospital via the emergency room, he was stabilized and monitored in our intensive care unit. His initial computed tomography (CT) scan showed long-segment corrosive necrosis with paraesophageal infiltration but no sign of perforation. He was started on conservative management with antibiotic and anti-inflammatory therapy, but after 1 week was experiencing increasing dysphagia. A Gastrografin swallow was performed, which showed stenosis of the esophagus (**>** Fig. 1).

Endoscopic examination confirmed the presence of an early stenosis after corrosive injury (> Fig. 2). Therefore, an endoscopic dilation was performed, but this led to a large esophageal perforation 23-40 cm from the dental arch (**> Fig. 3** and **•** Fig. 4). We immediately commenced endoscopic vacuum therapy (EVT) with extraluminal and intraluminal sponge placement [1]. Following this, the patient underwent ongoing therapy with both esophageal bouginage and the use of intraluminal and extraluminal sponges. EVT was continued for 18 days with changes being made at intervals of 3 days. Simultaneous bouginage was always required because of persisting esophageal stenosis.

At the time of discharge, the patient was managing oral food intake without any problems and reported a good quality of life. This case report describes successful management of the complications of cor-

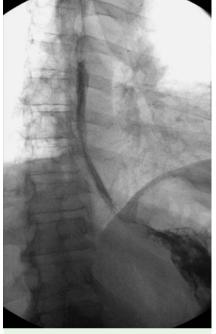


Fig. 1 Gastrografin swallow performed 1 week after accidental ingestion of oven cleaner showing an esophageal stenosis.



Fig.2 Endoscopic view of the esophagus showing evidence of a corrosive injury with early stenosis.

rosive injury, with esophageal salvage being achieved through the use of innovative endoscopic techniques including EVT.

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Competing interests: None

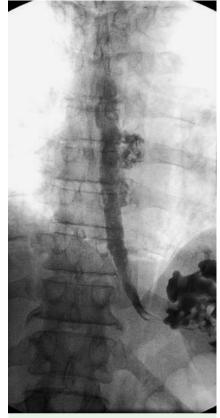


Fig. 3 Gastrografin swallow showing evidence of esophageal perforation after endoscopic dilation had been performed.

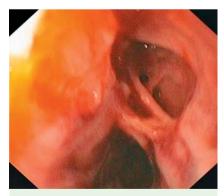


Fig. 4 Endoscopic view following the esophageal perforation.

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Bibliography

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