

Oesophago-atrial fistula secondary to ingestion of battery acid

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A 36-year-old man presented to the emergency department following ingestion of car battery acid after a suicide attempt. An oesophagogastroduodenoscopy showed erosive oesophago-gastritis. He was managed conservatively and transferred to the ward. His condition was initially stable.

Three weeks later he vomited a small amount of fresh red blood. This was followed by recurrent grand mal seizures. He was transferred to the critical care unit for intubation and ventilation.

Urgent computed tomography scans of the brain, thorax and abdomen were performed. The brain computed tomography scan showed pneumocephalus with cerebral oedema (**Figure 1**). Computed tomography scan of the thorax showed air in the left atrium and ventricle (**Figure 2**). A repeat oesophagogastroduodenoscopy showed fresh blood in the oesophagus with extensive corrosive damage. A bubble echocardiogram ruled out a connection between the right and left chambers of the heart.

The patient's pupils became fixed and dilated soon after admission. Life-sustaining support was withdrawn and the patient died.

This case highlights an important cause of delayed complications after ingestion of acid. The acid had eventually caused a fistula to form between the patient's oesophagus and left atrium. From here, air had embolised to the brain causing pneumocephalus and cerebral oedema, which had resulted in seizures.

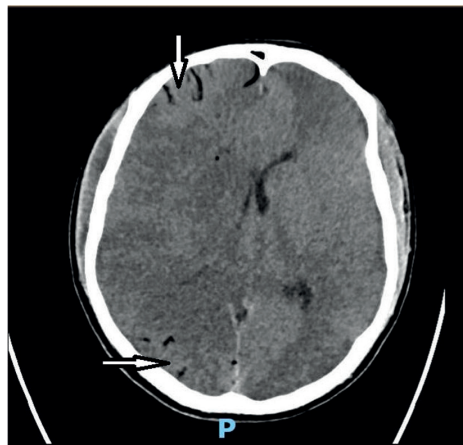


Figure 1. Computed tomography scan of the brain showing pneumocephalus (arrows) and cerebral oedema.

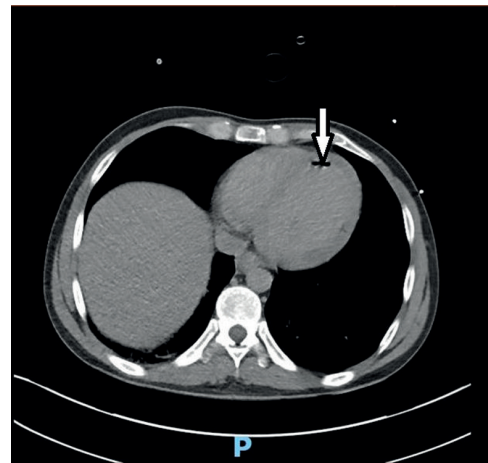


Figure 2. Computed tomography scan of the thorax showing air in the left ventricle (arrow).

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