

# Life saving carotid intervention in a complex patient: the importance of documentation

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## Background

A 41-year-old gentleman presented with exsanguinating haematemesis and haemodynamic instability.

He had a complex history of sulphuric acid ingestion which had required oesophagogastrrectomy, pancreatectomy, small bowel resection and tracheostomy, due to chemical injury to the aerodigestive tract years before.

In order to enable oral feeding, he subsequently underwent colonic interposition and neo-oesophagus formation. This neo-oesophagus later strictured (Figure 1).

The patient had background mental health issues, complicated by airway and voice problems; therefore communication and history-taking were difficult.

## Investigations

On admission, in an attempt to provide haemorrhage control, he underwent upper GI endoscopy, which did not reveal a bleeding source. An initial CT and catheter angiogram of the mesenteric vessels was negative. A second CT angiogram forty-eight hours later imaged the thorax as well as the abdomen. This revealed a neo-oesophageal stent that had eroded into the left common carotid artery, causing active extravasation into the gastro-intestinal tract (Figure 1).



Figure 3 (left): selective left common carotid angiogram demonstrates carotico-neo-oesophageal fistula and active bleeding, due to neo-oesophageal stent.

Figure 4 (right): selective left common carotid angiogram following carotid stenting shows cessation of bleeding.

## Management

The patient deteriorated (systolic BP 50mmHg, lactate 14mmol/L) and required 56 units of blood products. He was transferred urgently to the angiography suite, where selective catheter angiography of the left common carotid confirmed the carotico-neoesophageal fistula (Figure 2).

Urgent deployment of an 8mmx5cm Viabahn covered stent into the left common carotid artery was performed, with cessation of bleeding and restoration of haemodynamic stability (Figure 3). The patient recovered, his neo-oesophageal stent was removed and he was discharged. Repeat CT angiogram studies have shown stable appearances and no evidence of ongoing fistulation.

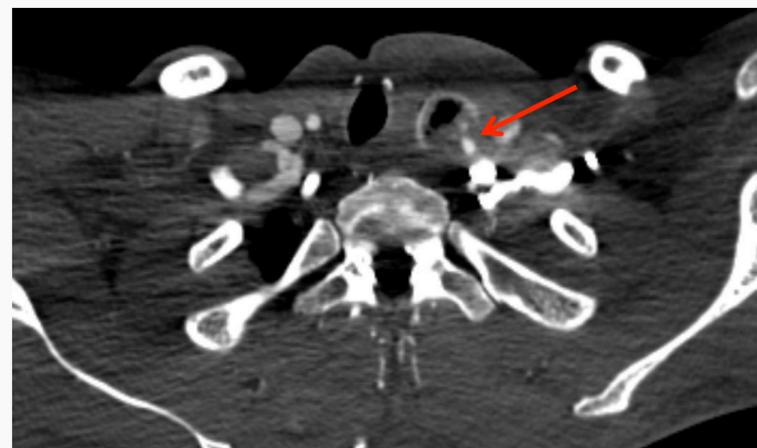


Figure 1 (left): barium swallow demonstrates neo-oesophageal stricture.

Figure 2 (right): axial CT angiogram shows communication between neo-oesophageal stent and left common carotid artery (arrow).

## Discussion

The events surrounding the neo-oesophageal stent insertion were not documented on the hospital's electronic discharge system or in any hospital clinic letter, and its existence was known only due to the second CT scan.

Oesophageal stents in non-malignant disease have a higher risk of erosion. Knowledge of this may have facilitated early selective carotid angiogram and intervention. It later emerged that the neo-oesophageal stent had been inserted in the same hospital, and that later removal/replacement had been planned at the time of insertion, but that this had not taken place.

## Summary

In this case, there was no documentation or knowledge of the neo-oesophageal stent at the time of the patient's deterioration. This case highlights the need for robust documentation. Endovascular carotid intervention saved this patient in extremis.