Unexpected cause of recurrent epistaxis

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DESCRIPTION
A 76-year-old man with a medical history of laryngeal cancer (T2N0M0), treated with radiotherapy and surgical excision (open partial laryngectomy) 20 years previously, and currently undergoing investigations for haematemesis, attended the emergency department after undergoing a week of recurrent epistaxis sometimes associated with hypotension and syncope. On examination, he had normal rhinoscopy findings. Blood tests revealed anaemia (haemoglobin 6 g/dL) with normal coagulation tests. After stabilising the patient with a blood transfusion, an oesophagogastroduodenoscopy was conducted, which revealed blood clots in the oesophagus, without a clear ulcer, wound or varices. The patient underwent an arteriography—the image showed a left carotid oesophageal fistula (figure 1, left).

Causes of carotid-oesophageal fistula can result from arterial lesions; mediastinitis;1 a foreign body, such as a fishbone, in the oesophagus,2 which can result in Chiari’s triad (chest pain, upper gastrointestinal bleeding and anaemia); or malignant lesions from adjacent organs (such as the oesophagus); they can also occur in those previously (even many years before, as in this case) treated with radiotherapy. Tracheo-oesophageal fistula was excluded due to the absence of contrast in the trachea after the imaging. Arteriovenous malformation was also discarded because there were no vascular bundles or arteriovenous circulation suggestive of this on arteriography.

The patient was subsequently taken to interventional radiology where three stents were inserted, resulting in complete fistula closure without complications (figure 1, right). The patient made a good recovery, and was discharged a few days later, scheduled for regular follow-up.

Learning points
▸ There are many causes of tracheo-oesophageal fistula, one of the most common is due to laryngectomy and radiotherapy.
▸ Chiari’s triad is a clinical finding that could be present in tracheo-oesophageal fistula.

Contributors JLC-V and ER-S were involved in writing the case and searching the literary review. CT-J was involved in supervising the project.

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REFERENCES