Upper gastrointestinal blood cast due to massive oropharyngeal bleeding

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SUMMARY
We present a case of a patient with recurrent squamous cell cancer of the base of the tongue and right tonsil who developed severe haematemesis. An elongated blood cast of the upper gastrointestinal tract was noted in the emesis. The patient required emergent intubation and blood transfusions. A CT scan with contrast revealed the presence of a pseudoaneurysm of the right lingual artery. Successful control of bleeding was achieved with coil embolisation of the pseudoaneurysm and its feeding artery. This case highlights that oropharyngeal bleeding can mimic gastrointestinal bleeding.

DESCRIPTION
A man in his 70s with a medical history of recurrent cancer of the base of the tongue and right tonsil, cigarette smoking, hypertension, dyslipidaemia, diabetes mellitus, seizure disorder and coronary artery disease on aspirin and plavix was brought to the hospital's emergency department from a nursing home with complaints of fatigue and anaemia. The patient was diagnosed with squamous cell cancer of the base of the tongue and right glossal tonsillar sulcus around 2 years ago for which he received chemoradiation therapy. After a multidisciplinary discussion, the patient received chemoradiation therapy due to the locoregionally advanced stage of cancer. A few months prior to presentation, he was diagnosed with a recurrence of cancer in his right tonsil with metastasis to ipsilateral cervical lymph nodes. The patient received radiation therapy a few weeks prior to presentation after it was deemed inoperable.

On presentation, the patient was found to have a haemoglobin of 57 g/L. He was noted to have a haemoglobin of 95 g/L 2 weeks prior. The patient received blood transfusion for anaemia. The patient was planned for an upper endoscopy and colonoscopy the following day. However, on the day of admission, he developed significant bleeding from his oropharyngeal cavity and haematemesis of large amounts of bright red blood. The patient was emergently intubated for airway protection and transfused with multiple units of blood products. Interestingly, an elongated blood cast of the upper gastrointestinal tract was noted in the emesis. Figure 1A depicts the blood cast that starts with a smooth cylindrical morphology casting the oesophagus and continues as a cast of the stomach, followed by segmental cast narrowing suggestive of extension into the small intestine. Gauge packing of his right oropharynx was performed to achieve haemostasis. A CT scan of the neck with contrast was performed (figure 1B) which showed a 1.2 cm pseudoaneurysm of the right lingual artery (arrow). No pseudoaneurysm was seen on previous imaging study at the time of recurrence diagnosis. The yellow asterisk (figure 1B) represents the gauge packing of the oropharynx. An arteriogram was subsequently performed (figure 1C) which showed the pseudoaneurysm (arrow) of the right lingual artery. Coil embolisation of the pseudoaneurysm and its feeding artery was performed with successful control of the bleeding. The patient underwent a tracheostomy to establish a secure airway prior to extubation. The ulcerative right tonsillar lesion was visualised on direct laryngoscopy. A percutaneous endoscopic gastrostomy tube was placed for nutrition due to oropharyngeal dysphagia, prior to his discharge to a nursing home. Oropharyngeal bleeding can present as haematemesis and can be confused with gastrointestinal bleeding. Securing emergent airway can help in preventing aspiration and asphyxiation.

Learning points
- Oropharyngeal bleeding can mimic gastrointestinal bleeding.
- Emergent intubation may be required to prevent respiratory compromise.

Figure 1 (A) Blood cast that starts with a smooth cylindrical morphology casting the oesophagus and continues as a cast of the stomach, followed by segmental cast narrowing representing the small intestine. (B) A 1.2 cm pseudoaneurysm of the right lingual artery (arrow) noted on the CT scan of the neck with contrast. The yellow asterisk represents the gauge packing of the oropharynx. (C) Pseudoaneurysm (arrow) of the right lingual artery identified on an arteriogram.
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Case reports provide a valuable learning resource for the scientific community and can indicate areas of interest for future research. They should not be used in isolation to guide treatment choices or public health policy.

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