Eur J Vasc Endovasc Surg 10, 370–371 (1995)

CASE REPORT

Oesophago-vascular Fistulae Secondary to Benign Peptic Ulcer Disease: A Rare Cause of Fatal Haemorrhage

Patrick J. Kenny,[1] Michael J. Kerin,[1] Deirdre M. O'Hanlon,[1] Sean Walsh,[2] Malcolm P. G. Little,[2] Donal F. Courtney[1] and Denis S. Quill[1]

Departments of [1]Vascular Surgery and [2]Pathology, University College Hospital, Galway, Ireland.

Key Words: Vascular surgery; Oesophago-aortic fistula; Oesophago-vascular fistula; Peptic ulcer disease.

Introduction

Oesophago-vascular fistulas are a very rare cause of massive upper gastrointestinal haemorrhage. The syndrome of sentinel haemorrhage, retrosternal pain and massive subsequent haemorrhage described by Chiari[1] is not always present and even though these fistulas are often associated with the presence of an aortic aneurysm or malignancy, this is not always the case. We present two cases of fatal haematemesis from an oesophago-vascular fistula secondary to benign peptic ulcer disease.

Case Reports

Case 1

A 78-year-old man was admitted to hospital for investigation of iron deficiency anaemia (haemoglobin 8.2 g/dl). He had an episode of mild haematemesis and melanea on the second day in hospital followed by a massive haematemesis 12 h later. An emergency laparotomy revealed a massive amount of blood in the stomach and haemorrhage from the lower oesophagus. A thoracotomy was commenced but the patient arrested and resuscitation was unsuccessful. At post mortem the patient was found to have a congenitally short oesophagus, 8 cm long, which merged into an intrathoracic stomach, 29 cm long, contained in a hiatus hernia. A large ulcer was present in the stomach which had eroded through the parietal pericardium and into the left atrium. Histology showed a chronic benign peptic ulcer originating in a columnar lined oesophagus and no evidence of malignancy.

Please address all correspondence to: D. F. Courtney.

Case 2

A 77-year-old lady presented with an acutely ischaemic left leg and was treated by a femorodistal bypass. Three weeks postoperatively the patient had a mild haematemesis, followed 3 h later by a massive haematemesis, haemoptysis and cardiac arrest. All attempts at resuscitation failed. At post-mortem an aortooesophageal fistula was discovered in the lower third of the oesophagus eroding into a non-aneurysmal aorta. Histology showed a deep penetrating oesophageal ulcer with active oesophagitis and again there was no evidence of malignancy.

Discussion

The incidence of aortoenteric fistulae is seven per 10 000 autopsies.[2] The most common site is from the duodenum and the second commonest is the oesophagus. Almost three quarters of all aortooesophageal fistulae are associated with aortic aneurysms and the majority of the remainder have an associated malignancy either primary oesophageal or bronchogenic.[3]

1078–5884/95/070370 + 02 $12·00/0

There have been few reported cases of successful resection of an aortooesophageal fistula.[4,5] However, with improved operative techniques and the advent of cardiopulmonary bypass, these lesions are now potentially treatable by surgery. We suggest that the presence of sentinel haemorrhage and retrosternal pain should raise the possibility of this entity being present. A semi-elective repair may then be possible if the appropriate investigations are promptly carried out. The symptom-free interval is often less than 6 h but can be as long as 2 weeks.[6]

The two cases described are unusual because of the benign nature of the underlying condition. We present these cases in the hope of drawing attention to this rare problem and alerting clinicians to its existence and the necessity for prompt intervention.

References

1 CHIARI H. Uber Fremdkorperverletzing des oesophagus mit aortenperformation. *Ber Klin Wochensch* 1914; **51**: 7–9.
2 FERGUSON MJ, ARDEN MJ. Gastrointestinal haemorrhage secondary to rupture of aorta. A review of four duodenal and three oesophageal cases. *Arch Intern Med* 1966; **117**: 133–137.
3 CARTER R, MULDER GA, SNYDER EN, BREWER LA. Aortoesophageal fistula. *Am J Surg* 1978; **136**: 26–30.
4 YONAGO RH, IBEN AB, MARK JB. Aortic bypass in the management of aortoesophageal fistula. *Ann Thorac Surg* 1969; **7**: 235.
5 SNYDER DMS, CRAWFORD S. Successful treatment of primary aortoesophageal fistula resulting from aortic aneurysm. *J Thorac Cardiovasc Surg* 1983; **85**: 4547.
6 VOYLES NR, MORETZ WH. Rupture of aortic aneurysms into the gastro-intestinal tract. *Surgery* 1958; **54**: 666.

Accepted 16 August 1994