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CASE REPORT

Case Report: Dieulafoy Lesion

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ABSTRACT

Introduction: Dieulafoy lesion (DL) is one of the rare causes of upper GI bleeding, less often diagnosed. We had an elderly female patient with haematemesis which turned out to be unusual, the case details are presented here. There were very few female patients in this hospital with haematemesis in the over 40 age group, out of which most were duodenal ulcer bleed or those from carcinoma stomach. This is only the second case in the author's experience. **Case history:** This is a 55 yr old female patient who presented with progressive haematemesis, initially controlled by adrenaline injection, but later, due to continued bleeding was subjected to surgery, and made a full recovery.

Conclusion: Dieulafoy lesion is less often suspected. Adrenaline injection or other Endoscopic modes of sclerotherapy are usually useful in control of bleeding. It also needs to be differentiated by endoscopy or by biopsy, from other forms of benign non-epithelial vascular lesions of the stomach, primarily, angiodysplasia.

Key words: haematemesis, stomach, endoscopic

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Introduction

Dieulafoy lesion is less often suspected. Adrenaline injection or other endoscopic modes of sclerotherapy are usually useful in the control of the bleeding. It also needs to be differentiated by endoscopy or by biopsy from other forms of benign non-epithelial vascular lesions of the stomach, primarily angiodysplasia.

Background

Dieulafoy lesion is an uncommon cause for upper GI bleeding, the commonest in the stomach[1]. It is also found in the duodenum[2], jejunum[3], colon[4],[5] and the rectum[6], but less commonly in neonates[7] and infants[8].

Case History

A 55 year old lady presented to the hospital with a two day history of pain in the abdomen and haematemesis, about 3-4 bouts bringing up about 200mls of vomitus with dark red blood each time. She was transferred from a local hospital, where she was on treatment for a suspected duodenal ulcer bleeding, where she was transfused with 3 units of whole blood.

She had been under treatment for dyspepsia of long duration, but did not report any history which was suggestive of analgesic or steroid use over a prolonged period. No previous history of upper GI endoscopy, smoking or alcohol use was reported. She had been on treatment for mild hypertension, which was under control with medication.



[Table/Fig 1] Lesion before adrenaline injection

On examination, she was found to have pallor, tachycardia about 103/min, normal BP and respiration and puffiness of the face. Examination of the chest was normal. The abdomen was mildly distended, but otherwise unremarkable. Investigations revealed an Hb of 6.1, PCV of 26 and raised urea and near normal creatinine levels. Upper GI endoscopy revealed a mucosal polypoid lesion with mild active bleeding, towards the lesser curvature of the stomach, close to the gastroesophageal junction. There were no other abnormalities in the mucosa of the oesophagus, the rest of the stomach or in the visible part of the

duodenum up to the 2nd part. Injection was done with epinephrine 1:10,000, with good control of bleeding.



[Table/Fig 2] Lesion after endoscopic adrenaline injection

However, on day 2 of admission, she developed hypotension and tachycardia and the Hb levels dropped below the post sclerotherapy level. A decision was made to undertake surgery. During the operation, an axial gastrotomy was done and at the lower end of the anterior surface of the stomach, the mucosa was inspected to locate the bleeding point. The lesion was located close to the greater curvature, on the posterior wall of the stomach. A wedge gastrectomy was done and the full thickness of the stomach surrounding the lesion was excised. The patient improved following surgery, but later developed pulmonary complications which needed intensive care. She later recovered, became fully fit and was discharged. Histopathology of the excised lesion was reported as Angiodysplasia of the stomach.

Discussion:

DLs occur without warning, presenting as severe haematemesis, often requiring vigorous resuscitation and urgent management, which may be endoscopic [9], band ligation [10] or surgical methods. In this case, we had tried Endoscopic injection which was not successful and therefore, open surgery was undertaken successfully.

DLs are often difficult to differentiate from other vascular abnormalities of the stomach or other parts of the GI tract, like vascular ectasias (GAVE), angiodysplasias and cirroid aneurysms. The criteria used for their diagnosis depend on the location of the bleeding vessel in the bowel wall and size [11],[12],[13] The more common likelihood of DLs occurring close to the lesser curve has been thought to be due to the vessels which arise directly from the left gastric artery. The defective vessel is thought to force its way through the muscularis and

the mucosa and protrude into the lumen, thus predisposing to trauma, rupture and bleeding [14]. Although it is suspected that this condition may be due to a general abnormality of the gut vasculature, no evidence has been found to show multiple DLs in one organ or in multiple organs in the same patient. However, two lesions close to each other have been described by Dieulafoy and others.

Conclusion:

Even though Dieulafoy lesions are recognized lesions, they are usually not suspected until endoscopy is done by a surgeon who is aware of its distinctive appearance. Although the literature reports a high number of lesions which are controlled endoscopically, it was the experience in this study to encounter one, which wasn't. A high index of suspicion and early endoscopic intervention seems to be the answer to promptly control the bleeding

References

- [1] Katz PO, Salas L.: Less frequent causes of upper gastrointestinal bleeding. *Gastroenterol Clin North Am.* 1993 Dec;22(4):875-89.
- [2] Anagnostopoulos G, Foley S, Raghunath K. Dieulafoy lesion in the duodenum. *N Z Med J.* 2005 Nov 11;118(1225):U1730.
- [3] Ueno N, Tada S, Nakamura T, Gohda K, Uehara M, Ohwan T, Suko H, Kamio T, Matsumoto T. Bleeding jejunal Dieulafoy lesion. *Gastrointest Endosc.* 2002 Apr;55(4):558.
- [4] Jain R, Chetty R. Dieulafoy disease of the colon. *Arch Pathol Lab Med.* 2009 Nov;133(11):1865-7.
- [5] Dharia T, Tang SJ, Lara L. Bleeding sigmoid colonic Dieulafoy lesion (with video). *Gastrointest Endosc.* 2009 Nov;70(5):1028; discussion 1028-9. Epub 2009 Aug 22.
- [6] Chen YY, Yen HH. Massive bleeding from a rectal dieulafoy lesion: combined multidetector-row CT diagnosis and endoscopic therapy. *Surg Laparosc Endosc Percutan Tech.* 2008 Aug;18(4):398-9.
- [7] Koo YH, Jang JS, Cho JH, Han SH, Ryu SH, Lee SW, Lee JH, Roh MH, Han SY, Choi SR. [Endoscopic injection treatment for gastric dieulafoy lesion in two newborn infants] *Korean J Gastroenterol.* 2005 Nov;46(5):413-7.
- [8] Lilje C, Greiner Riede UN, Sontheimer J, Brandis M. Dieulafoy lesion in a one-year- child *J Pediatr Surg.* 2004 Jan;39(1):133-4.
- [9] Zakary NY, van Langenberg DR, Alshumrany M, Schoeman MN. Gastrointestinal: acute haemorrhage from a Dieulafoy lesion within a gastric diverticulum managed endoscopically. *J Gastroenterol Hepatol.* 2009 Dec;24(12):1891.
- [10] Alis H, Oner OZ, Kalayci MU, Dolay K, Kapan S, Soyly A, Aygun E. Is endoscopic band ligation superior to injection therapy for Dieulafoy lesion? *Surg Endosc.* 2009 Jul;23(7):1465-9. Epub 2009 Jan 6.
- [11] <http://surgpathcriteria.stanford.edu/gi/dieulafoy-caliber-persistent/printable.html>
- [12] Mikó TL, Thomázy VA. The caliber persistent artery of the stomach: a unifying approach to gastric aneurysm, Dieulafoy's lesion, and submucosal arterial malformation. *Hum Pathol.* 1988 Aug;19(8):914-21.
- [13] Sunthorn Treearanuwattana, MD Choosak Khemtai, MD* Dieulafoy 2 Lesion: Pathology, Diagnosis and Treatment *Thai journal of Surgery,* 2002, 23:87-96
- [14] Juler GL, Labitzke HG, Lamb R, Allen R. The pathogenesis of Dieulafoy's gastric erosion. *Am J Gastroenterol.* 1984 Mar;79(3):195-200.