Dieulafoy lesion

What is a Dieulafoy lesion?

The lesion in Dieulafoy's disease consists of a submucosal ectatic artery in the gastrointestinal tract. It is larger than the vessels usually in that area. It can occur in any part of the GI tract, although most frequently it is in the stomach.[1] The protuberant artery causes brisk bleeding with little or no surrounding ulceration. The aetiology of the ectatic vessel and the cause of bleeding is unknown.

Dieulafoy was a French Surgeon and was the first to describe three cases at the end of the 18th century.

Commonest sites[2]

- Around 70% of Dieulafoy lesions are located in the stomach. Within the gastric region, most of the lesions (75%) can be found in the proximal stomach, particularly 6 cm from the gastroesophageal junction.[3]
- Small intestine - both jejunum and ileum have been involved.[4]
- Colon.
- Rectum.[5]
- More rare - oesophagus.

How common is Dieulafoy lesion? (Epidemiology)[6]

The incidence of Dieulafoy lesion leading to GIT haemorrhage ranges from 0.5% to 14%, depending upon the study. It is commoner in men and presents around 50 years of age.

Symptoms of dieulafoy lesion[3] [7]

- Typically asymptomatic but then can present acutely with massive gastrointestinal haemorrhage. Bleeding is typically reported as melaena (44%), haematemesis (30%), a combination of both (18%), haematochezia (6%), or as iron deficiency anaemia (1%).
- May present with haemodynamic instability such as tachycardia, hypotension, and orthostasis, along with acute prerenal azotaemia.
- Haemoglobin levels typically range between 84 to 92 g/L.
- Recurrent bleeding within 72 hours after initial presentation can occur if left untreated following the initial endoscopy.
- Other gastrointestinal symptoms, especially abdominal pain, are uncommon, and if present, usually indicates an alternate diagnosis such as peptic ulcer disease or complications from bleeding such as mesenteric ischaemia secondary to haemorrhagic shock.

Investigations

Endoscopy, although repeated endoscopy may be required - especially if the lesion is not actively bleeding. Laparotomy may also be required.[3]

Dieulafoy lesion treatment and management[3]

- Primary haemostasis can be achieved with electrocoagulation, which provides a quick and inexpensive solution with an almost 80% haemostatic success rate.
- Other methods that may be used include sclerotherapy with ethanol or norepinephrine, thermocoagulation, argon plasma coagulation or haemostatic clips.
- Secondary haemostasis can be accomplished through repeat endoscopy, angiography, or rarely, surgical wedge resection.
- Tattooing the site of the original intervention during the initial endoscopy steers the secondary haemostatic measures.

Prognosis[3]

- With proper diagnosis and treatment, the rate of mortality has decreased from 30% in the 1970s to currently 8%. However, the difficulty lies in vigilant detection, especially in anomalous locations.
- The rate of recurrence ranges from 9% to as high as 40%.

Further reading

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Authored by:	Peer Reviewed by: Dr Krishna Vakharia, MRCGP	
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