



How to localize duodenal lesions endoscopically

Ayman Alsebaey, MD

Professor of Hepatology and Gastroenterology

National Liver Institute, Menoufia University, Egypt

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قَالَ تَعَالَى: ﴿ وَمِنْهُمْ مَّنْ يَقُولُ رَبَّنَا آئِنَا فِي الدُّنْيَا حَسَنَةً وَفِي

الْآخِرَةِ حَسَنَةً وَقِنَا عَذَابَ النَّارِ ﴾ البقرة ٢٠١

"Our Lord, give us in this world [that which is] good and in the Hereafter [that which is] good and protect us from the punishment of the Fire."



اللهم إن أبي في ذمتك، وحبل جوارك، فقه من فتنة القبر وعذاب النار، وأنت أهل الوفاء والحق، فاغفر له وارحمه إنك أنت الغفور الرحيم

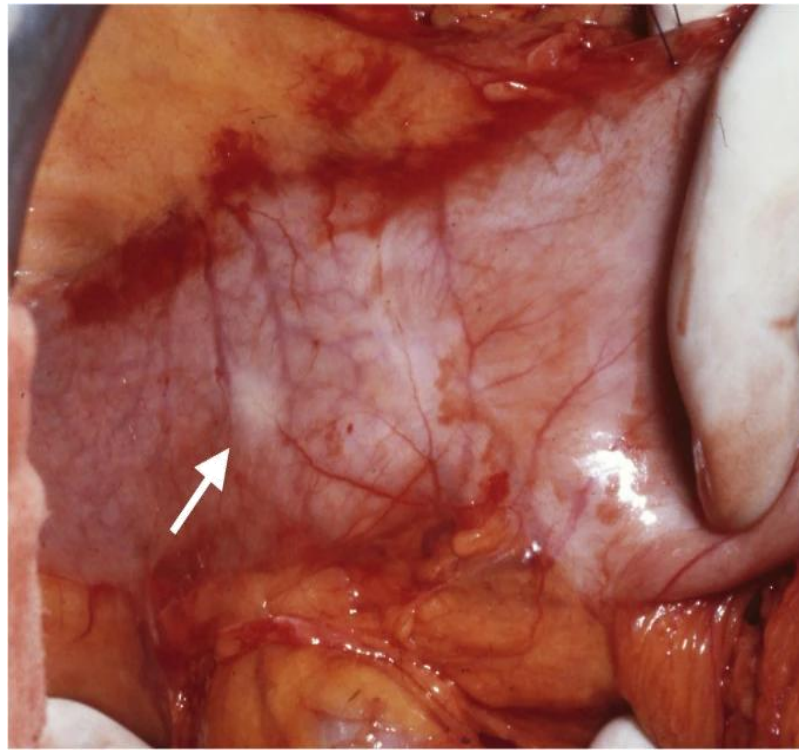
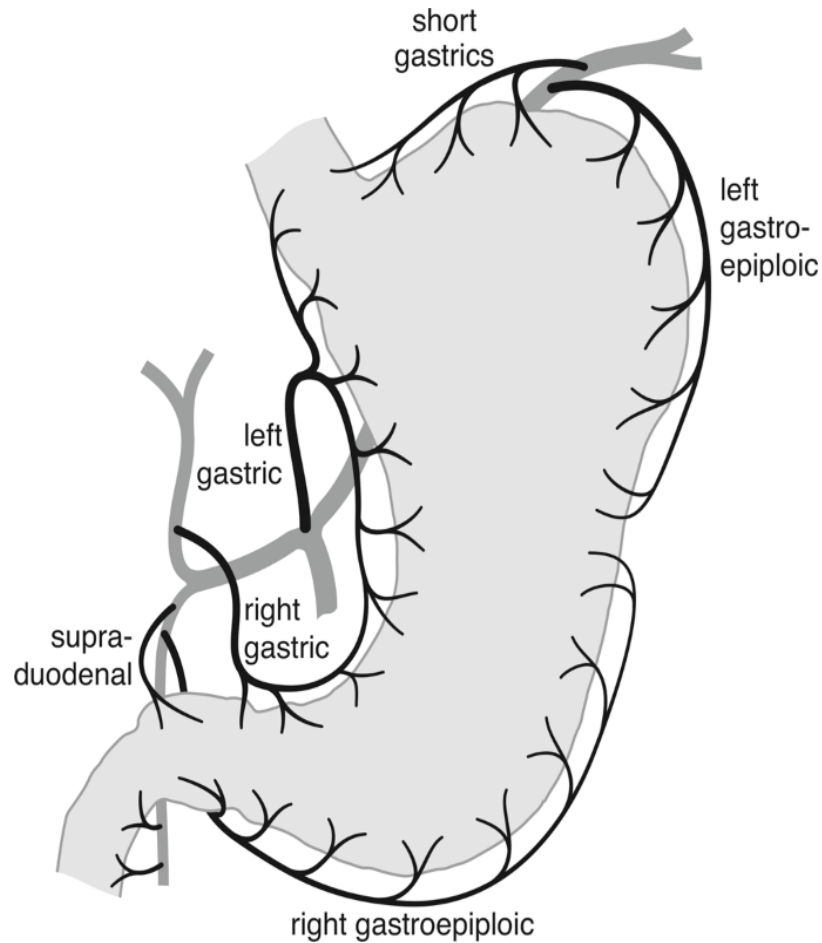
O Allah, surely my father is under Your protection, and in the rope of Your security, so save him from the trial of the grave and from the punishment of the Fire. You fulfill promises and grant rights, so forgive him and have mercy on him. Surely You are Most Forgiving, Most Merciful.



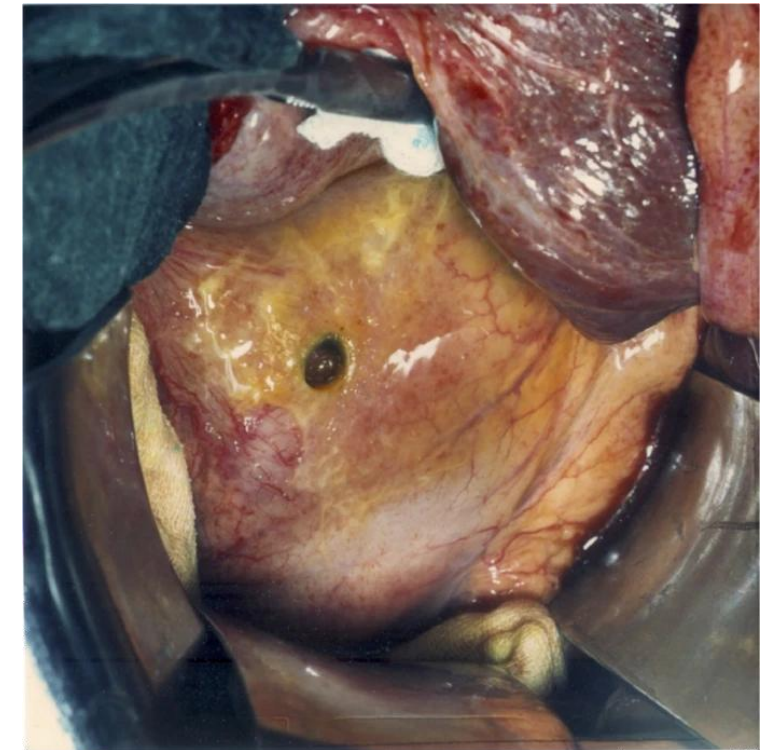
Introduction

- When you refer a patient with spurting duodenal ulcer to the surgeon, he always ask you about the site.
- Duodenal surgery is bothersome, and the surgeon hopes to do rapid intervention especially if the patient is critical or unstable.
- In practice there is great discrepancy between that endoscopic anatomic duodenal ulcer site and the true surgical site.
- How to solve this problem?





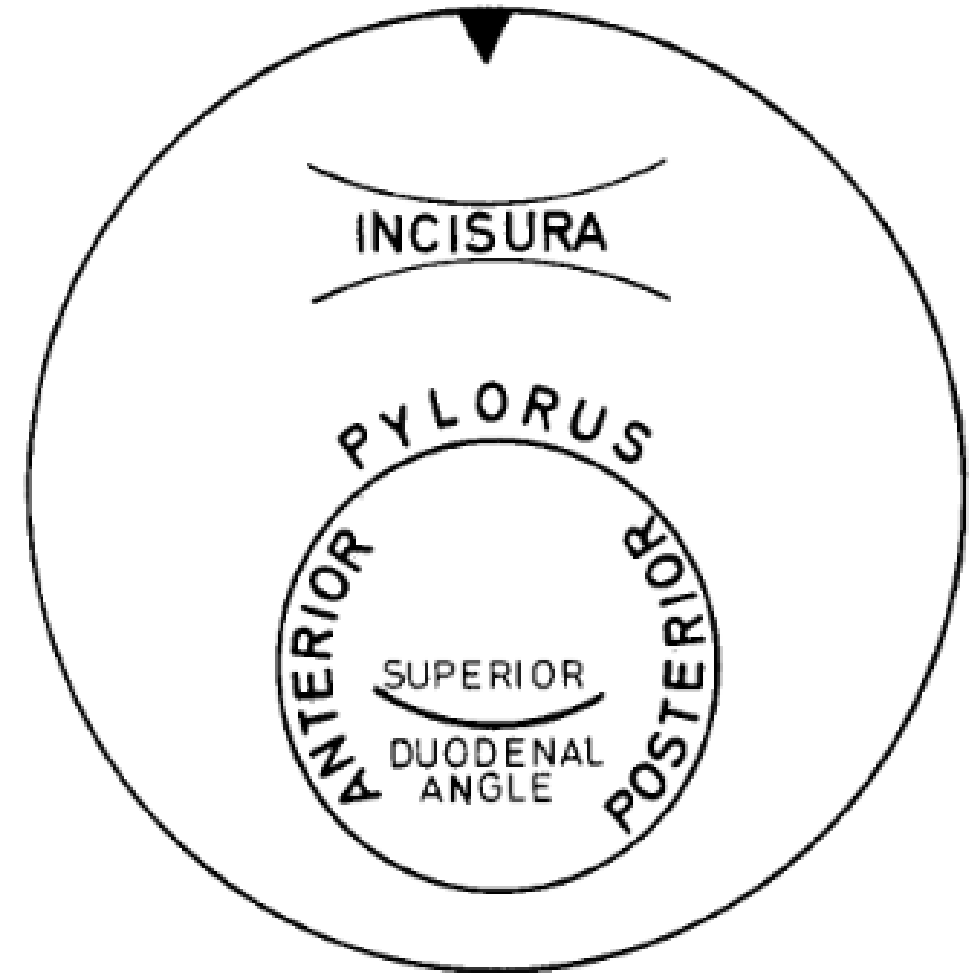
Mayo's anemic spot demonstrated at operation in a view of the anterior wall of the antrum and the proximal duodenum. Dragging the antrum away from the fixed duodenum into the wound, a pale spot will appear at the anterior aspect of the bulb (left). It will vanish completely as soon as the tension is released. It develops at the typical site of duodenal ulcer and may be confused with it. However it does not show the sharp delineation of a duodenal ulcer. A second whitish structure running transversely can be seen directly over the pyloric muscle (centre), the most prominent muscular structure in the foregut.



View at a freshly perforated duodenal ulcer at operation. The characteristic form of this full wall necrosis develops at the anterior surface in-between the arterial influx from both mesenteries. The direct view from the serosal side shows the radial symmetry of the transmural defect with acute margins to all sides of the vital surrounding tissue. Macroscopically and microscopically this typical finding appears to be punched out from a grossly intact duodenal wall.

Diagrammatic representation of the anatomy of the duodenal bulb at endoscopy [1986].

- 3 o'clock: **posterior wall.**
- 9 o'clock: **anterior wall.**
- 12 o'clock: **superior wall.**
- 6 o'clock: **inferior wall.**



Endoscopic orientation within the duodenal bulb 1992

Laparotomy performed for bleeding duodenal ulcer after diagnostic/therapeutic endoscopy revealed a disparity in location of the lesion on several occasions at our institution. The position of the duodenal lesion is

The aforementioned study demonstrated that the true posterior position in the duodenal bulb could be precisely determined in only 28% of the cases by experienced endoscopists. This observation may have clinical implications in

pendently but simply observed the video screen. The patient was then placed into the supine position and 30 ml of colored water was slowly instilled via the biopsy channel. The true posterior position was documented by the pooled fluid and properly documented in the fellow's and staff phy-

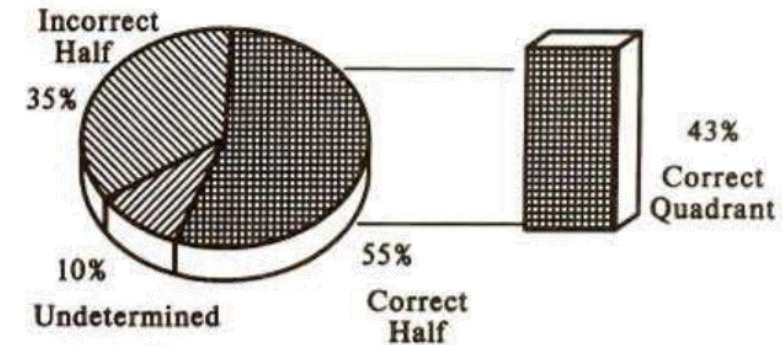
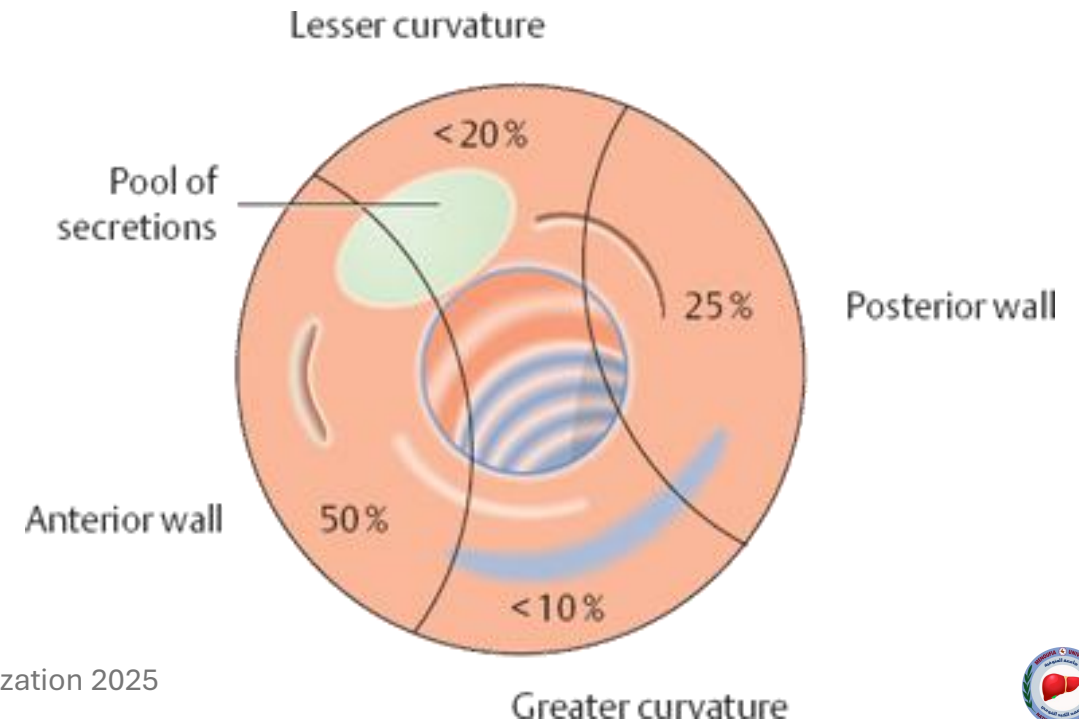
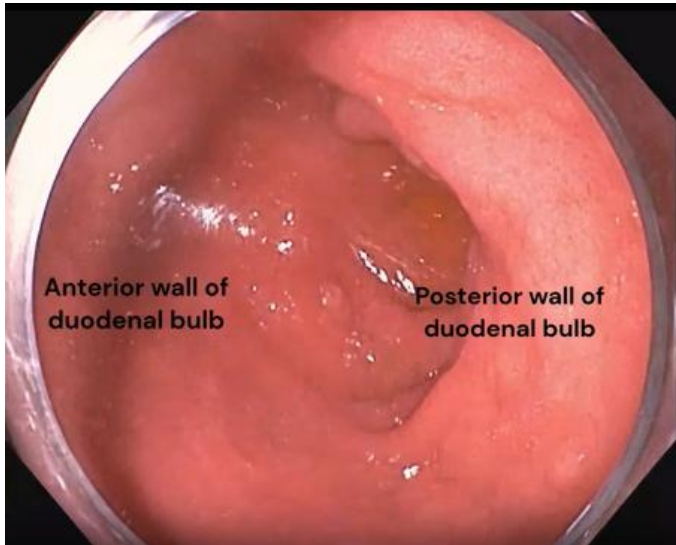


Figure 1: Endoscopic determination of the posterior location in the duodenal bulb is illustrated as to correct quadrant, correct or incorrect half and indeterminate position. The endoscopist chose the posterior position in the correct quadrant 43 % of the time, the correct half 55 %, and the wrong half 35 %.

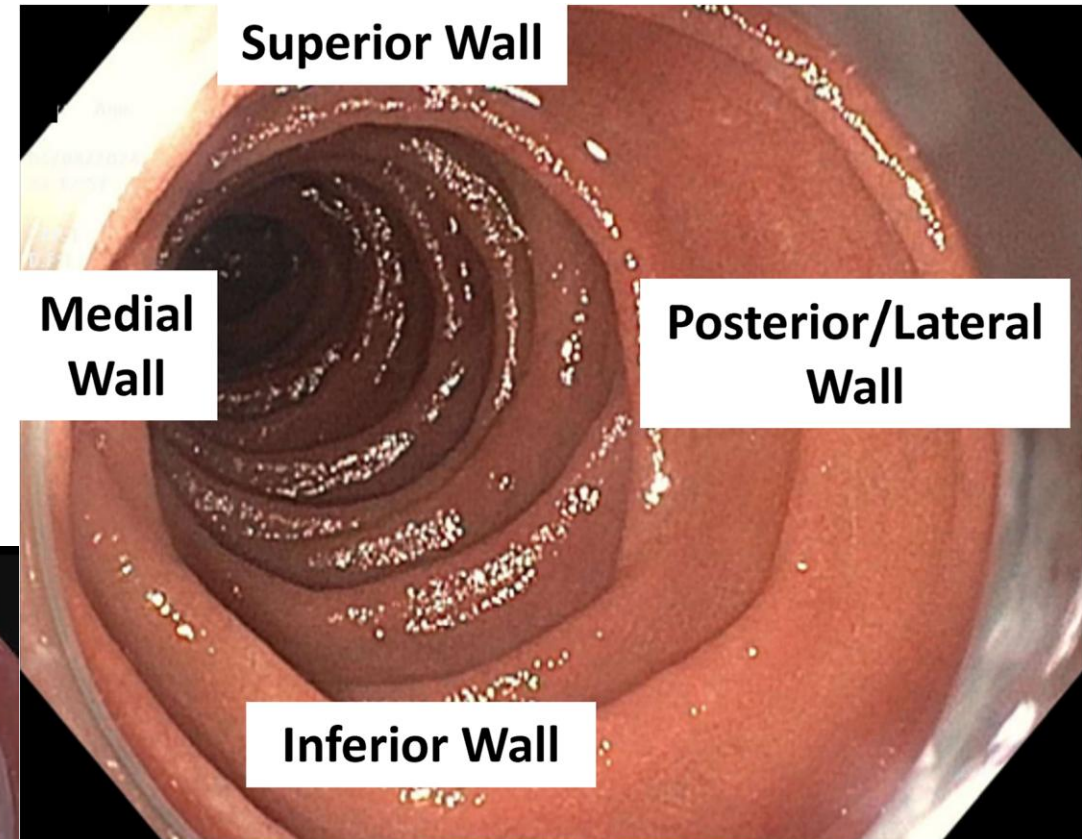


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Bulb

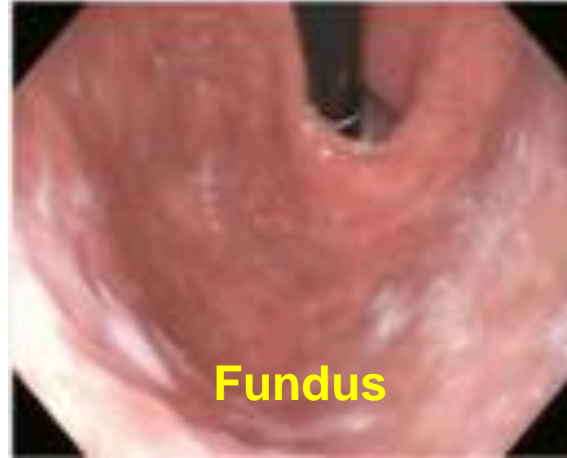
Bulb



Second part of the duodenum



Lesser Curvature



Posterior

Anterior

Great Curvature

Superior



Anterior

Posterior

Inferior

Right

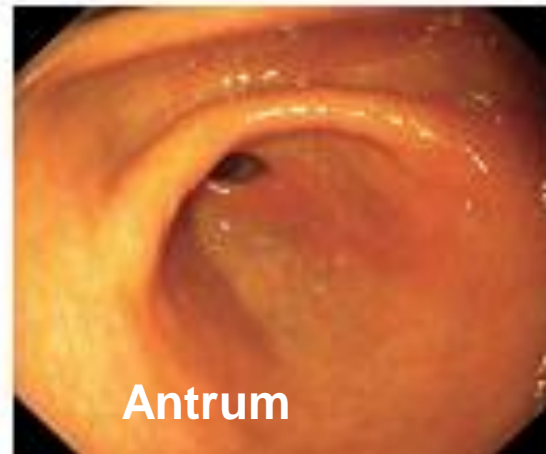


Anterior

Posterior

Left

Lesser Curvature

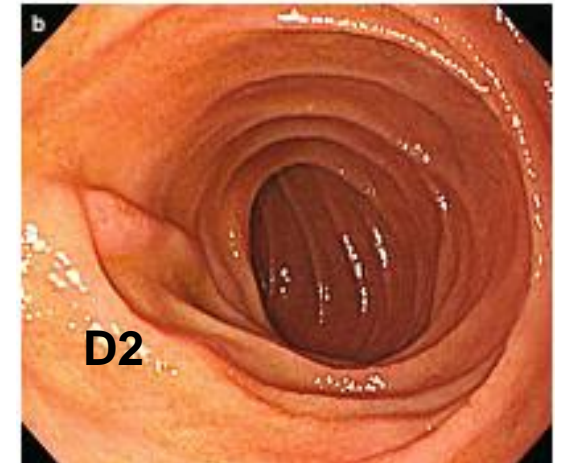


Anterior

Posterior

Great Curvature

Superior



Medial

Posterior/Lateral

Inferior





Thanks

