

Anatomical description during standard upper endoscopy

Ahmad Najdat Bazarbashi, Kelly E. Hathorn, Marvin Ryou

Division of Gastroenterology, Hepatology and Endoscopy, Brigham and Women's Hospital, Boston, MA, USA *Correspondence to:* Ahmad Najdat Bazarbashi, MD. Division of Gastroenterology, Hepatology and Endoscopy, Brigham and Women's Hospital, Boston, MA, USA. Email: abazarbashi@bwh.harvard.edu.

Received: 15 January 2019; Accepted: 27 February 2019; Published: 18 March 2019. doi: 10.21037/aos.2019.03.01

View this article at: http://dx.doi.org/10.21037/aos.2019.03.01

In this video (*Figure 1*), we demonstrate standard upper endoscopy performed on a 50-year-old patient with history of gastroesophageal (GE) reflux disease and dyspepsia. We highlight the common anatomical landmarks of the upper gastrointestinal tract (*Table 1*, *Figure 2*) and endoscopic techniques for successful esophageal intubation, gastric retroflexion, duodenal access and tissue sampling using biopsy forceps.

Essentials of endoscopic reporting

Esophagus

- ❖ Z line: regular vs. irregular;
- Location of GE junction from incisors (example: 40 cm);
- ❖ Ease of scope passage through GE junction;
- If varices present: grade, size, location, red wale sign or white nipple sign (stigmata of bleeding);
- Hiatal Hernia: size, from GE junction to diaphragmatic pinch (example 35–40 cm), Hill classification;
- * Esophagitis: Los Angele (LA) Grading/Classification;
- ❖ Barrett's esophagus: length, Prague classification.

Stomach

- Presence of ulcers, erosions, Cameron lesions, gastric antral vascular ectasia (GAVE) and other mucosal pathology;
- Ulcer: shape, size, clean based, overlying clot, visible vessel, surrounding mucosa appearance;
- ❖ Mass: regular vs. irregular, size (measure proximal

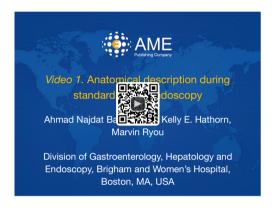


Figure 1 Anatomical description during standard upper endoscopy (1).

Available online: http://aos.amegroups.com/post/view/1550051583

- extension to distal extension), malignant appearing, anterior vs. posterior wall or lesser curvature vs. greater curvature, extension into esophagus or GE junction, spontaneous bleeding or contact bleeding;
- ❖ If gastritis is present: location, patchy *vs.* diffuse, mild *vs.* severe, contact bleeding *vs.* spontaneous bleeding.

Duodenum

- Presence of ulcers, duodenitis, villous atrophy, diverticula, and ampullary lesions;
- Ulcer: shape, size, clean based, overlying clot, visible vessel, surrounding mucosa appearance;
- ❖ Extent of duodenum evaluation (usually 2nd or 3rd part of duodenum).

Page 2 of 2 Art of Surgery, 2019

Table 1 Anatomical location and commonly encountered pathology

Anatomical location	Commonly encountered pathology
Mid-esophagus	Esophageal webs, inlet patches, papillomas, Schatzki ring, varices, esophagitis, malignancy
Gastroesophageal junction	Esophageal webs, Schatzki ring, varices, esophagitis, malignancy, Barrett's esophagus, hiatal hernia, Mallory Weiss tear
Stomach	Fundus: ulcers/erosions, gastric varices, fundic gland polyps, gastric cancer
	Body: ulcers/erosions, gastritis, gastric cancer, polyps, portal gastropathy
	Antrum: ulcers/erosions, gastritis, gastric cancer, gastric antral vascular ectasia (GAVE)
Duodenum	Duodenitis, duodenal cancer, duodenal ulcer, villous atrophy, ampullary lesions, diverticula

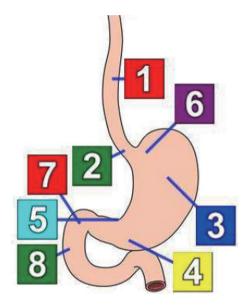


Figure 2 Anatomical landmarks during upper endoscopy. Label 1: mid-esophagus; label 2: gastroesophageal junction; label 3: gastric body; label 4: gastric antrum; label 5: incisura; label 6: gastric fundus; label 7: duodenal bulb; label 8: second part of duodenum.

Acknowledgements

None.

Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

Informed Consent: Written informed consent was obtained from the patient for publication of this manuscript and any accompanying images.

References

 Bazarbashi AN, Hathorn KE, Ryou MR. Anatomical description during standard upper endoscopy. Art Surg 2019;3:v002. Available online: http://aos.amegroups.com/ post/view/1550051583

doi: 10.21037/aos.2019.03.01

Cite this article as: Bazarbashi AN, Hathorn KE, Ryou M. Anatomical description during standard upper endoscopy. Art Surg 2019;3:2.