

Featured Movie: The Gastroduodenal Artery

John Deutsch, MD

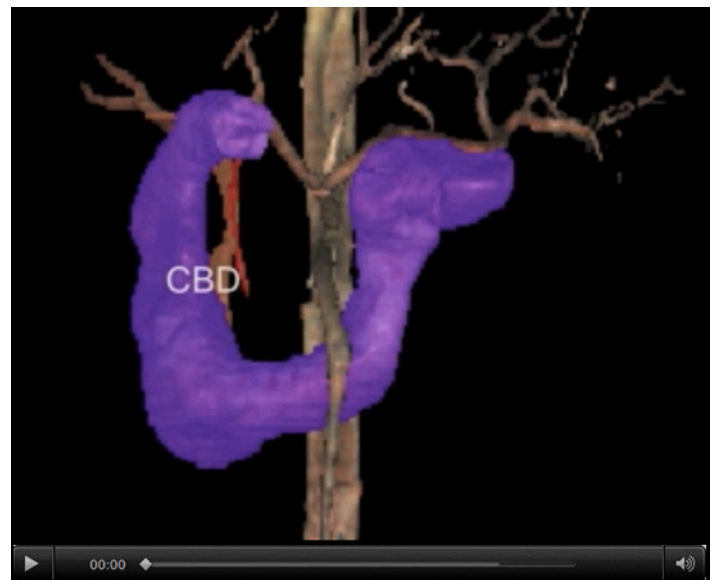
EssentiaHealth
Duluth MN

The Gastroduodenal artery (GDA) is an important vessel in gastroenterology. Peptic ulcers involving the GDA are relatively common and can be a source of fatal hemorrhage¹⁻³.

Bleeding duodenal ulcers that are refractory to endoscopic management often involve the GDA. Wong et al performed angiographic embolization in 32 patients with bleeding upper gastrointestinal ulcers who failed endoscopic management. 25 of these patients (74%) had been bleeding from the GDA³.

The GDA most commonly arises from the common hepatic artery (HA) near the bifurcation into the left (LHA) and right (RHA) hepatic arteries. The GDA then gives rise to the superior pancreaticoduodenal artery (PDA), which then splits into the pancreaticoduodenal and right gastroepiploic arteries.

The Featured Movie shows the GDA using Visible Human® anatomy as derived from the ToLTech VH Dissector™.



Video 1

A radial array EUS image from the duodenal bulb is also provided to illustrate the close proximity of this relatively large vessel to the duodenal lumen.

References:

1. Cheung FK, Lau JY. *Management of massive peptic ulcer bleeding. Gastroenterol Clin North Am.* 2009 Jun;**38**(2):231-43.
2. Del Piano M, Bianco MA, Cipolletta L, Zambelli A, Chilovi F, Di Matteo G, Pagliarulo M, Ballarè M, Rotondano G; *Prometeo study group of the Italian Society of Digestive Endoscopy (SIED). The "Prometeo" study: online collection of clinical data and outcome of Italian patients with acute nonvariceal upper gastrointestinal bleeding. J Clin Gastroenterol.* 2013 Apr;**47**(4):e33-7.
3. Wong TC, Wong KT, Chiu PW, Teoh AY, Yu SC, Au KW, Lau JY. *A comparison of angiographic embolization with surgery after failed endoscopic hemostasis to bleeding peptic ulcers. Gastrointest Endosc.* 2011 May;**73**(5):900-8.