

# Anatomy in relation to left colectomy

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This video (*Figure 1*) shows the laparoscopic exploration of the abdomen before a laparoscopic left colectomy. A live demonstration of the anatomical details and landmarks is given.

I suggest this video (*Figure 1*) to my residents as a preparatory tool, before performing a laparoscopic colectomy.

In the recent years, an advice toward centralization of colorectal surgery to high-volume centers has been given by many authors. Nevertheless, the association between caseload and outcomes is still questionable and the majority of laparoscopic colectomies are still performed by low-volume surgeons. Accordingly, I believe that providing local services with adequate surgical education and training tools could be a better strategy to improve outcomes and global health.

As a part of this strategy, I became engaged in the development of simplified and easy-to-learn laparoscopic surgical techniques (2-4), which I consider a valuable and complementary tool to help my residents build their learning curve and achieve a reliable experience.

Please, take your time with this video. I hope it will be of help for your growth as surgeons.

## Questions for residents

**Question 1:** Which is the suggested way to start the dissection during a laparoscopic left colectomy?

Please click “Answer” to continue your reading.

**Answer 1:** We suggest starting the dissection by dividing the peritoneum between the inferior mesenteric vein and the aorta, instead of directly pursuing the inferior mesenteric artery. This strategy allows for easy visualization and division of the Toldt’s fascia, thus lowering the left ureter and moving it away from the inferior mesenteric artery. The inferior mesenteric artery can be pursued with greater safety this way.

**Question 2:** How are the inferior mesenteric artery and the



**Figure 1** Anatomy in relation to left colectomy (1).

Available online: <http://aos.amegroups.com/post/view/2018072401>

left colic artery better identified?

Please click “Answer” to continue your reading.

**Answer 2:** Together with the superior aspect of the inferior mesenteric artery, from which it originates, the left colic artery forms the right side of a rectangle, of which the aorta is the base, the duodenojejunal junction is the left side, and the inferior mesenteric vein is the upper side. If the peritoneum is incised below the duodenojejunal junction and above the aortic profile, a window can be opened by lowering the Toldt’s fascia from the posterior aspect of the left mesocolon. When deepening this window towards the aortic bifurcation, the superior aspect of the inferior mesenteric artery and the left colic artery are met and can be prepared for a safe division.

**Question 3:** Where do the ureters enter the pelvis?

Please click “Answer” to continue your reading.

**Answer 3:** The ureters enter the pelvis by crossing the bifurcation of the common iliac vessels and then running

parallel to and above the hypogastric arteries.

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### Footnote

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