

Biology 224

Human Anatomy and Physiology - II

Week 5; Lecture 2; Wednesday

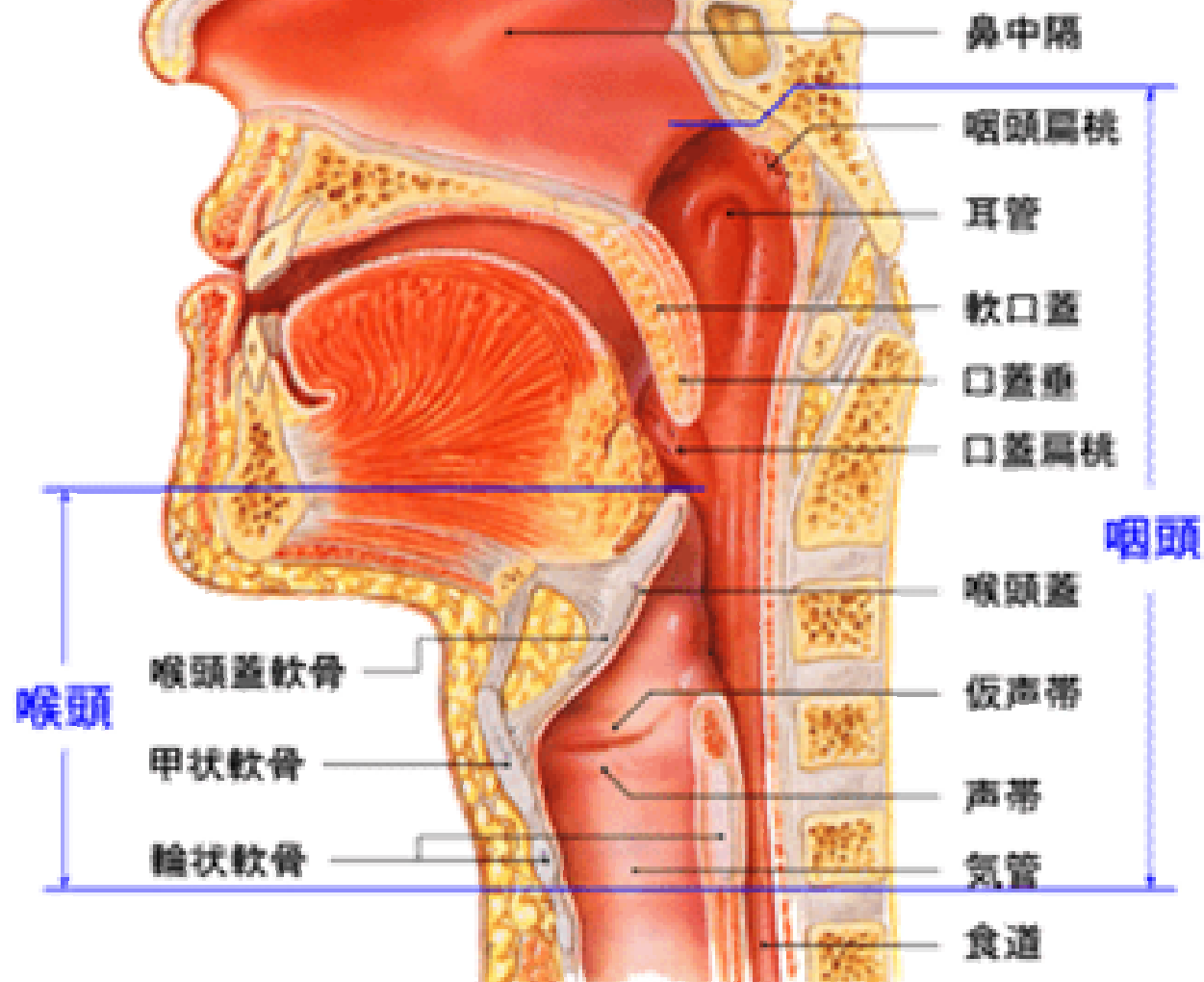
Dr. Stuart S. Sumida

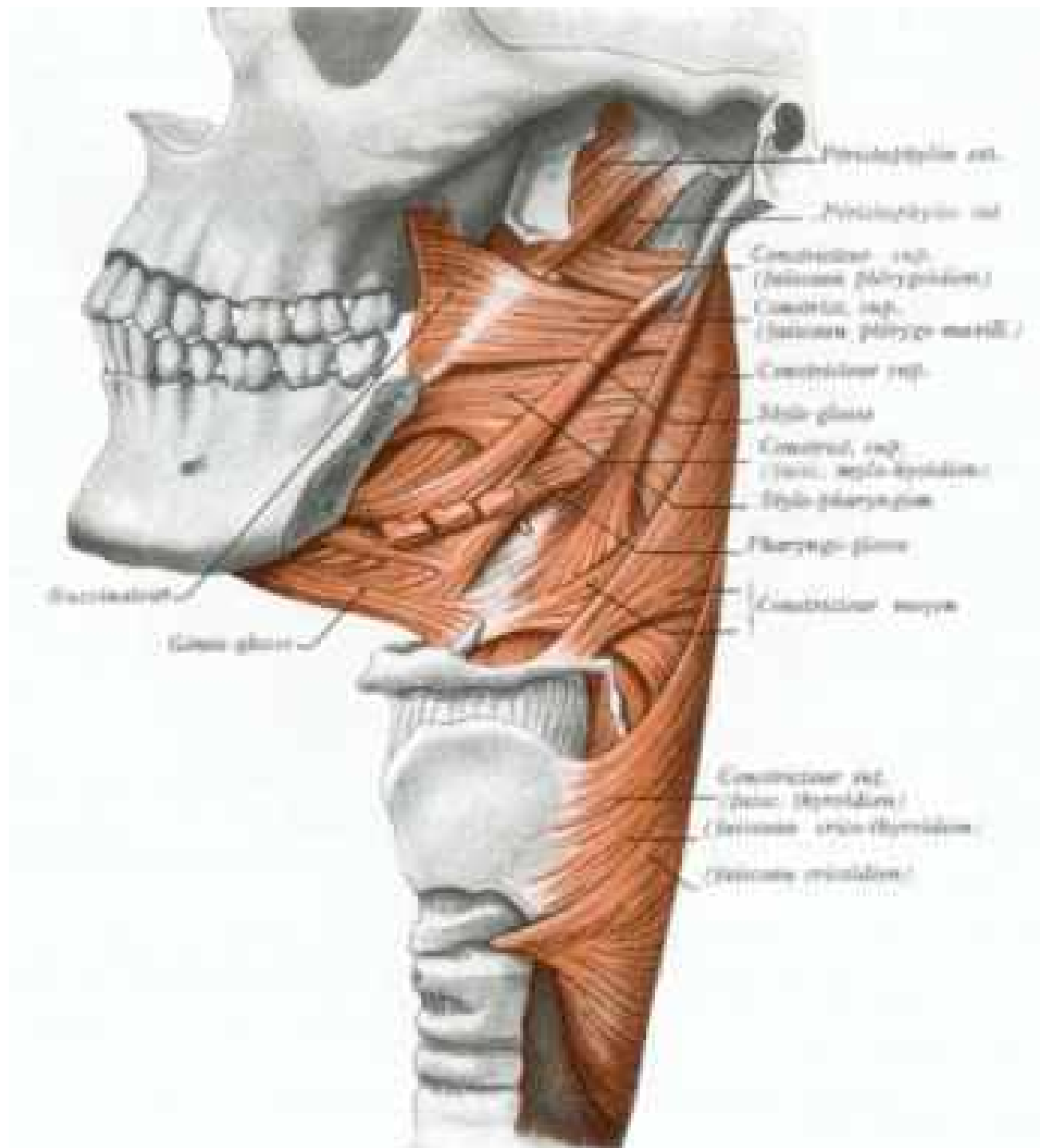
Gut Tube: Development, Structure, Function

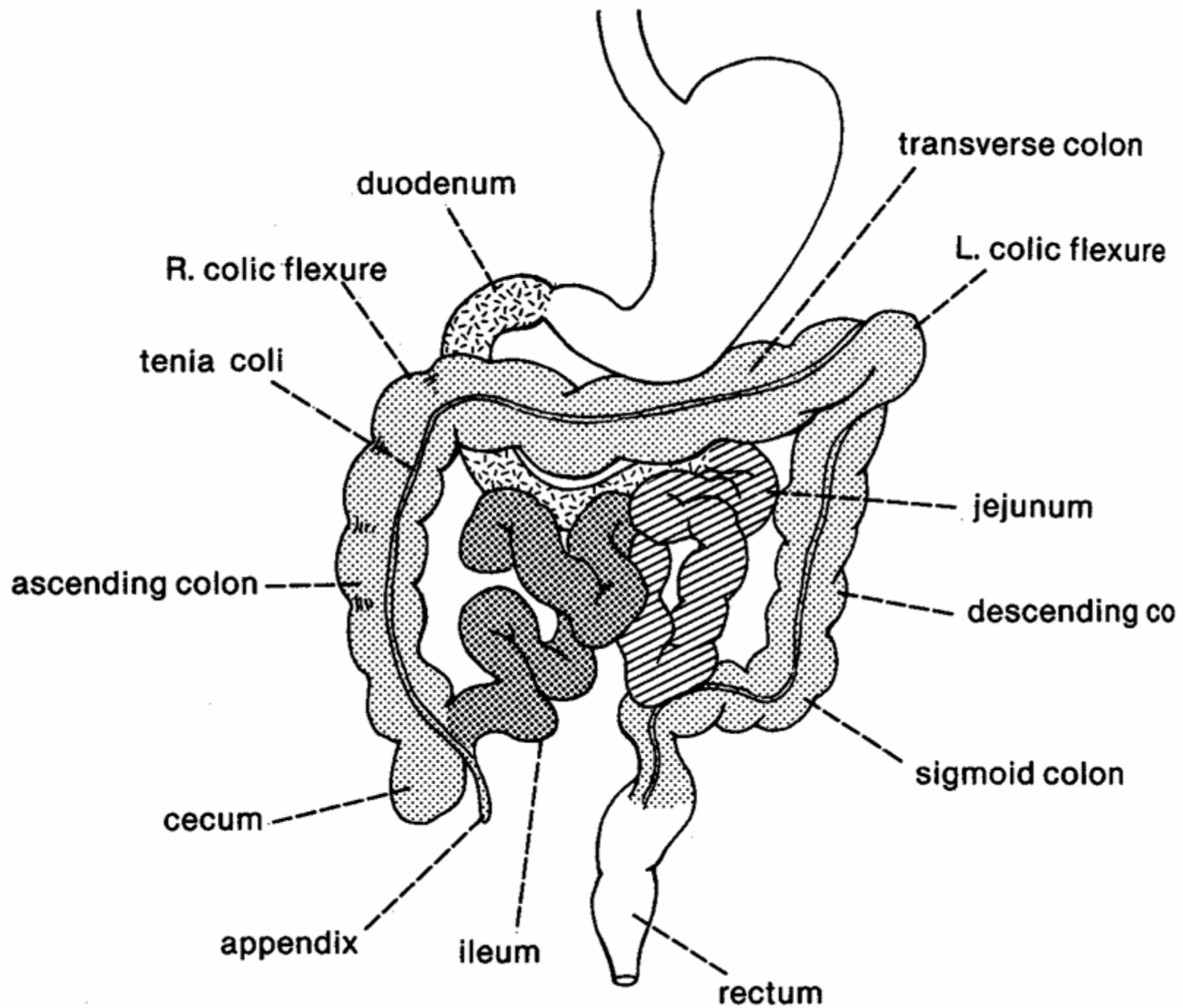


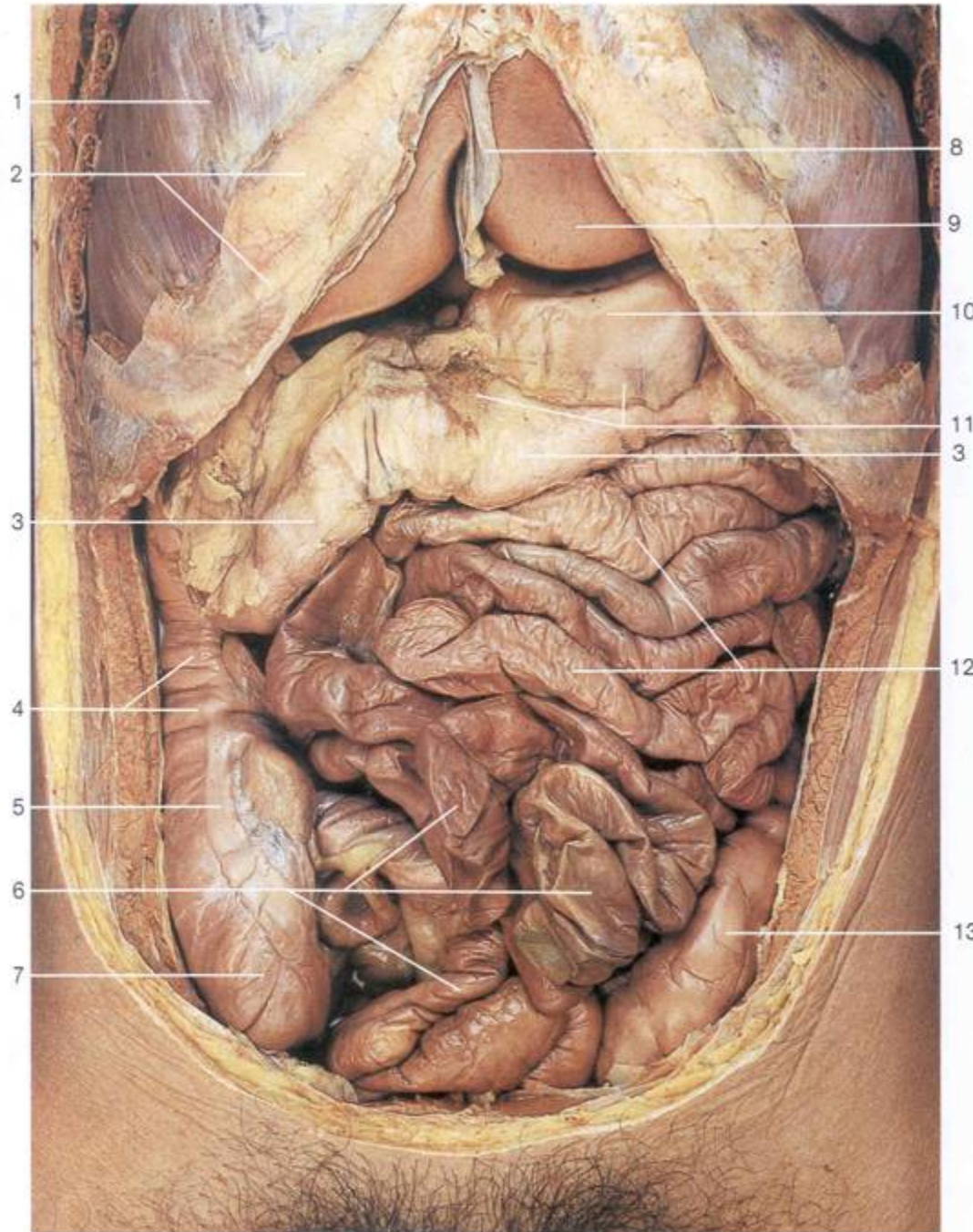
咽頭と喉頭

(講談社 からだの地図帳より)

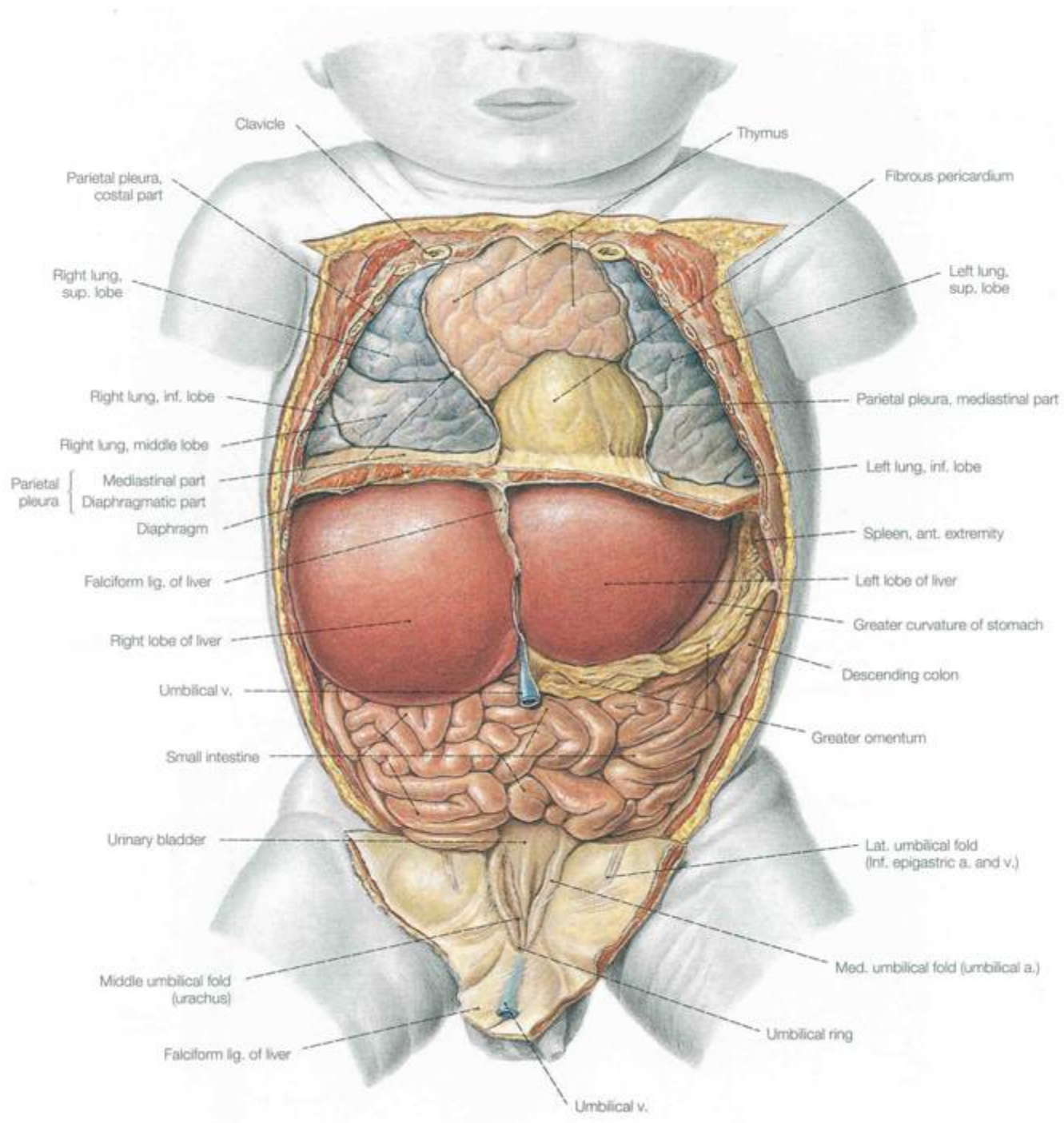


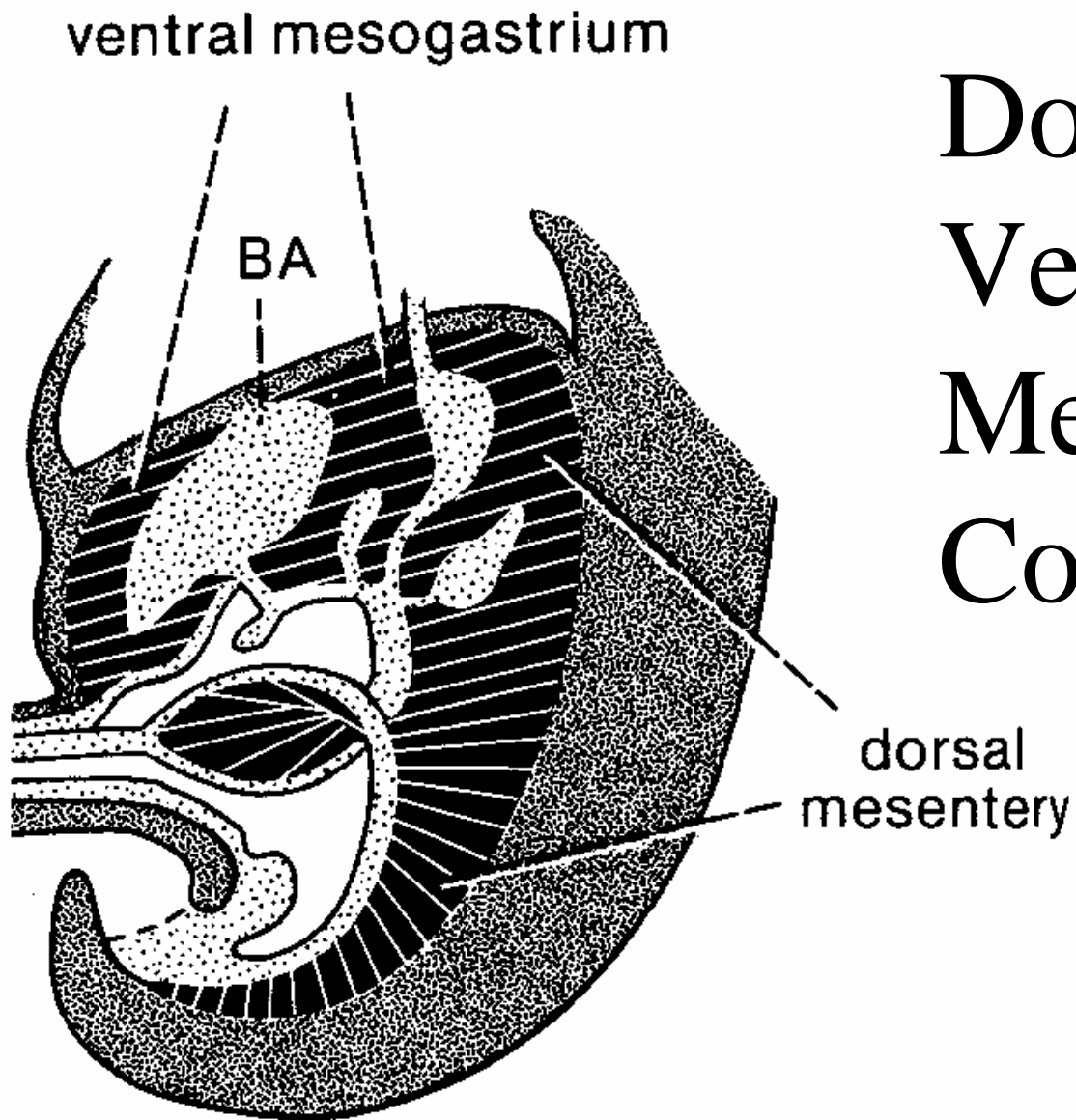






- 1 Diaphragm
- 2 Costal margin
- 3 Transverse colon
- 4 Ascending colon with haustra
- 5 Free taenia of cecum
- 6 **Ileum**
- 7 **Cecum**
- 8 **Falciform ligament of liver**
- 9 Liver
- 10 Stomach
- 11 Gastrocolic ligament
- 12 Jejunum
- 13 Sigmoid colon
- 14 **Vermiform appendix**
- 15 Terminal ileum
- 16 **Mesoappendix**
- 17 Mesentery

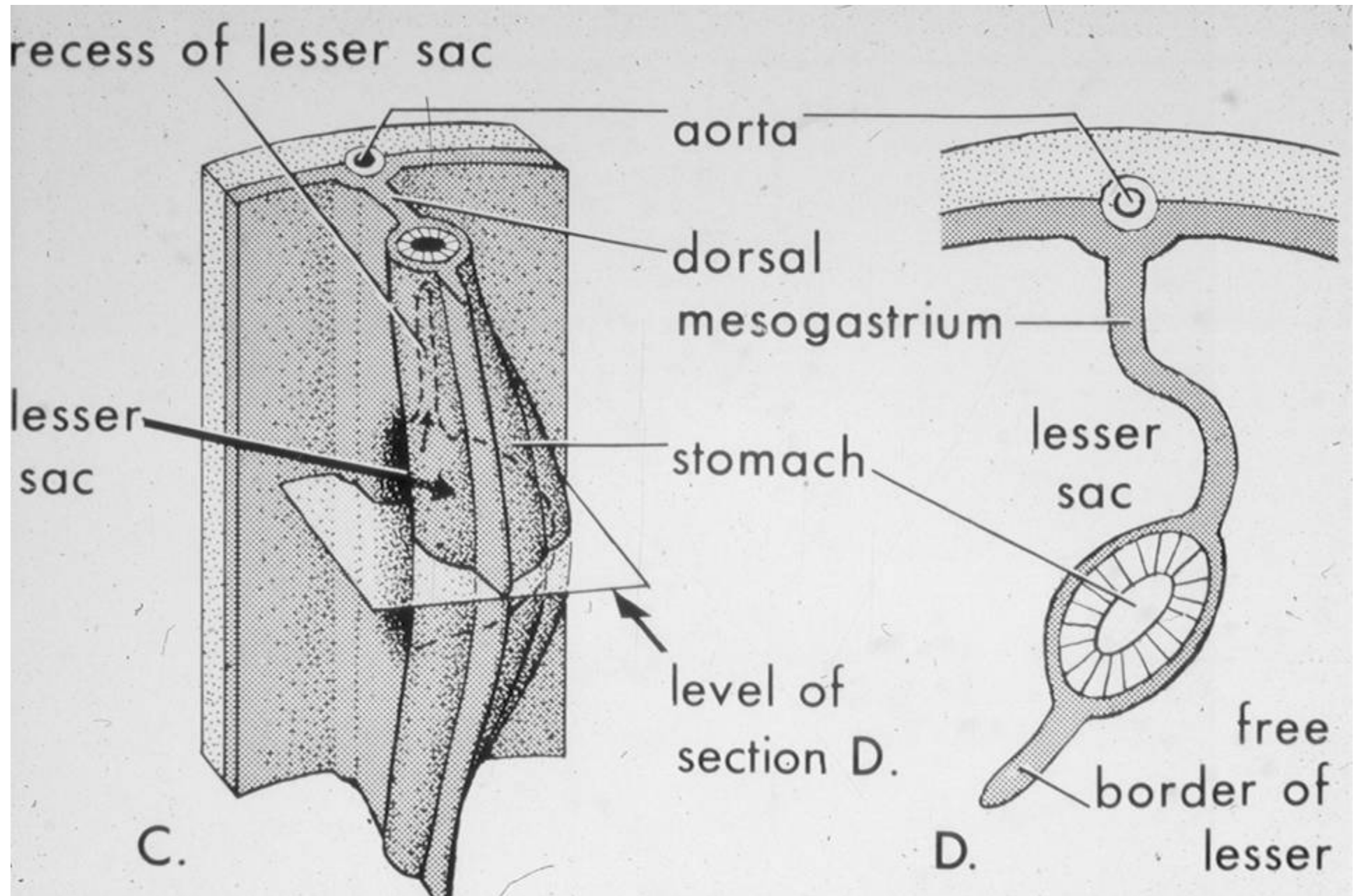




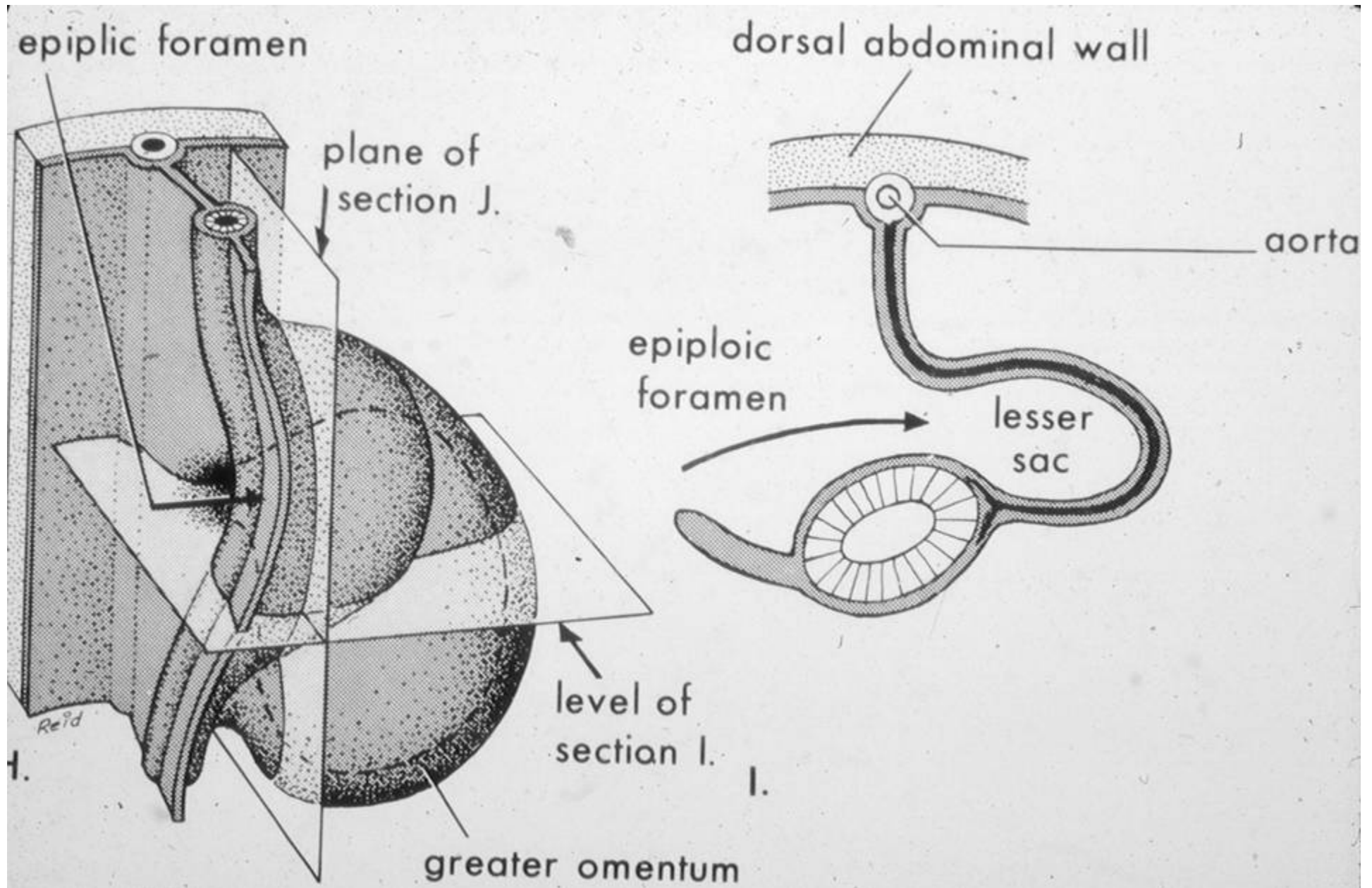
Dorsal vs. Ventral Mesentery Components

Development and Structure of the Abdominal Foregut

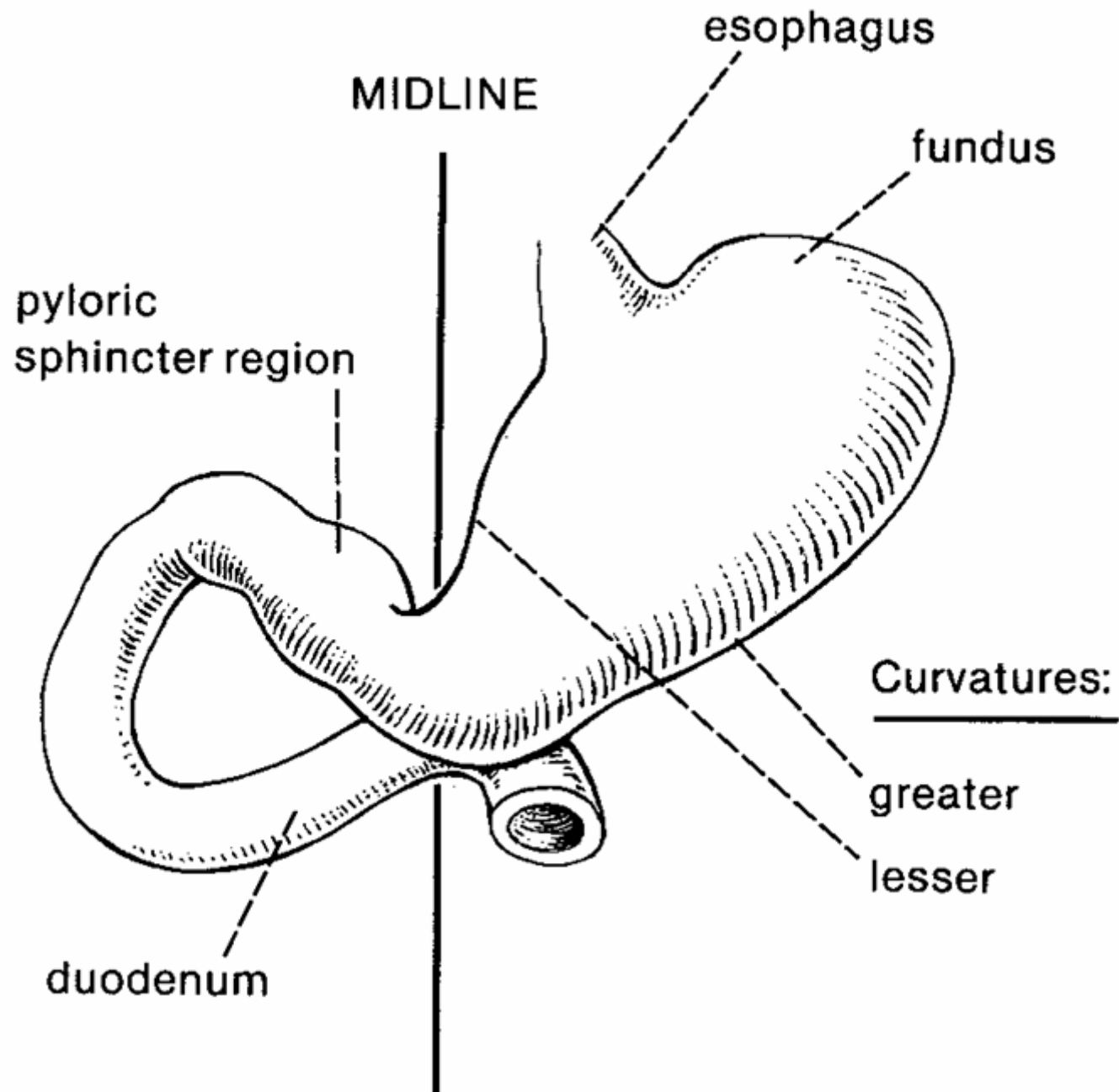
Sorry...here you
have to stop and
draw and take
notes!

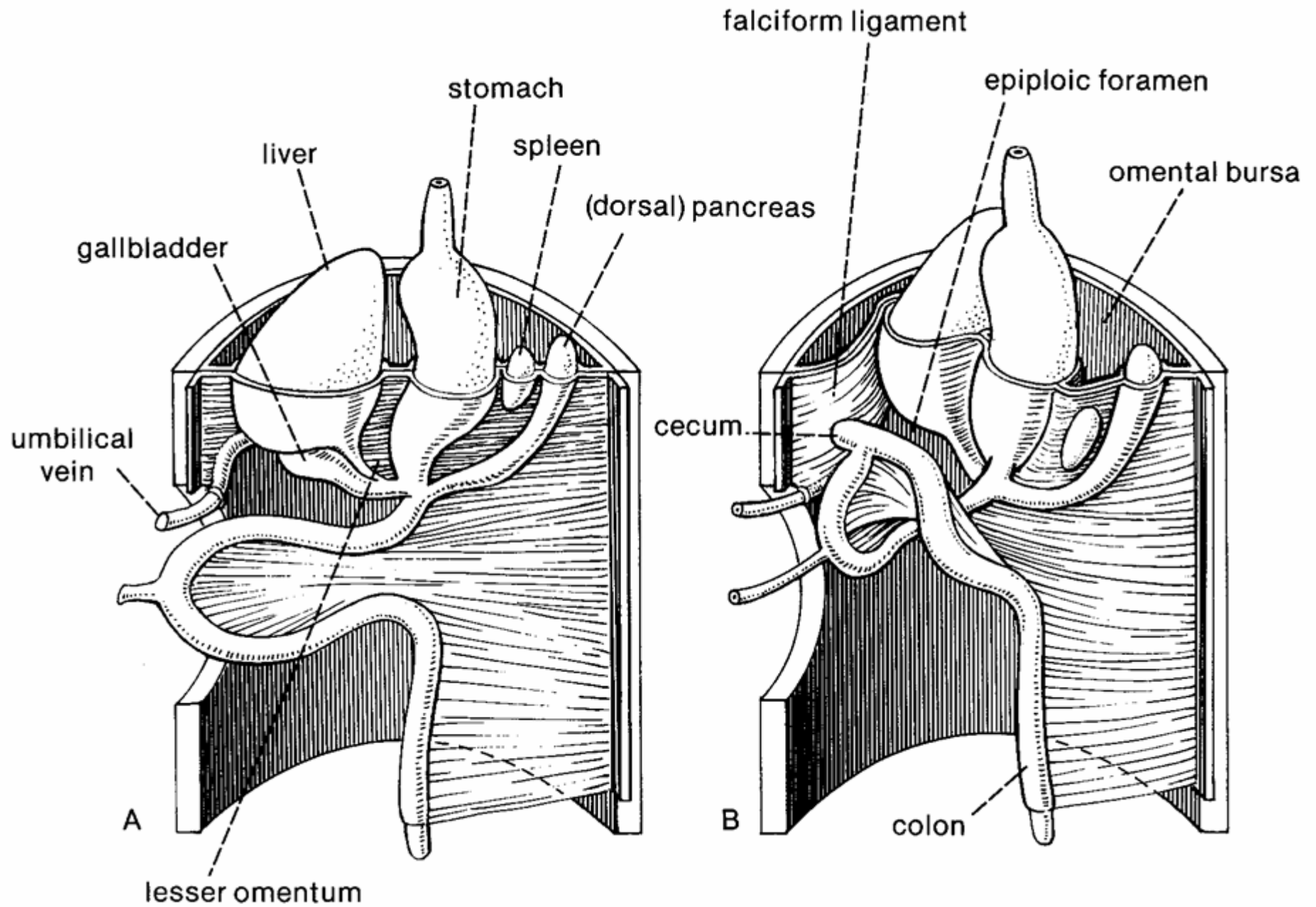


Early Development of the Stomach

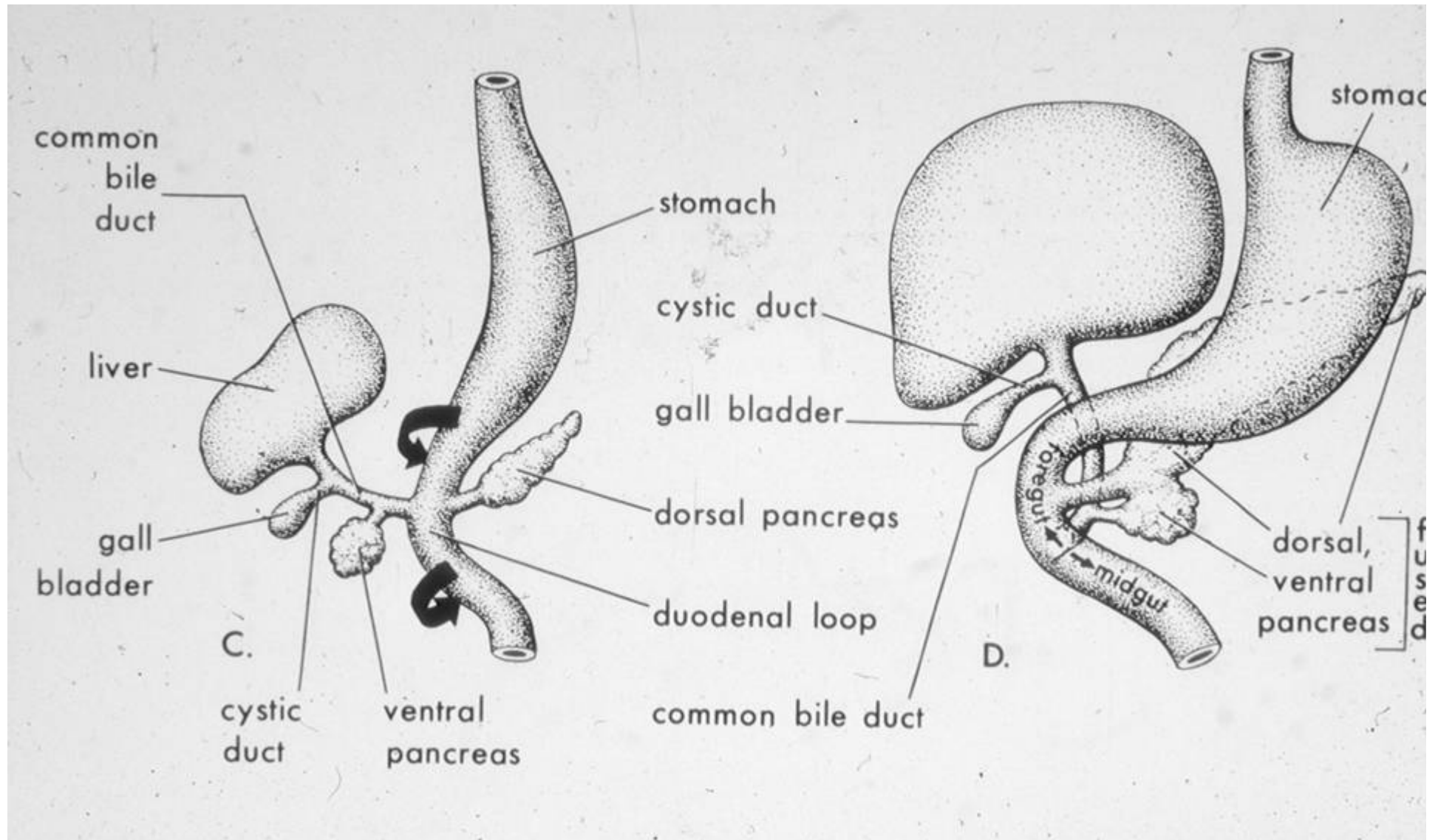


Continued Development of the Stomach

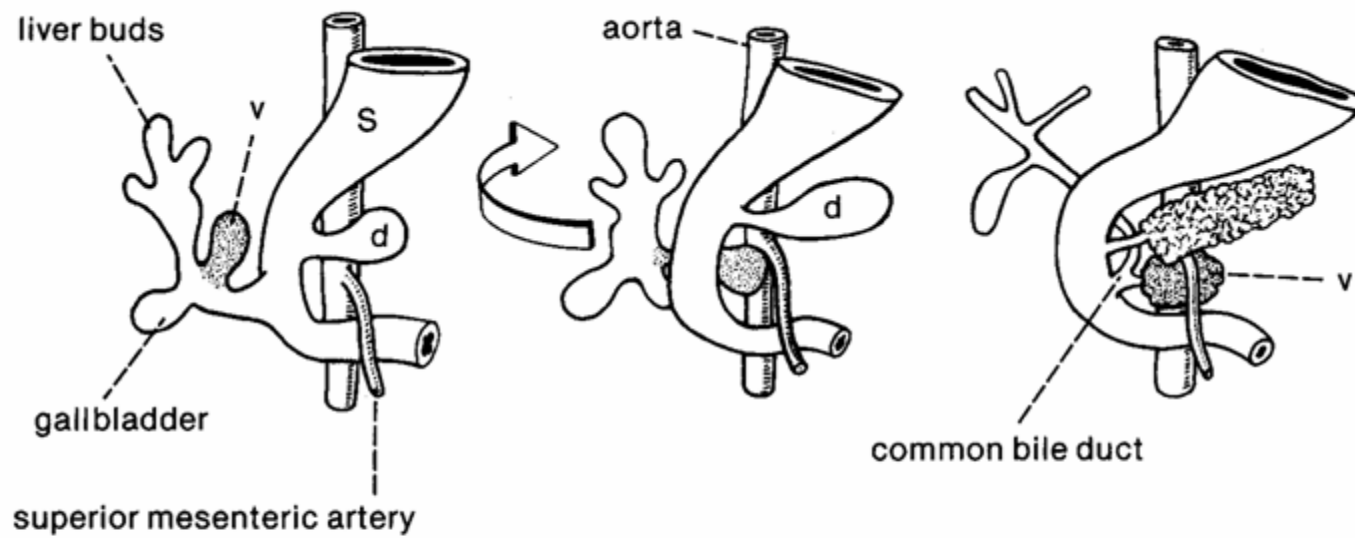




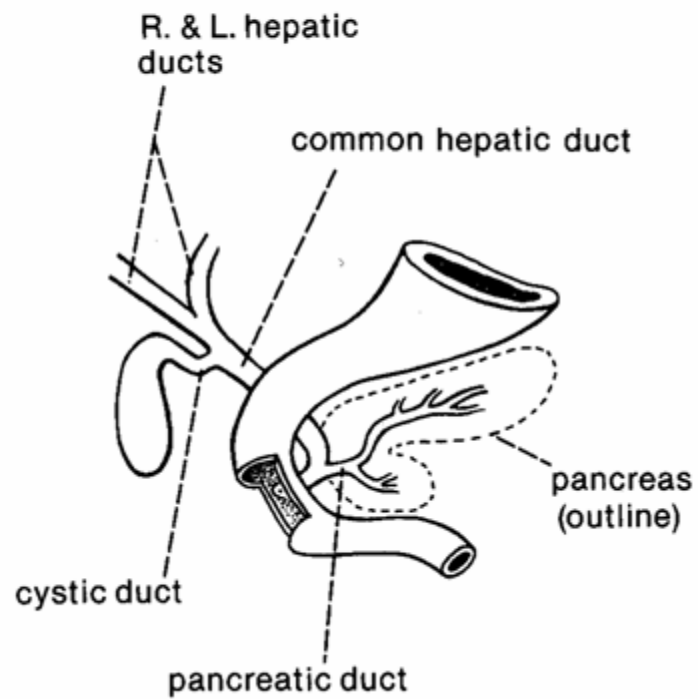
Rotation of the Foregut



Development of diverticula of the foregut



Pancreas Development



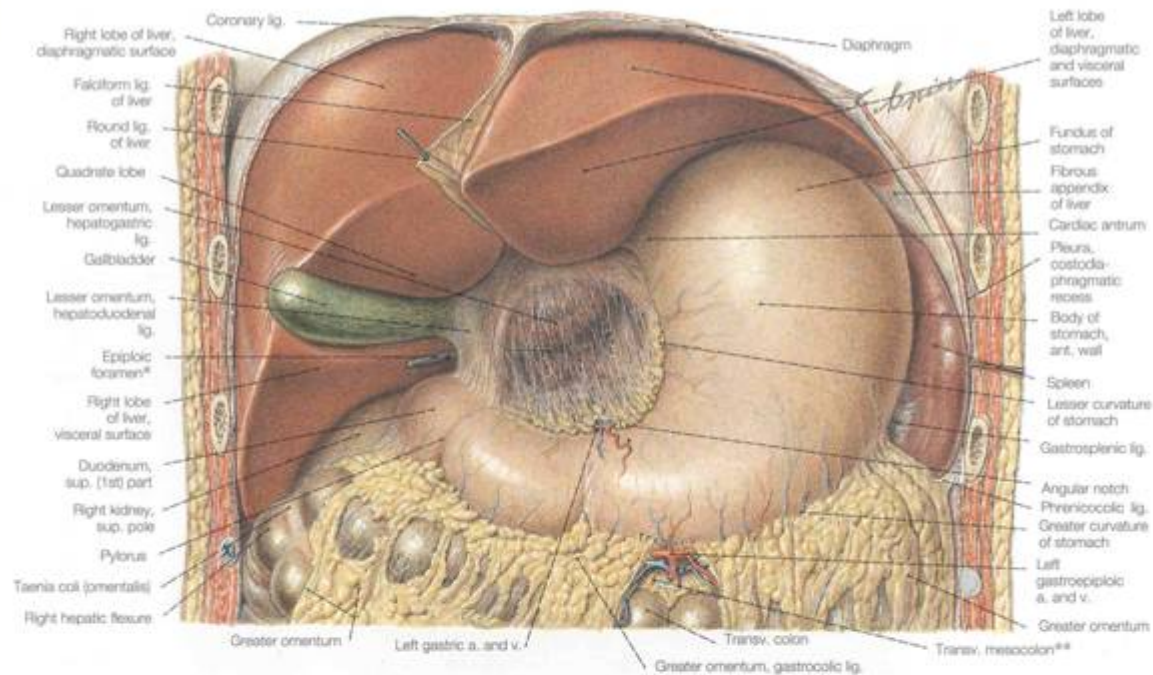
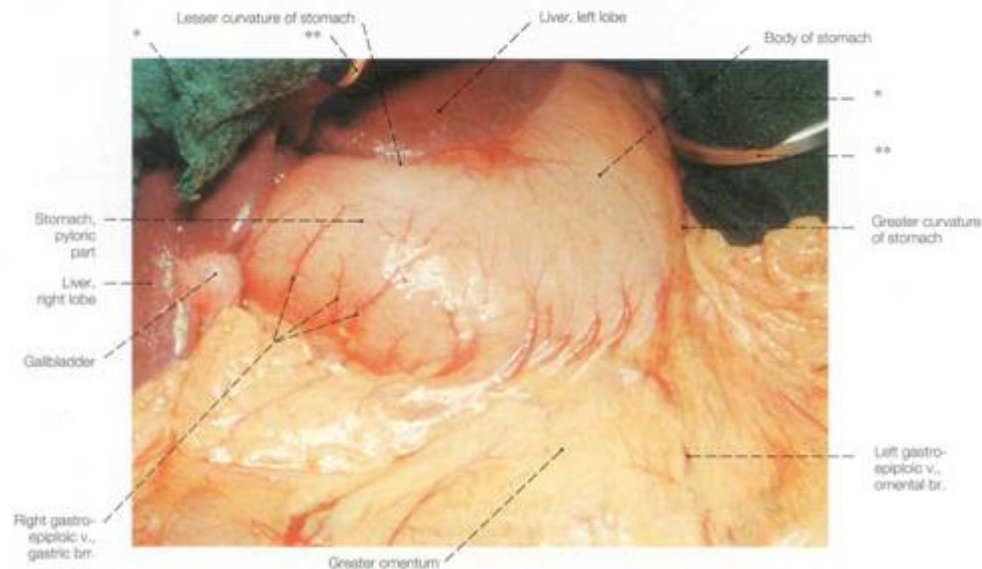


Fig. 969 Position of the viscera in the upper abdomen, ventral view. Parts of the diaphragm and the anterior thoracic and abdominal walls have been removed.

This part of the abdominal cavity is also known as the "glandular abdomen."

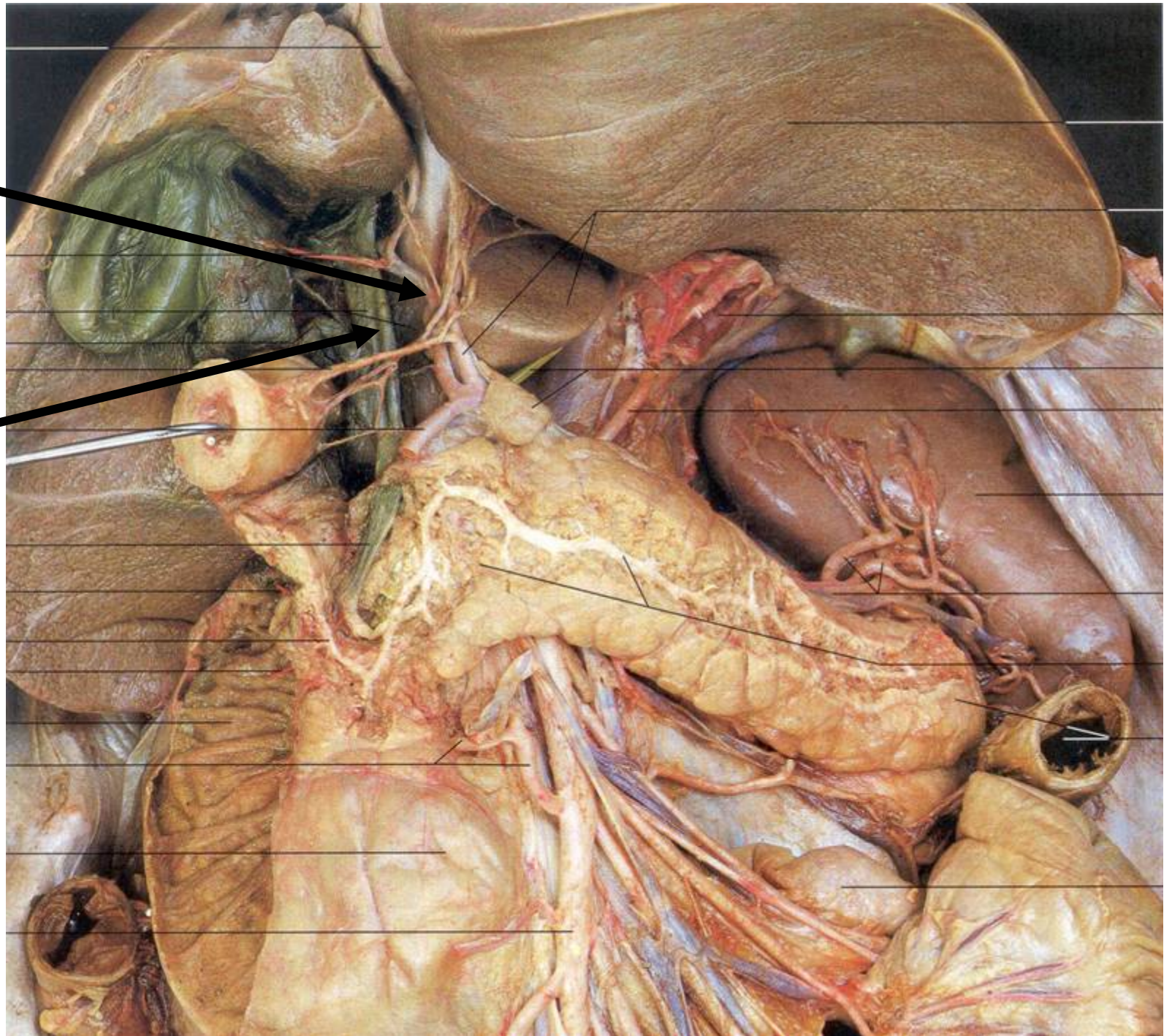
* Also: Foramen of WINSLOW

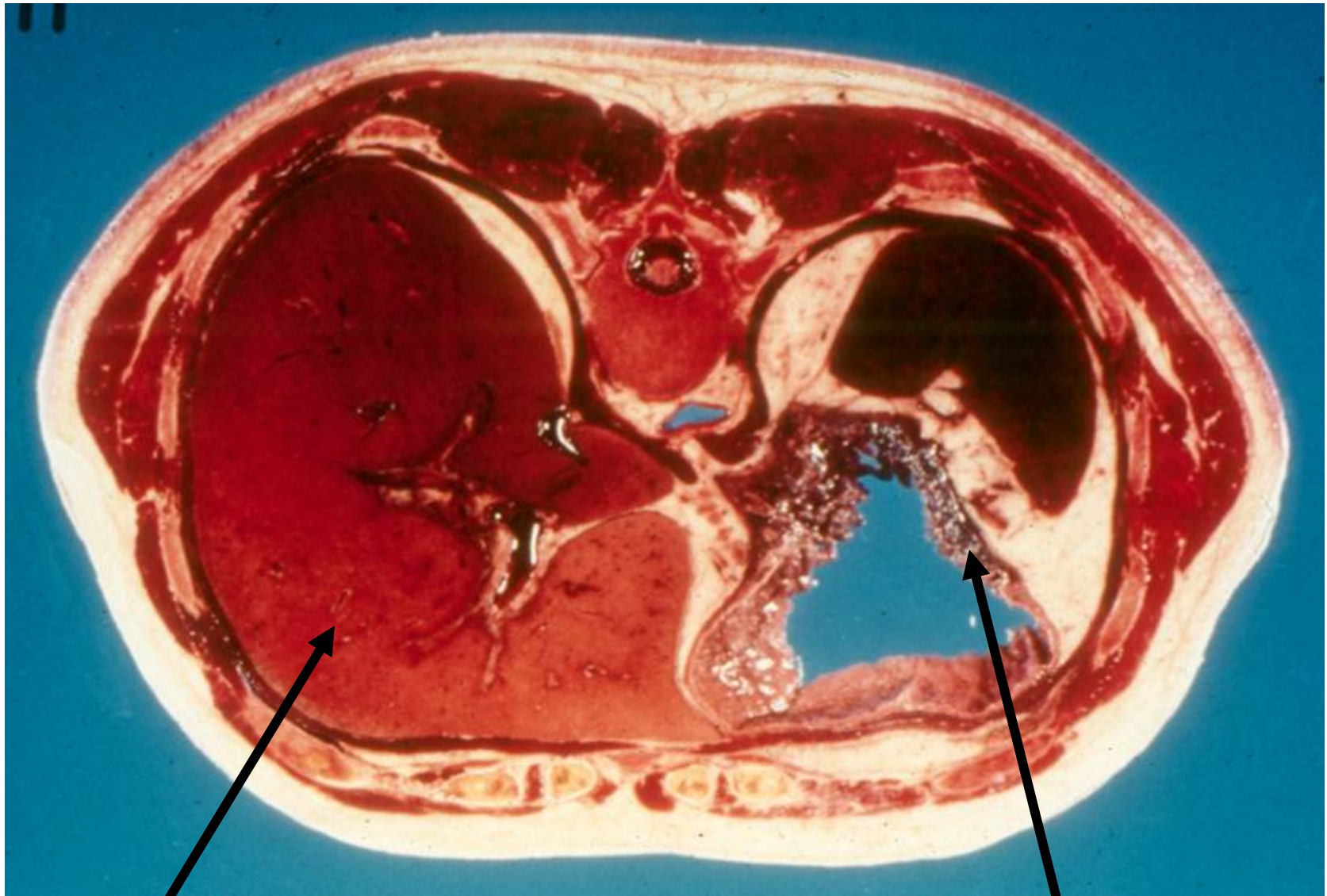
** Omental bursa partially opened



Hepatic
Portal Vein

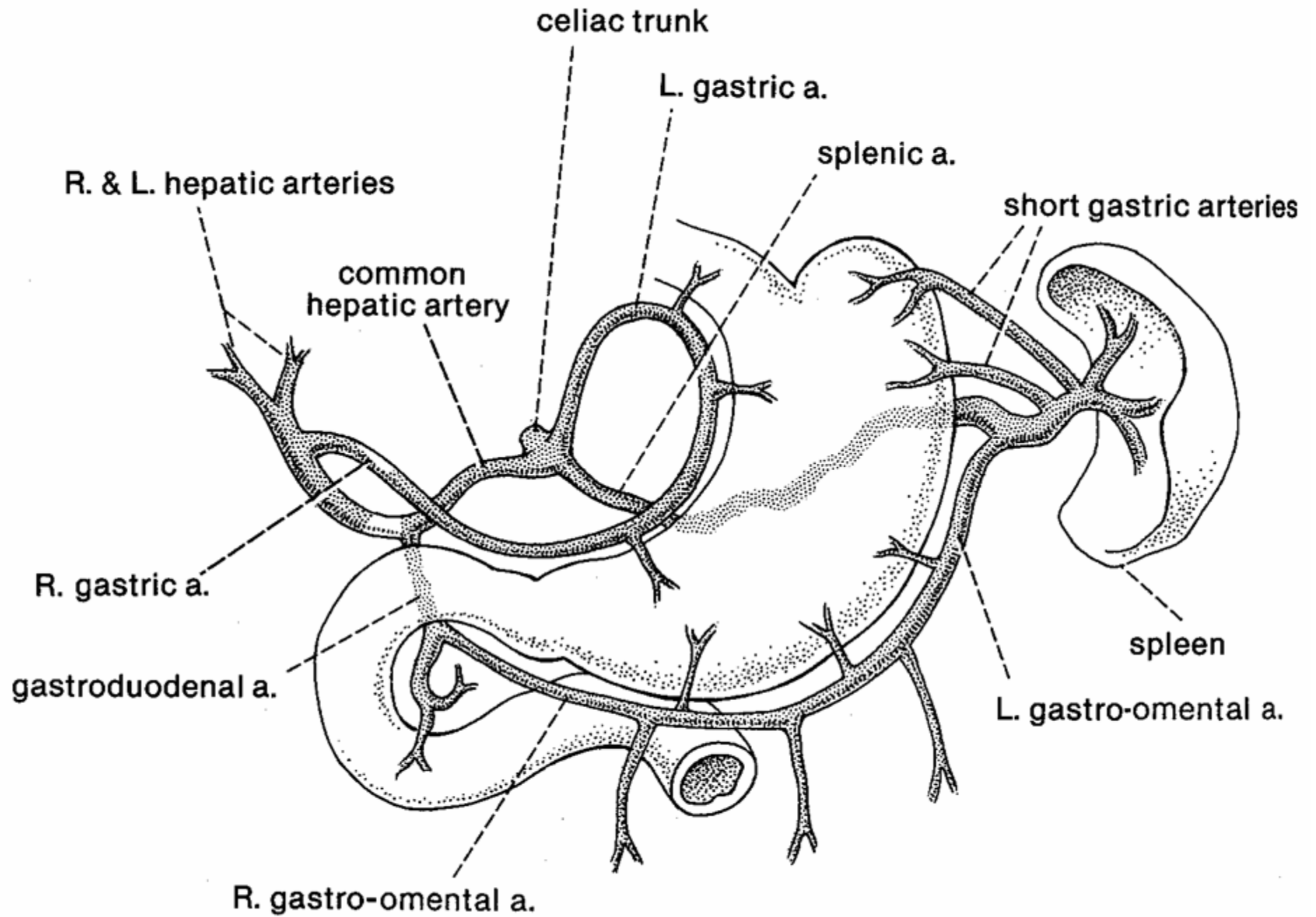
Bile Duct





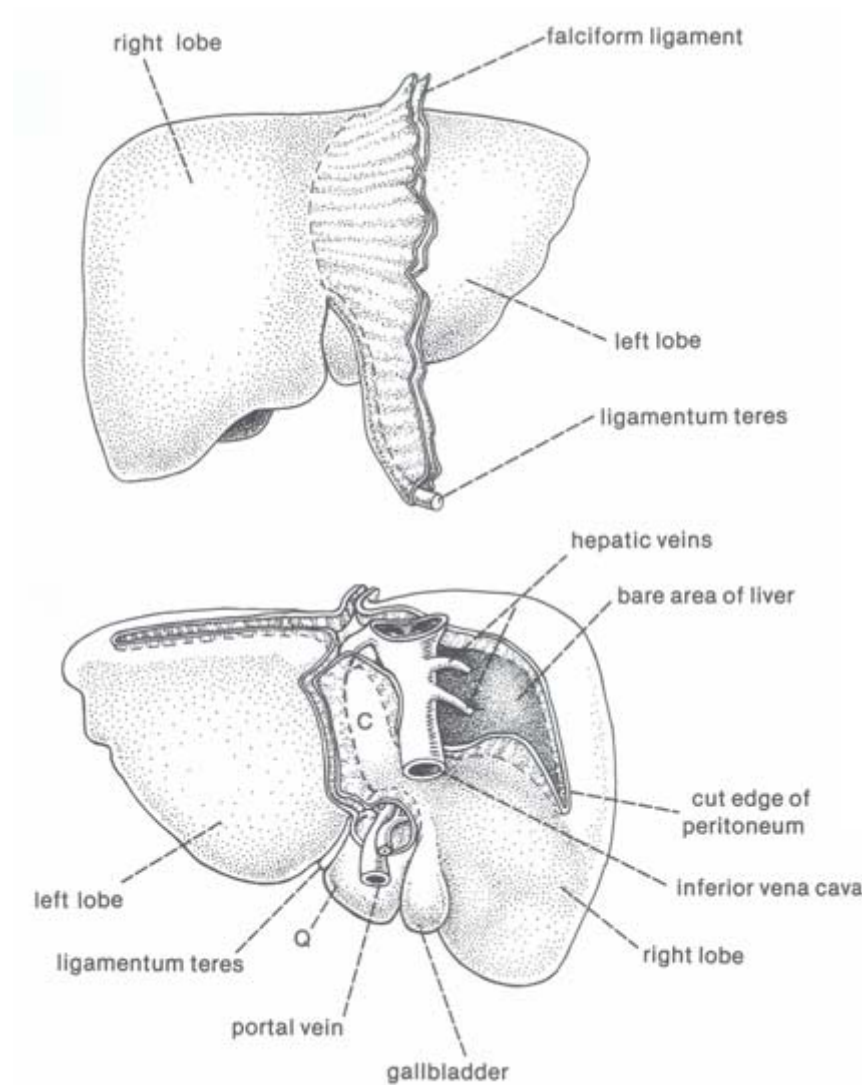
Liver

Stomach

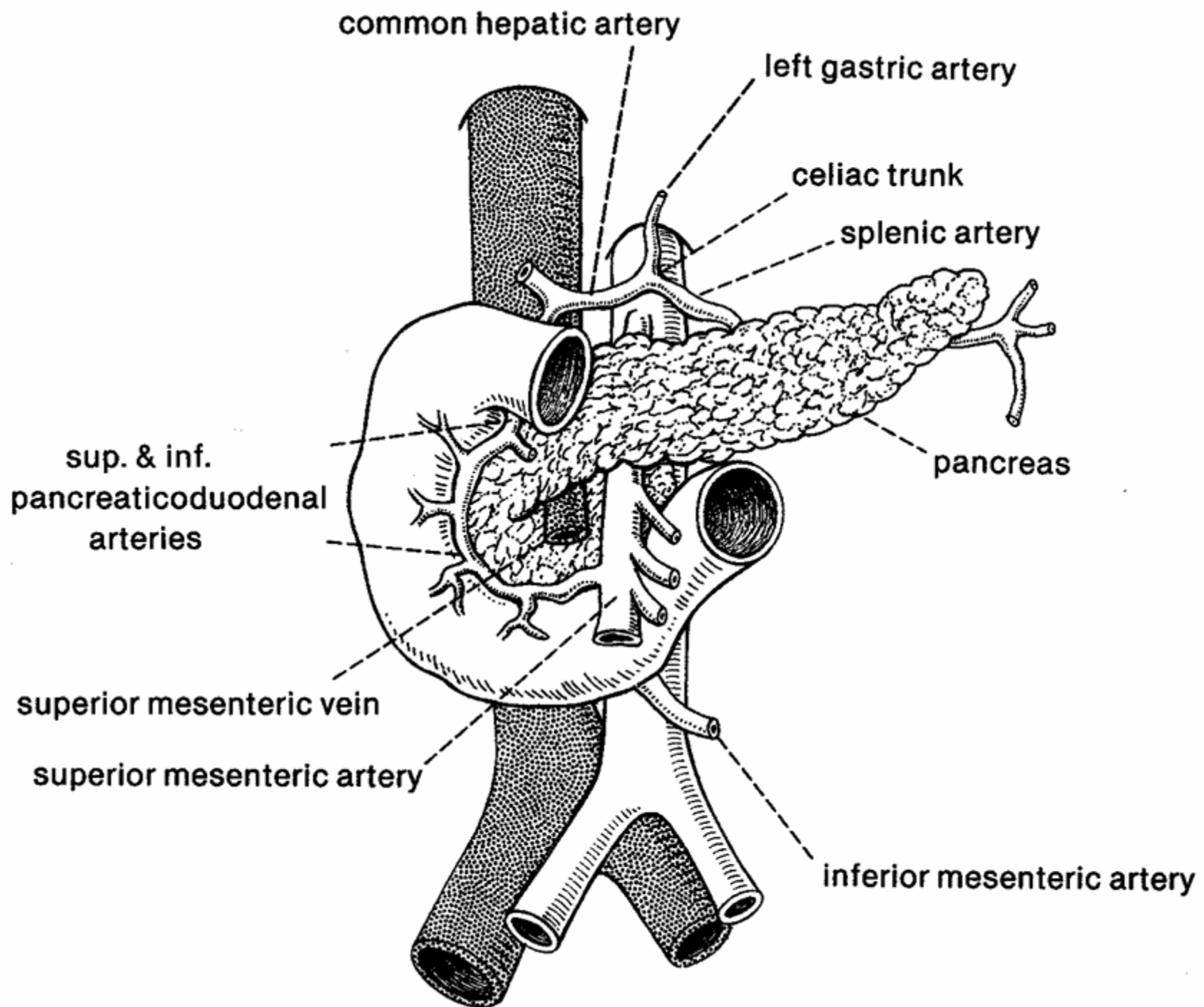


Liver:

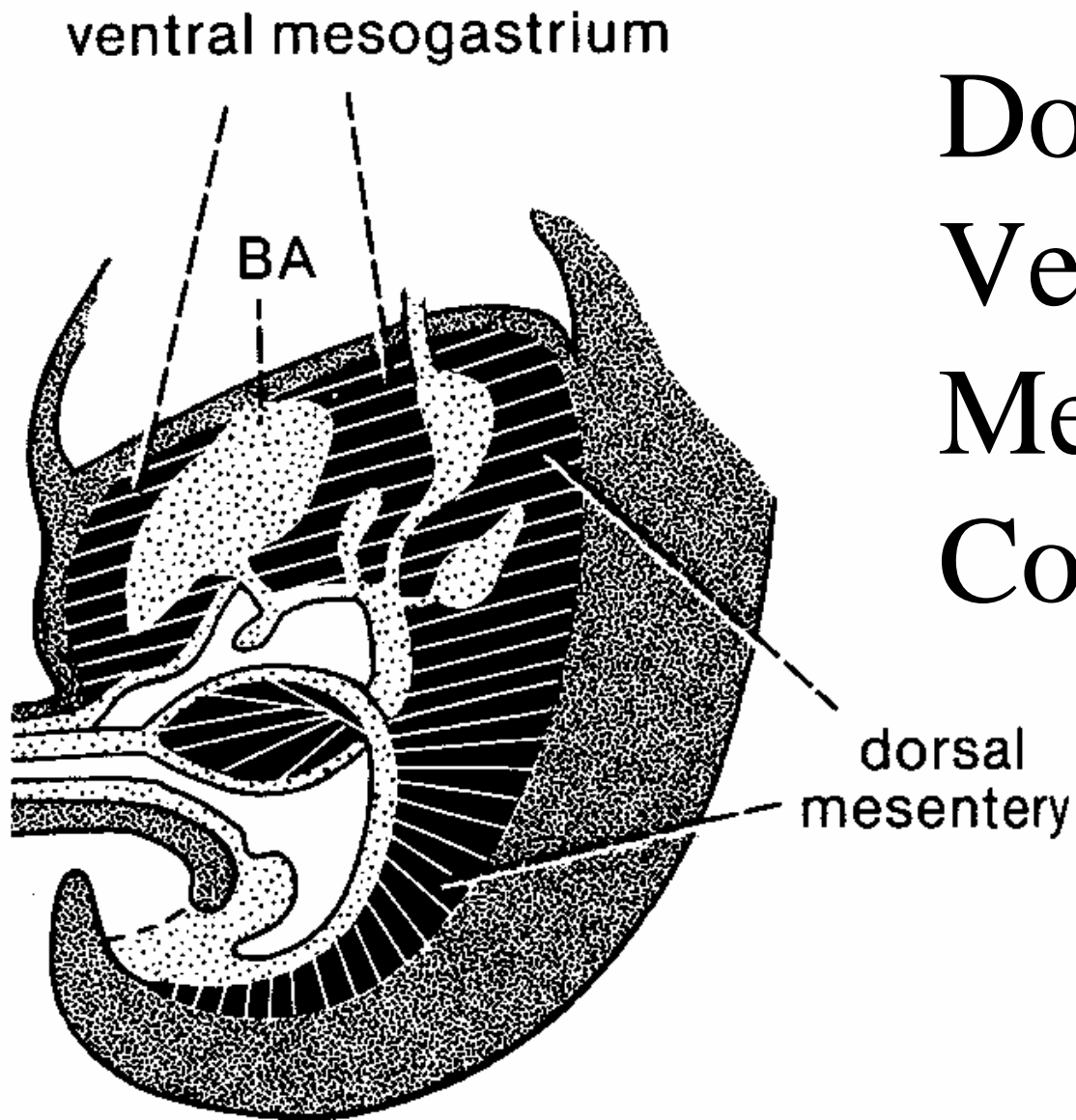
Dorsal
View



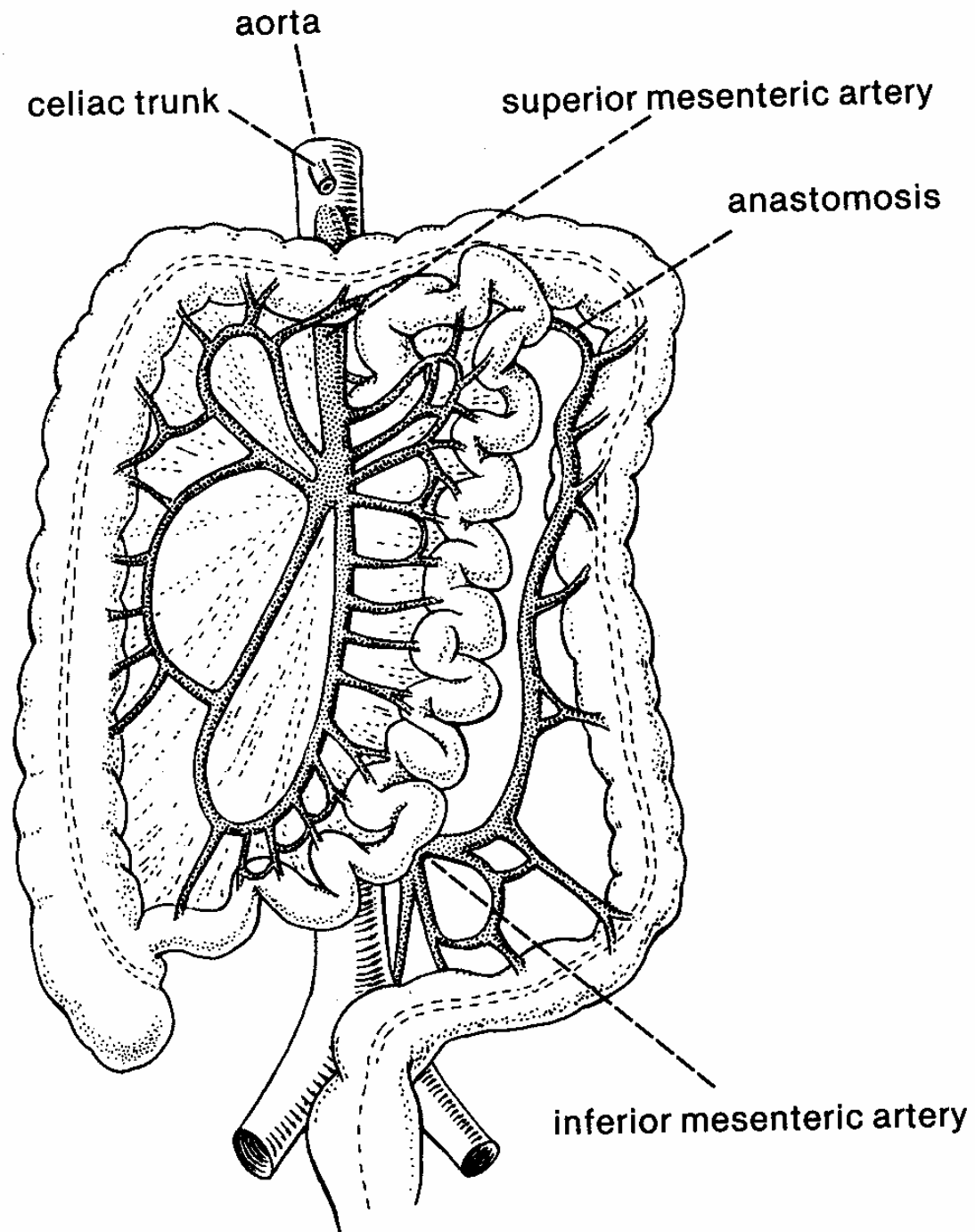
Ventral
View

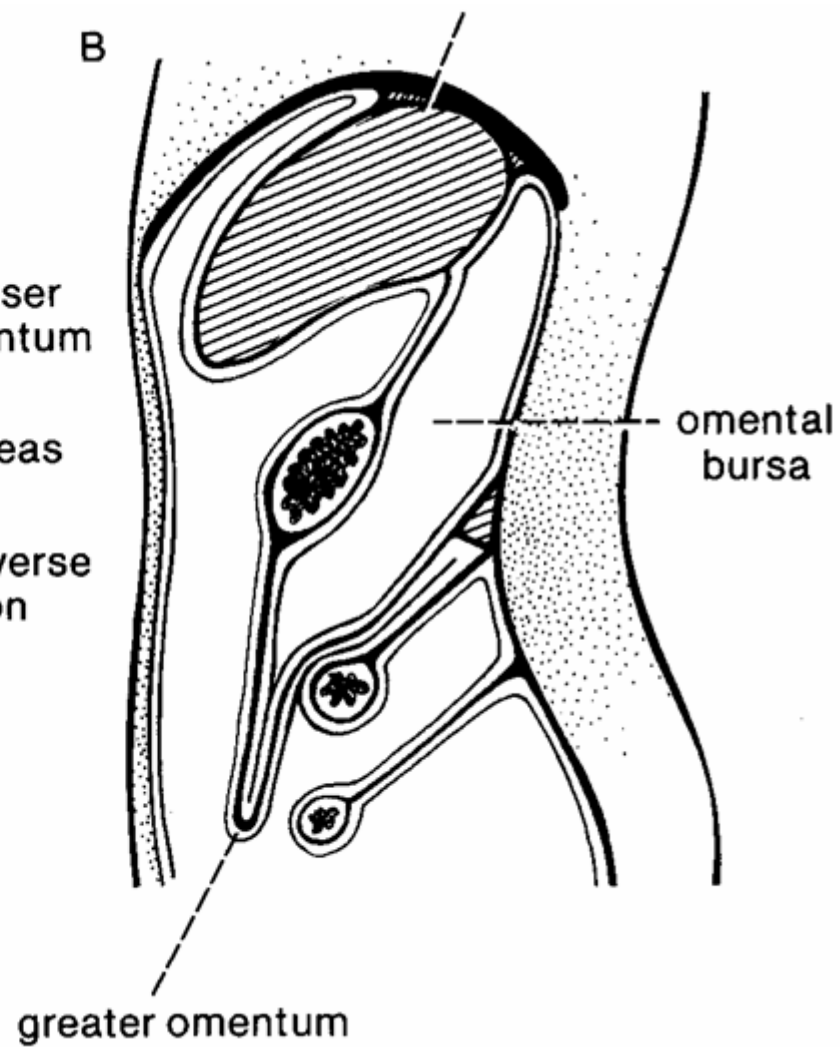
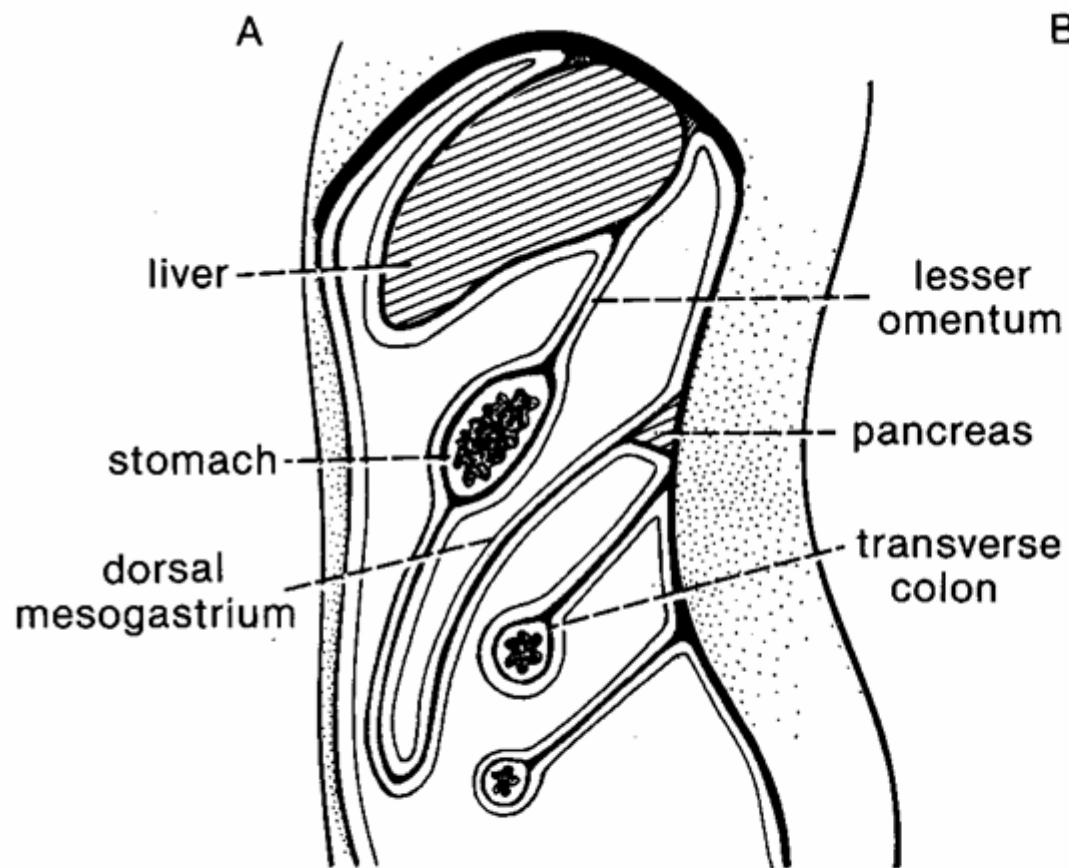


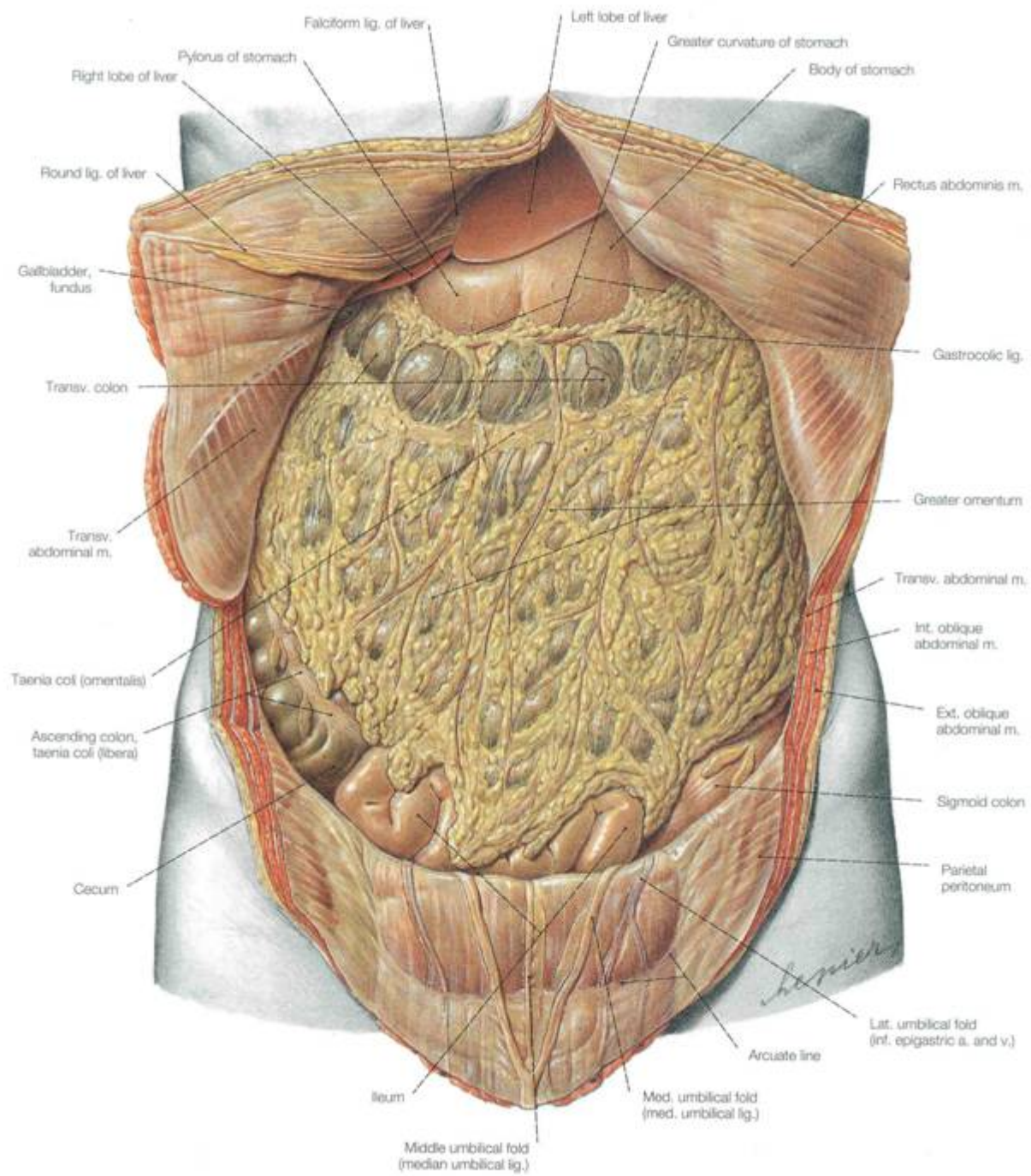
Development and Structure of the Abdominal Midgut

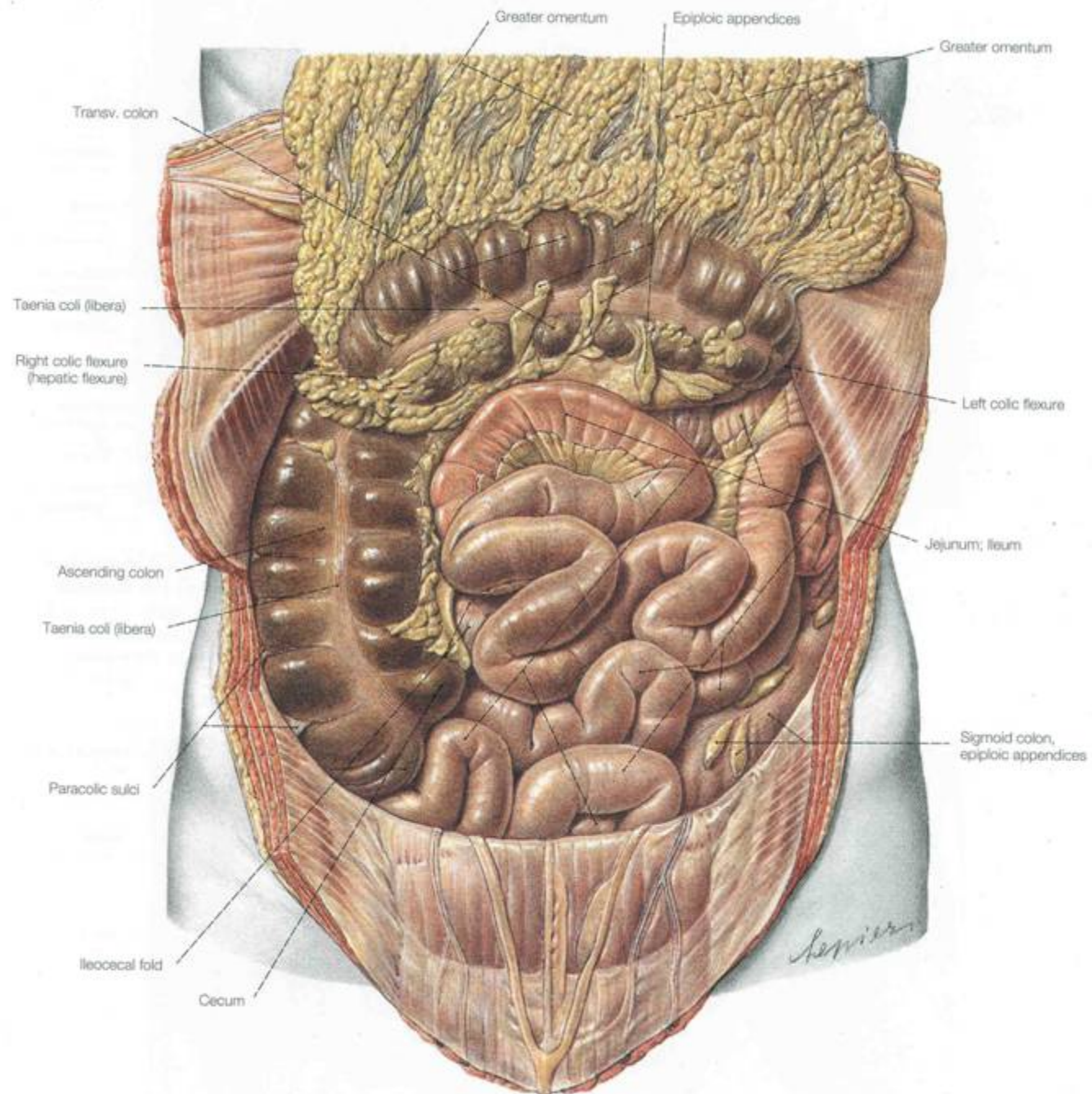


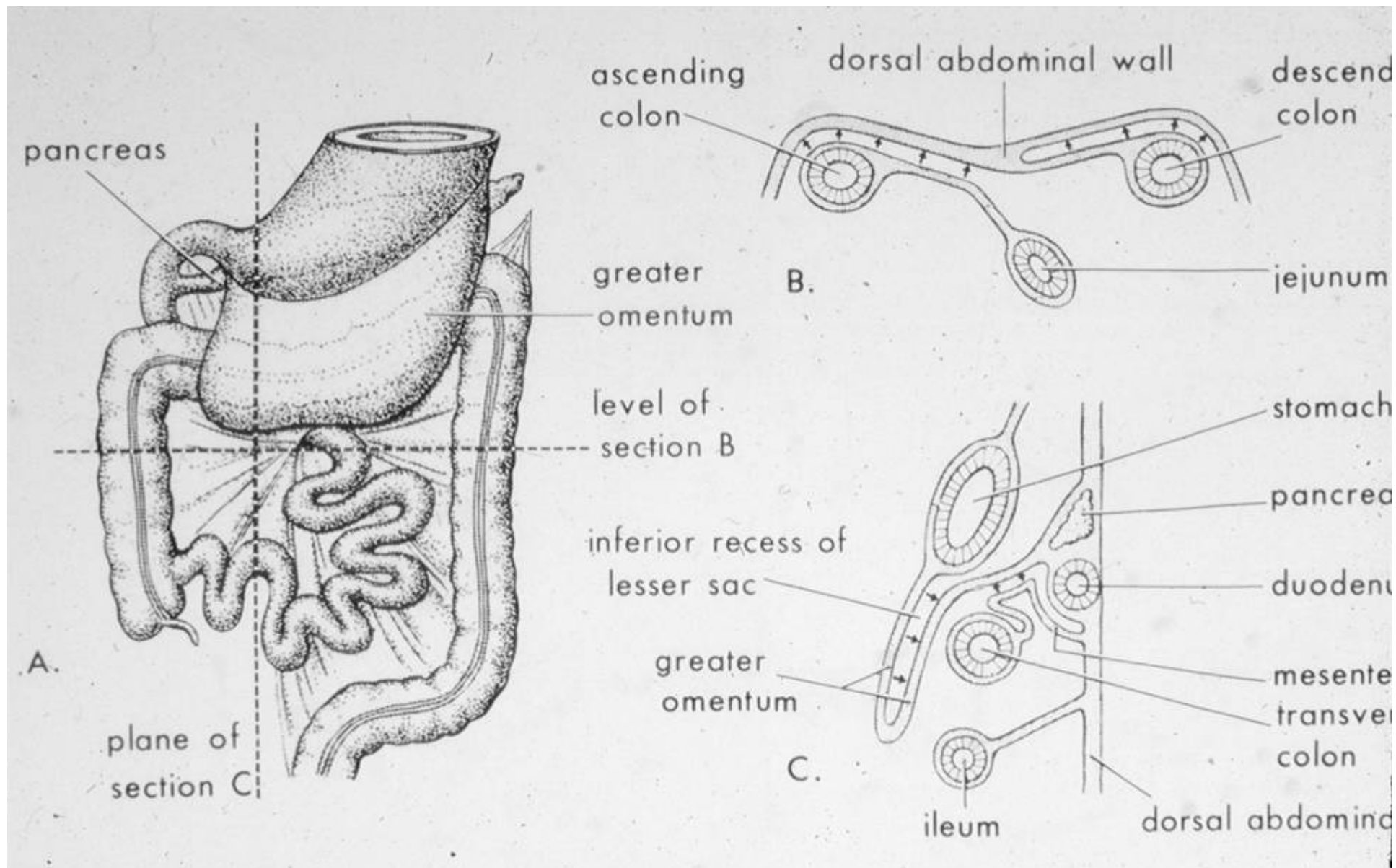
Dorsal vs. Ventral Mesentery Components



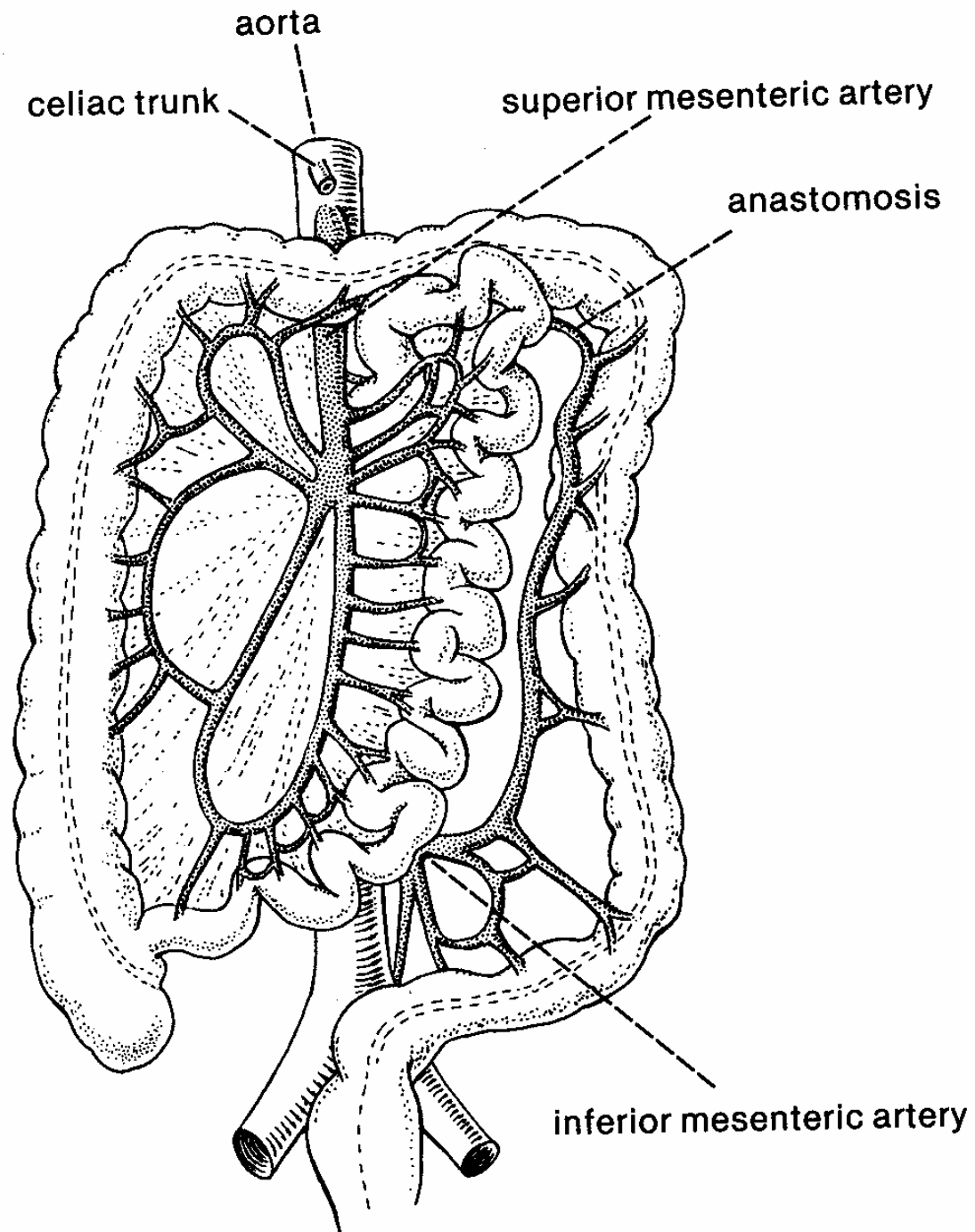




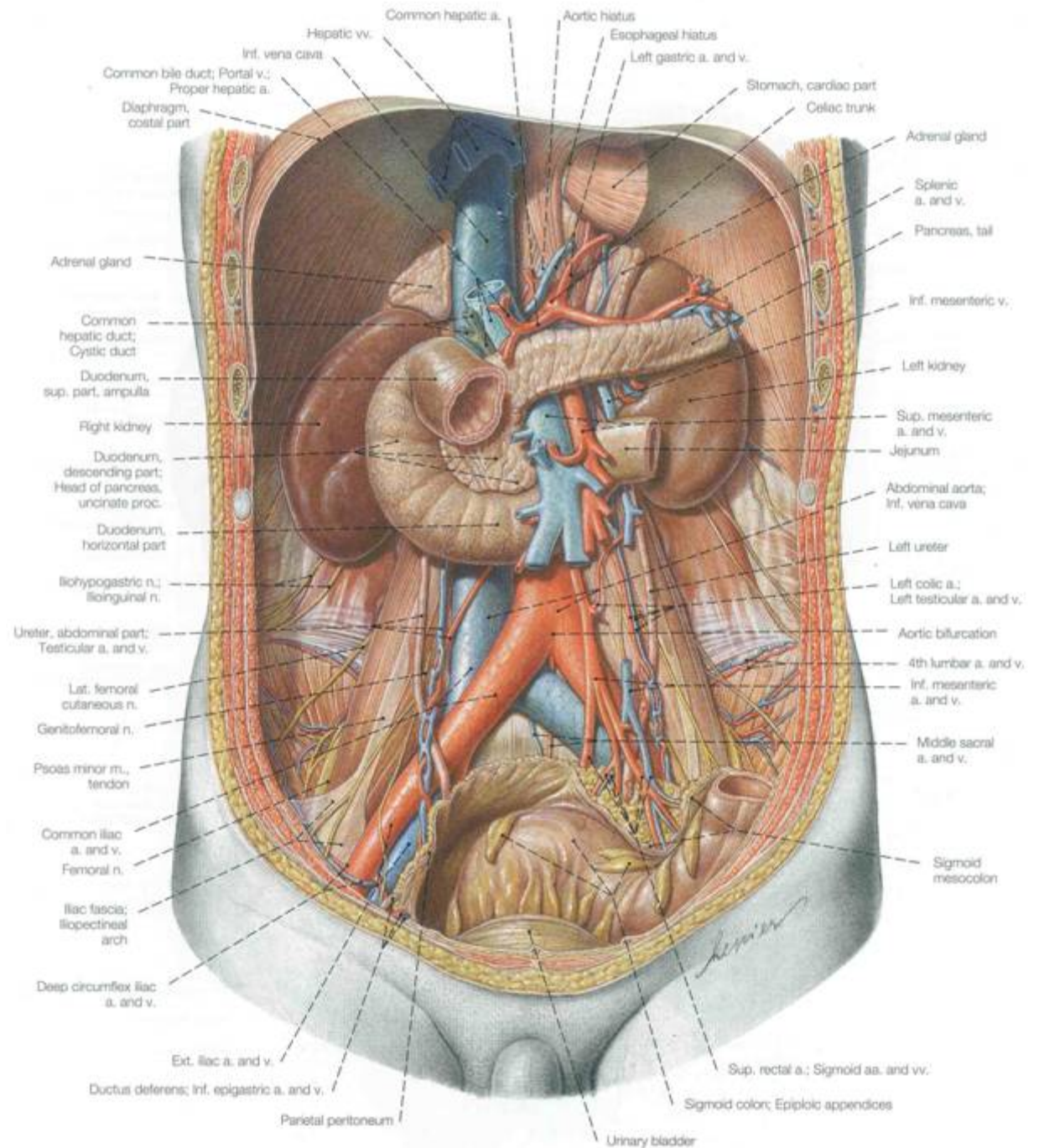


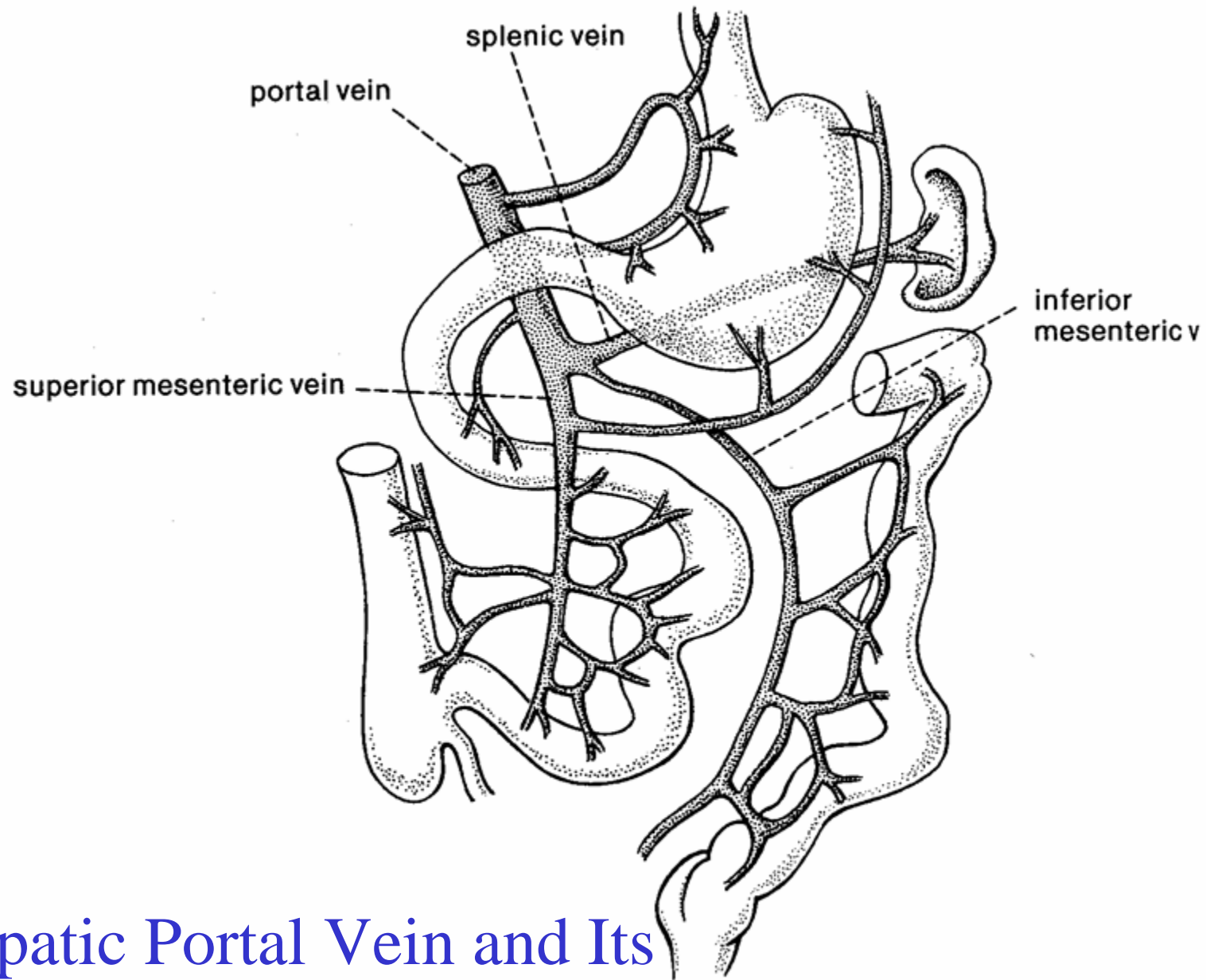


Development and Structure of the Abdominal Hindgut

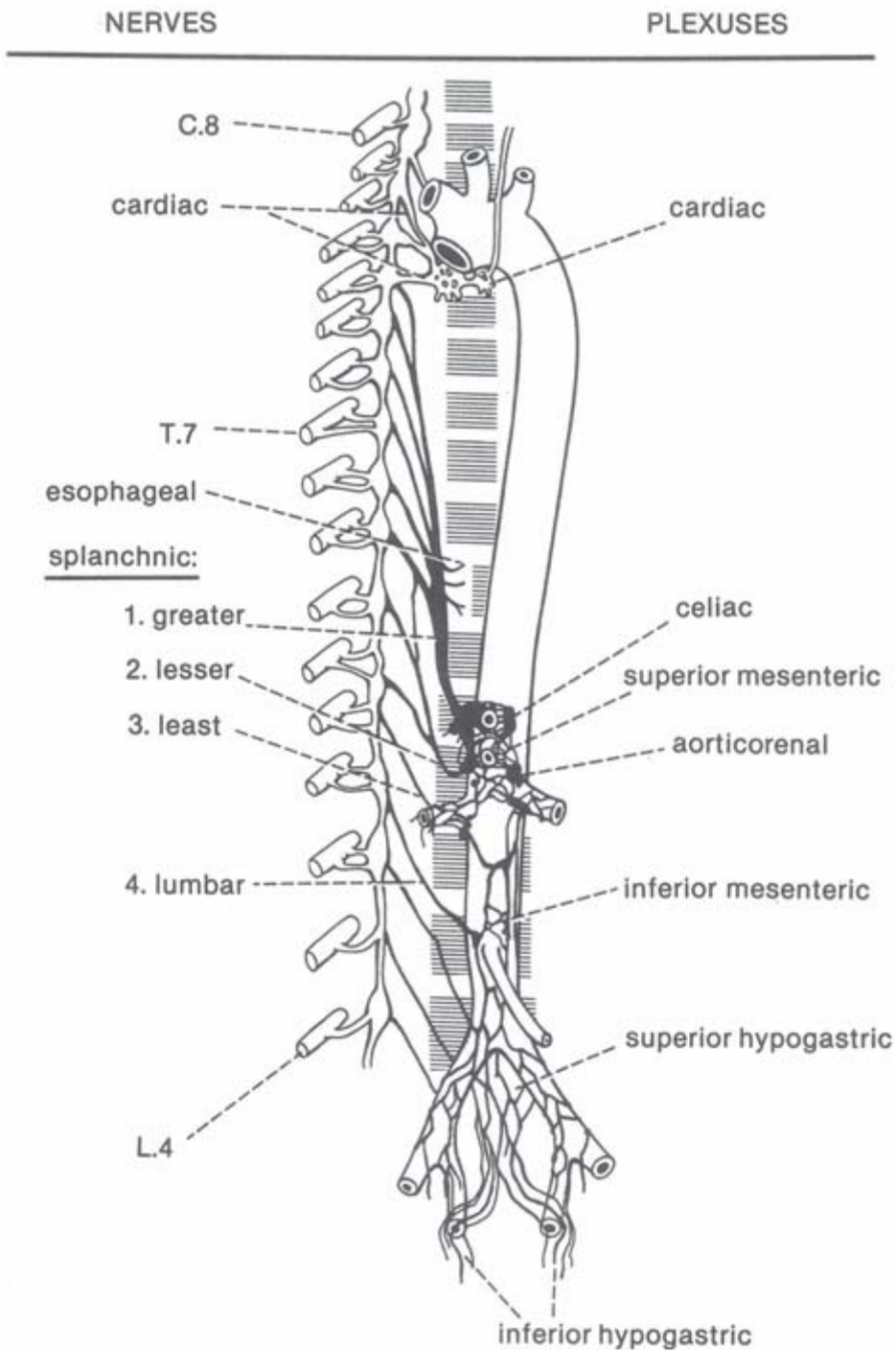


Review of Retroperitoneal components of abdominal cavity

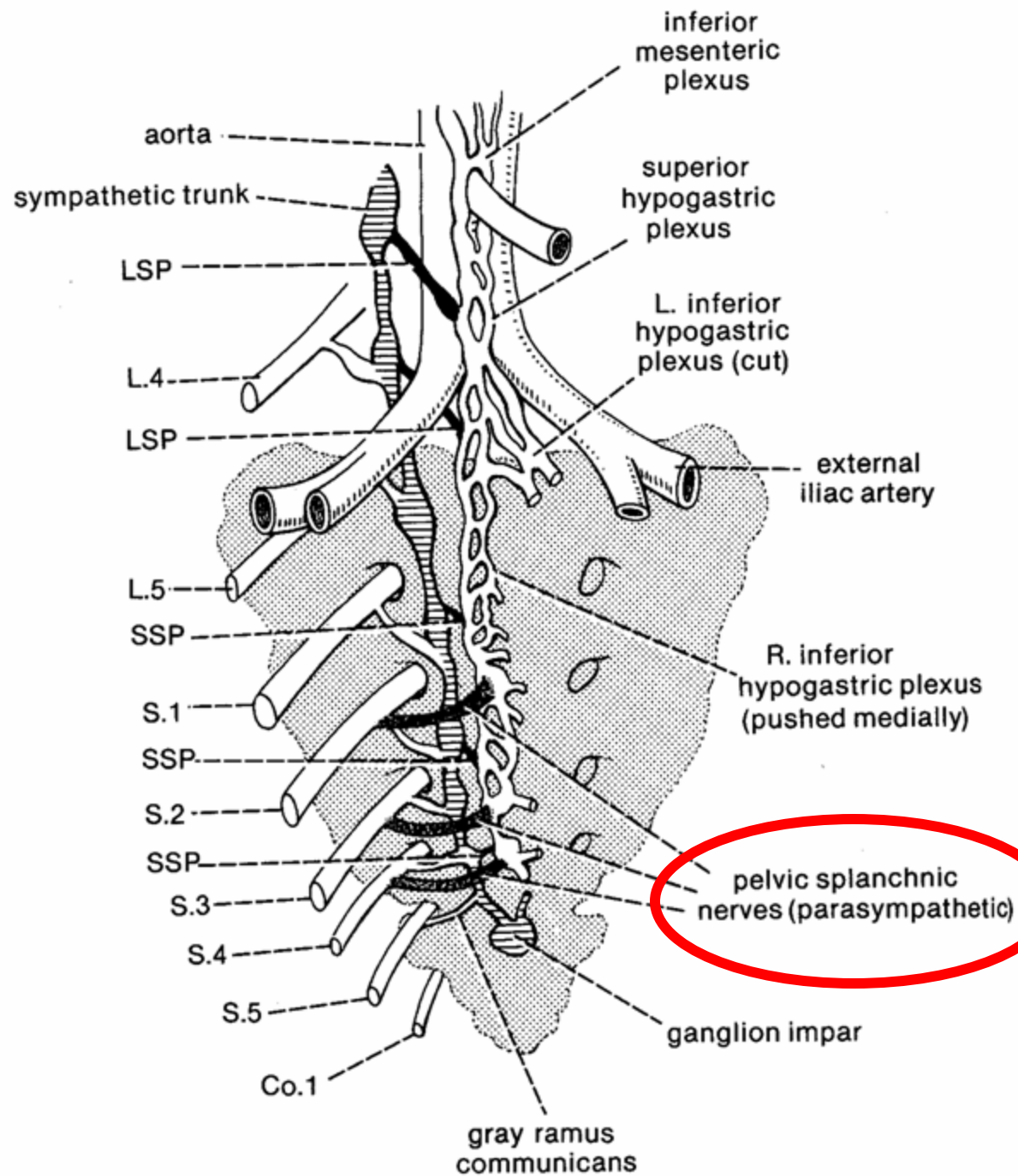




Hepatic Portal Vein and Its Tributaries



Sympathetic Supply of the Abdominal Gut



Parasympathetic
Supply to the
Hindgut: S2-4)

Foregut, Midgut, & Hindgut Summary

Embryonic Gut	Boundaries	Sympathetic nerve	Levels
Foregut	Through first ½ of duodenum	Greater Splanchnic	T5-9
Midgut	2 nd ½ of duodenum through left colic flexure	Lesser Splanchnic	T10-11
Hindgut	Left colic flexure to anus	Least Splanchnic	T12

Summary Continued.....

Embryonic gut	Preaortic ganglia	Arteries of Abdominal aorta	Hepatic portal vein	Parasymp. innervation
Foregut	Celiac ganglion	Celiac artery	Splenic vein	Vagus Nerve (X)
Midgut	Superior mesenteric ganglion	Superior mesenteric artery	Superior mesenteric vein	Vagus Nerve (X)
Hindgut	Inferior mesenteric ganglion	Inferior mesenteric artery	Inferior mesenteric vein	Sacral Outflow (S1-S4)