

CVM 6908, Anatomy II
Gross Anatomy Objectives, Readings, & Terms List
Dissection of Abdomen

OBJECTIVES:

NOTE: 'Dissection' objectives colored red are shared (relisted) with 'Application' objectives associated with the abdomen. **All objectives and terms are testable on quizzes and exams.**

D5.1 Describe and identify the various serous membranes within the abdominal cavity.

D5.2 Identify the muscle layers of the abdominal wall and their associated aponeuroses; describe the relative placement and distinguishing features of each layer.

D5.3 Identify and describe the structures and organs of the abdomen in equine and bovine; describe the normal topography of the abdomen and localize the related structures and organs.

D5.4 Identify and describe the anatomical features of the equine, porcine, bovine/ruminant, and camelid stomach; summarize notable species differences.

D5.5 Identify and describe the anatomical features of the small and large intestines among ungulates (equine, bovine, porcine, camelid); describe the anatomical variations in the ascending colon amongst these species and summarize the normal flow of ingesta through the GI tract in the equine and bovine.

D5.6 Summarize the regions of the gastrointestinal tract that are supplied by the celiac and cranial mesenteric arteries in the equine and bovine.

REQUIRED READINGS:

eBook: [*Dissection Lab Guide for Ungulate Anatomy*](#): "Chapter 5: Dissection of Abdomen" (Parts 1, 2, 3, 4 and 5; Part 6 is Supplemental Information)

TERMS

Term notations:

- Note that some terms are followed by a letter: "p" for palpable/observable structures and "r" for structures identifiable on radiographs. Be able to localize palpable terms on a cadaver or image.
- In general the body is bilaterally symmetrical with similar structures found on the right and left sides or similarities exist between right and left sides of the same organ.
- Identify the listed structures in both the horse (eq) and the bovine (bov) unless the section indicates a species specific notation or the term is identified as species specific, e.g., the tuber spinae is found only in the horse and pig.
- In general, the pig (por) terms will be indicated

Abbreviation key:

aka = also known as

a. = artery; **aa.** = arteries (plural)

ln. = lymph node; **lnn.** = lymph nodes (plural)

m. = muscle; **mm.** = muscles (plural)

n. = nerve; **nn.** = nerves (plural)

v. = vein; **vv.** = veins (plural)

Dissection of Abdomen: TERMS

ABDOMINAL WALL (and associated structures)

- subiliac lymph node (bov)/subiliac lymphocenter (eq)
- external abdominal oblique m.
 - tunica flava abdominis
- rectus abdominis m.
- internal abdominal oblique m.
- transversus abdominis m.
- paralumbal fossa (ID in bov)
- prepubic tendon - *also Chapter 2*

ABDOMINAL STRUCTURES and VISCERA

- parietal peritoneum
- visceral peritoneum
- connecting peritoneum
- pelvic brim
- uterus (female)
- ovaries, left and right (female)
- ductus deferens (male)
- urinary bladder
- kidney (L & R)
 - renal cortex
 - renal medulla
- ureter
- caudal vena cava - *also Chapter 4*
 - hepatic veins
- portal v.
- liver
 - right, left & caudate lobes (bov)
 - left, right, quadrate, & caudate lobes (eq)
- gallbladder (bov)
 - cystic duct (bov)
- bile duct
- esophagus - *also Chapter 4*

EQUINE ABDOMINAL STRUCTURES and VISCERA

(be able to ID on embalmed, fresh, and dry specimens where applicable)

- epiploic foramen
- spleen
 - base
 - apex
- nephrosplenic space
- nephrosplenic ligament

stomach

- cardia
- fundus/fundic region
- body
- pyloric region
 - pylorus
- lesser curvature
 - lesser omentum
- greater curvature
 - greater omentum
- glandular & non-glandular regions
 - margo plicatus

duodenum

- descending duodenum
 - major duodenal papilla
- caudal duodenal flexure (aka caudal loop of the duodenum)
- ascending duodenum

mesoduodenum

jejunum (aka jejunal loops)

mesojejunum

- root of the mesentery/mesenteric root
- mesenteric lymph nodes

ileum

- ileocecal fold
- ileocecal orifice (aka ileal orifice)

cecum (w/bands (teniae) & sacculations)

- base, body & apex
- cecocolic orifice

cecocolic fold

(colon)

ascending colon

- right & left ventral colon (w/bands & sacculations)
 - ventral diaphragmatic flexure/sternal flexure
- bands (teniae)
- sacculations

pelvic flexure

left & right dorsal colon (w/bands)

- dorsal diaphragmatic flexure/diaphragmatic flexure

mesocolon

transverse colon

descending colon (aka small colon) (w/bands & sacculations)

- antimesenteric band
- mesenteric band

EQUINE ABDOMINAL ARTERIES

abdominal aorta

celiac a.

splenic a.

hepatic a.

- left gastric a.
- cranial mesenteric a.
- jejunal aa.
- right colic a.
- colic a. branch

RUMINANT ABDOMINAL STRUCTURES and VISCERA

(be able to ID on embalmed, fresh, and dry specimens where applicable)

spleen

stomach

rumen

- dorsal, ventral, and cranial sacs
- dorsal & ventral caudal blind sacs
- right & left longitudinal grooves
- right & left longitudinal pillars
- cranial pillar
- caudal pillar
- dorsal & ventral coronary pillars
- rumen papillae
- ruminoreticular fold
- ruminoreticular orifice

reticulum

- reticular cells (honeycomb)
- reticular groove
- cardia (top of groove)
- reticulo-omasal orifice (bottom of groove)

omasum

- omasal laminae

abomasum

- lesser curvature

- lesser omentum

pylorus

- pyloric sphincter

- torus pyloricus

greater curvature

greater omentum

- superficial layer of the omentum

- deep layer of the omentum

- caudal fold of the omentum

- omental bursa

- duodenum
 - mesoduodenum
 - descending duodenum
 - caudal duodenal flexure
- jejunum
 - mesojejunum
 - mesenteric lymph nodes
- ileum
 - ileocecal fold
- ileal (ileocolic) orifice
- cecum
- (colon)
 - mesocolon
 - ascending colon
 - proximal loop of ascending colon
 - spiral colon
 - centripetal coils
 - central flexure
 - centrifugal coils
 - distal loop of ascending colon
- transverse colon
- descending colon (aka small colon)

RUMINANT ABDOMINAL ARTERIES

- abdominal aorta
 - celiac a.
 - cranial mesenteric a.

CAMELID ABDOMINAL VISCERA (DRY and WET)

- esophagus
- stomach
 - first compartment (C1)
 - sacculations
 - transverse fold
 - ventricular lip
 - second compartment (C2)
 - sacculations
 - third compartment (C3)
- duodenum
- spiral colon

PORCINE ABDOMINAL VISCERA (DRY and WET)

- gallbladder
- esophagus
- stomach
 - cardiac region
 - glandular & non-glandular regions
 - gastric diverticulum
 - pylorus/pyloric region
 - torus pyloricus

ileum

- ileal papilla

cecum (w/bands & sacculations)

ascending colon (aka 'spiral colon' in pig)

- centripetal loop

- bands & sacculations

- central flexure

- centrifugal loop