LIVER, PANCREAS, SPLEEN

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LIVER (HEPAR)

- the largest gland of the body
- intraperitoneal organ

FUNCTIONS:

1. secretion of bile
2. in embryonic live – hemopoetic center
3. storage of glycogen
4. converts end products of protein catabolism to urea and uric acid
5. end products of hemoglobin catabolism discharged in the bile as bile pigments
6. disintoxication
SIZE AND WEIGHT:

- depend on body weight and age

1. in the cat: 2% of body weight
2. in the dog 3 – 4% of body weight
3. in the pig 2 – 3% of the body weight
4. in the herbivores 1 – 1.5% of the body weight

http://18.hyt.capecoral-bootsvermietung.de/pork_liver_diagram.php
LIVER (HEPAR)

FORM, POSITION:

located:

• in the thoracic part of the abdomen

• behind the diaphragm

• the bulk of the liver lies to the right of the median plane

The left side of the abdominal wall is reflected in a female dog with a pregnant uterus (1). The spleen (2) and liver (3) are visible, but most other viscera are hidden by the greater omentum (4). Identify the fat-filled falciform ligament (5), which runs between the umbilicus and the liver. When intact, the ligament passes to the left of the quadrate lobe of the liver (asterisk).

http://vanat.cvm.umn.edu/carnLabs/Lab16/Img16-1.html

http://18.hvd.capecoral-bootvermietung.de/pork_liver_diagram.php
LIVER (HEPAR)

FORM, POSITION:

IN RUMINANTS located:

- the development of rumen pushes the liver entirely into the right half of the abdomen
LIVER (HEPAR)

1. FACIES DIAPHRAGMATICa

2. FACIES VISCERALIS
LIVER (HEPAR)

FACIES DIAPHRAGMATICA:

- convex
- lies against the concavity of the diaphragm
FACIES DIAPHRAGMATICA:

AREA NUDA:

- bare spot
- not covered by peritoneum
FACIES VISCERALIS:
- faces mostly caudally related to the:
  a) stomach
  b) duodenum
  c) jejunum
  d) colon
  e) right kidney
LIVER (HEPAR)

FACIES VISCERALIS:
- according to the organs – impressions are produced

1. esophageal notch (impressio esophagea) – on margo dorsalis
2. gastric impression (impressio gastrica) – on the left lobe
3. duodenal impression (impressio duodenalis) – ventral, right to the porta hepatis
4. colic impression (impressio colica) – on the right ventral part of the visceral surface
5. pancreatic impression (impressio pancreatica)
LIVER (HEPAR)

FACIES VISCERALIS:

6. renal impression (impressio renalis):
   - by the right kidney, on the right lobe, caudate process

7. suprarenal impression (impressio suprarenalis):
   - by the right suprarenal gland, on the lobe caudalis
FACIES VISCERALIS:

a. reticular impression (impressio reticularis) – on the left lobe – in Bo.

b. omasal impression (impressio omasica) – occupies a large part of the visceral surface – in Bo.

c. cecal impression (impressio cecalis) – in Eq – on the right lobe
LIVER (HEPAR)

FACIES VISCERALIS

SULCUS VENAE CAVAE:

- groove for the vena cava caudalis
LIVER (HEPAR)

FACIES VISCERALIS

FOSSA VESICAE FELLEA:

- fossa for the gall bladder
LIVER (HEPAR)

FACIES VISCERALIS

FISSURA LIGAMENTI TERETEIS:

- fissure for the round ligament (lig. teres hepatis)
FACIES VISCERALIS

TUBER OMENTALE:
- in Car
- prominence of the right lateral lobe

Right lateral view of abdominal viscera with the liver reflected cranially and rotated (right toward the top). Observe the gallbladder (1), cystic duct (2), hepatic ducts (3), and the bile duct (4). The pancreas (5) has been reflected to expose the bile duct which opens into the duodenum (6). Identify lobes of the liver: left lateral (7), quadrate (8), right medial (9), right lateral (10), and the caudate (11) and papillary (12) processes of the caudate lobe.

http://vanat.cvm.umn.edu/carnLabs/Lab16/Img16-7.html
LIVER (HEPAR)

FACIES VISCERALIS

PORTA HEPATIS:
- hilus of the liver

through which:
1. the vena portae
2. the bile duct (ductus hepaticus comm.)
3. a. hepatica enter or leave the organ
LIVER (HEPAR)

MARGO ACUTUS:
- facies diaphragmatica et visceralis meet ventrolaterally in this sharp – edged border

MARGO OBTUSUS:
- facies diaphragmatica et visceralis meet dorsally in the blunt border
LIVER (HEPAR)

1. MARGO DOSRALIS
2. MARGO VENTRALIS
3. MARGO DEXTER
4. MARGO SINISTER
LIGAMENTS OF THE LIVER (HEPAR)

- the liver is related to the ventral mesentery during embryonic development

VENTRAL MESENTERY:
- conveys blood vessels, nerves, lymphatics

PART OF THE VENTRAL MESENTERY:
I. OMENTUM MINUS (LESSER OMENTUM)
1. LIGAMENTUM HEPATODUODENALE
2. LIGAMENTUM HEPATOGASTRICUM
II. LIGAMENTUM FALCIFORME HEPATIS
LIGAMENTS OF THE LIVER (HEPAR)

OMENTUM MINUS (LESSER OMENTUM)

- the liver connected to the stomach by the lesser omentum

consists of:

1. LIGAMENTUM HEPATODUODENALE
2. LIGAMENTUM HEPATOGASTRICUM

Cranialateral view of abdominal viscera, the liver (1) is reflected cranially and the greater omentum (2) pulled out. The greater omentum attaches to the greater curvature of the stomach (3) and to the spleen (4). The lesser omentum (5) runs from the lesser curvature of the stomach to the liver (covering the papillary process (asterisk) of the liver).

http://vanat.cvm.umn.edu/carnLabs/Lab16/limg16-3.html
LIGAMENTS OF THE LIVER (HEPAR)

OMENTUM MINUS (LESSER OMENTUM)

1. LIGAMENTUM HEPATODUODENALE
   - extends from the porta hepatis to the proximal portion of the duodenum
   - conveys the:
     1. ductus choledochus
     2. vena portae
     3. a. hepatica – a. gastrica dext.

http://vanat.cvm.umn.edu/carnLabs/Lab16/Img16-6.html
LIGAMENTS OF THE LIVER (HEPAR)

OMENTUM MINUS (LESSER OMENTUM)

2. LIGAMENTUM HEPATOGASTRICUM
- extends from the porta hepatis to the lesser curvature
- conveys the a. gastrica sin.
BURSA OMENTALIS (OMENTAL BURSA, LESSER SAC)

- the cavity in the abdomen
- formed by the lesser and greater omentum
- connected with the greater sac via the omental foramen (Foramen of Winslow)

1. entrance: foramen omentale seu epiploicum – ventral from V. cava caudalis
   - dorsal from V. portae

2. Vestibulum bursae omentalis – bordered ventrally by lesser omentum

3. Aditus ad recessus caudalem – above the lesser curvature, entrance of recessus caudalis

4. Recessus caudalis - space between the paries superfic. and prof. of greater omentum

https://veteriankey.com/peritoneum-and-retroperitoneum/
II. LIGAMENTUM FALCIFORME HEPATIS (FALCIFORM LIGAMENT):

- remnant of the ventral mesentery

extends:

a) between the liver and the diaphragm

b) between liver and the ventral abdominal wall

• includes the v. umbilicalis in fetal life

• v. umbilicalis obliterates after the birth froming the round ligament (lig. teres hepatitis)

http://vanat.cvm.umn.edu/carnLabs/Lab16/Img16-1.html
II. LIGAMENTUM TERES HEPATIS (ROUND LIGAMENT):

- v. umbilicalis obliterates after the birth froming the round ligament (lig. teres hepatitis)
LIGAMENTS OF THE LIVER (HEPAR)

LIGAMENTUM CORONARIUM (CORONARY LIGAMENT):

- surrounds the caudal vena cava
- between the liver and the diaphragm
- gives rise to the triangular ligamentum (ligamentum triangulare)
LIGAMENTS OF THE LIVER (HEPAR)

LIGAMENTUM TRIANGULARE DEXTRUM et SINISTRUM (TRIANGULAR LIGAMENT):

- the right and the left lobe attached to the diaphragm by these ligaments
- continue medially with the coronary ligament
LOBES OF THE LIVER (LOBUS HEPATIS)

divided in four main lobes by fissures:

1. LOBUS HEPATIS SINISTER (left hepatic lobe)
2. LOBUS HEPATIS DEXTER (right hepatic lobe)
3. LOBUS HEPATIS CAUDATUS (caudate lobe)
4. LOBUS HEPATIS QUADRATUS (quadrate lobe)
LOBES OF THE LIVER (LOBUS HEPATIS)

LOBUS HEPATIS SINISTER (left hepatic lobe):

may be subdivided into:

1. lobus hepatis sinister medialis (left medial lobe)
   between:
   - left lateral lobe
   - incisura lig. teretis

2. lobus hepatis sinister lateralis (left lateral lobe)
LOBES OF THE LIVER (LOBUS HEPATIS)

LOBUS HEPATIS DEXTER (right hepatic lobe)

may be subdivided into:

1. lobus hepatis dexter medialis (right medial lobe)
2. lobus hepatis dexter lateralis (right lateral lobe)
LOBES OF THE LIVER (LOBUS HEPATIS)

LOBUS HEPATIS CAUDATUS (caudate lobe)

- dorsal to the porta hepatitis

may be subdivided into:

1. processus papillaris
   - into the direction of the vestibulum bursae omentalis

2. processus caudatus
   - from the visceral surface, into the direction of lesser omentum
LOBES OF THE LIVER (LOBUS HEPATIS)

(quadrate lobe)

- ventral to the porta hepatis

between:

a. fossa vesicae fellea

b. incisura lig. teretis
LOBES OF THE LIVER
(LOBUS HEPATIS)

IN CARNIVORES:

1. Lobus hepatis sinsiter lateralis (left lateral lobe)
2. Lobus hepatis sinister medialis (left medial lobe)
3. Lobus hepatis dexter lateralis (right lateral lobe)
4. Lobus hepatis dexter medialis (right medial lobe)
5. Lobus quadratus
6. Lobus caudatus
   a. proc. caudatus – on the right
   b. proc. papillaris – on the left
LOBES OF THE LIVER

(LOBUS HEPATIS)

CARNIVORE

https://www.uzh.ch/cmsssl/vetanat/de/Praeparatorium/Plastinate/Verdauungsapparat/LEBERHUND.html
LOBES OF THE LIVER (LOBUS HEPATIS)

IN PIG:

1. Lobus hepatis sinsiter lateralis (left lateral lobe)
2. Lobus hepatis sinister medialis (left medial lobe)
3. Lobus hepatis dexter lateralis (right lateral lobe)
4. Lobus hepatis dexter medialis (right medial lobe)
5. Lobus quadratus
6. Lobus caudatus

a. proc. caudatus – on the right

- NO proc. papillaris
LOBES OF THE LIVER (LOBUS HEPATIS)

IN PIG:

https://www.vetanat.uzh.ch/de/Praeparatorium/Plastinate/Verdauungsapparat/eberschwein.html
LOBES OF THE LIVER (LOBUS HEPATIS)

IN RUMINANTS:

1. Lobus hepatis sinister
2. Lobus hepatis dexter
3. Lobus quadratus
   - between the fossa ligamenti teretis and gall bladder
4. Lobus caudatus
   a. proc. caudatus – LARGE
   b. proc. papillaris - small

UNDIVIDED!!!

1 Lobus dexter, Lobus sinister, 2 3 Lobus caudatus, 4 Lobus quadratus, 5 Porta hepatica (Arteria hepatica et Vena portae), 6 Lymphonodi hepatici, 7 Vesica fellea
LOBES OF THE LIVER (LOBUS HEPATIS)

IN RUMINANTS:

dunkelblau: Lebervenensystem, hellblau: Pfortadersystem, grün: Gallengänge, rot: Arterien

https://www.vetanat.uzh.ch/de/Praeparatorium/Plastinate/Verdauungsapparat/leber.html
LOBES OF THE LIVER (LOBUS HEPATIS)

IN HORSE:

1. Lobus hepatis sinsiter lateralis
2. Lobus hepatis sinister medialis
3. Lobus hepatis dexter - **UNDIVIDED!!!**
4. Lobus quadratus
   - between the fossa ligamenti teretis and gall bladder

4. Lobus caudatus
   a. proc. caudatus
   b. NO proc. papillaris

http://bvetmed1.blogspot.com/2013/03/horse-and-pig-abdomen-lecture-164.html

BLOOD SUPPLY OF THE LIVER

Arteria hepatica

- nutritional supply of the liver
- branch of A. coeliaca
- enter the liver through the hepatic porta
- gives the Aa. interlobulares
- the Aa. interlobulares enter the liver sinusoids
BLOOD SUPPLY OF THE LIVER

VENA PORTAE:

- transport venous blood

- portal blood contains nutrients and toxins extracted from digested contents

carries blood from the:

1. gastrointestinal tract
2. gallbladder
3. pancreas
4. spleen to the liver


https://veteriankey.com/hepatic-vascular-anomalies/
BLOOD SUPPLY OF THE LIVER

VEINS DRAIN INTO VENA PORTAE:

1. VENA LIENALIS
2. VENA MESENTERICA CRANIALIS
3. VENA MESENTERICA CAUDALIS

Stylized view of the splanchnic vasculature; arrows show direction of blood flow.


Note: Semischematic dorsal view.
MICROCIRCULATION OF THE LIVER

VENA PORTAE:

- enter the liver through porta hepatis
- gives Vv. interlobulares
- Vv. interlobulares enter the liver sinusoids

LIVER SINUSOIDS CONTAIN MIXED BLOOD:

a. blood from Aa. interlobulares
b. blood from Vv. Interlobulares
- liver sinusoids empty into the central veins
MICROCIRCULATION OF THE LIVER

CENTRAL VEINS:
- coalesce into sublobular veins

SUBLOBULAR VEINS:
- coalesce into hepatic veins (VENAE HEPATICAE)

VENAE HEPATICAE:
- leave the liver
- drain into the caudal vena cava

Gross anatomy of the liver (diaphragmatic surface) and hepatic veins. GB, Gallbladder; ligament; LL, left lateral; LM, left medial; Q, quadrate; RL, right lateral; RM, right medial.

Microscopic anatomy of the liver. (From Levy MN: Berne & Levy principles of physiology, ed 4, St Louis, 2005, Mosby/Elsevier.)

https://veteriankey.com/hepatic-vascular-anomalies/
BILE DUCTS OF THE LIVER

BILE:

1. produced by hepatocytes
2. collected into the bile canaliculi
3. canaliculi radiate to the edge of the liver lobule, where they merge to form interlobular bile ducts
4. interlobular bile ducts unite to form lobular ducts (ductus biliferi)

Microscopic anatomy of the liver. (From Levy MN: Berne & Levy principles of physiology, ed 4, St Louis, 2005, Mosby/Elsevier.)

https://veteriankey.com/hepatic-vascular-anomalies/

https://link.springer.com/referenceworkentry/10.1007%2F978-3-642-13327-5_144
BILE DUCTS OF THE LIVER

EXTRAHEPATIC BILE DUCTS:

5. Intrahepatic ducts drain into the right and left hepatic ducts (ductus hepatici)

DUCTUS HEPATICUS:

- Extrahepatic bile ducts

IN HORSE, RUMINANTS:

- The lobar ducts unite to form the right and left hepatic duct (ductus hepaticus dext. et sin.)
- Ductus hepaticus dext. et sin. unite to form the common hepatic duct (ductus hepaticus communis)
- Ductus hepaticus comm. and ductus cysticus form the ductus choledochus (common bile duct)
- Ductus choledochus ends on papilla duodeni major

https://link.springer.com/referenceworkentry/10.1007%2FP978-3-642-13327-5_144
BILE DUCTS OF THE LIVER

IN CARNIVORES:
- each sublobule has own lobar duct
- lobar ducts drain into the cystic duct
- NO right and left hepatic duct (ductus hepaticus dext. et sin.)
- NO common hepatic duct (ductus hepaticus communis)
- ductus choledochus ends on papilla duodeni major
BILE DUCTS OF THE LIVER

DUCTUS HEPATOCYSTICUS:
- pass directly from the liver into the gall bladder
- in Car and Ru
GALL BLADDER (VESICA FELLEA)

FUNCTION:

1. store bile
2. concentrates the bile by water absorption through mucosa
3. discharges bile into the duodenum

- HORSE HAS NO GALL BLADDER
GALL BLADDER (VESICA FELLEA)

- sac – like
- lies on the visceral surface of the liver
- in fossa vesicae felleae

1. COLLUM VESICAE FELLEA
2. CORPUS VESICAE FELLEA
3. FUNDUS VESICAE FELLEA - bottom, blind end

https://www.ehealthstar.com/anatomy/gallbladder
GALL BLADDER (VESICA FELLEA)

DUCTUS CYSTICUS:
- ductus cysticus + ductus hepaticus comminis = ductus choledochus

https://www.ehealthstar.com/anatomy/gallbladder
PANCREAS

- large digestive gland

EXOCRINE FUNCTION:
- production of pancreatic juice

ENDOCRINE FUNCTION:
production of:
1. insulin
2. glucagon
3. somatostatin

https://www.proteinatlas.org/learn/dictionary/normal/pancreas

https://www.dartmouth.edu/~anatomy/Histo/lab_6/endocrine/DMS143 popup.html
PANCREAS

- located in the dorsal part of the abdominal cavity

associated with the:

a. stomach

b. cranial and descending portion of the duodenum

DOG

HORSE

RUMINANT
1. FACIES VENTRALIS
2. FACIES DORSALIS
PANCREAS

1. MARGO CRANIALIS
2. MARGO CAUDALIS
3. MARGO DEXTER
4. MARGO SINISTER

PANCREAS

INCISURA PANCREATIS:
- in Car, Ru
- notch for the portal vein
- in the margo caudalis

https://epi4dogs.com/the-pancreas/
PANCREAS

ANULUS PANCREATIS:
- in Eq, Su
- ring around the portal vein

https://www.semanticscholar.org/paper/Pig-pancreas-anatomy%3A-implications-for-pancreas-and-Ferrer-Scott/084f64a3fb05a49ebae5958bad7ad4fd23fb07f0
PANCREAS

divided into:

1. CORPUS PANCREATIS (body)
2. LOBUS PANCREATIS DEXTER (right lobe)
3. LOBUS PANCREATIS SINISTER (left lobe)
CORPUS PANCREATIS (body):

- the middle part
- in contact with the cranial part of the duodenum
TUBER OMENTALE:
- ventral prominence of body
- in the bursa omentalis
LOBUS PANCREATIS DEXTER (right lobe):

- in the mesoduodenum descendens
- along the descending duodenum (except in Eq)
PROCESSUS UNCINATUS:

- hooked process
- extends medially from the right lobe around the caudodorsal surface of the portal vein
LOBUS PANCREATIS SINISTER (left lobe):
- on the visceral surface of the stomach
- in Ru dorsal to the rumen
IN CARNIVORES:

- U (V) - shaped loop

1. body:
   - central

2. left lobe:
   - shorter, thicker
   - runs within the origin of greater omentum
   - on the dorsal abdominal wall

3. right lobe:
   - longer
   - follows the descending duodenum
   - in mesoduodenum descendens
IN PIG:

1. body:
   - large

2. left lobe:
   - large

3. right lobe:
   - small


https://www.semanticscholar.org/paper/Pig-pancreas-anatomy%3A-implications-for-pancreas-and-Ferrer-Scott/084f64a3fa05a49ebae5958bad7ad4fd2f07f0
IN HORSE:
- triangular - shaped

1. body:
   - large, compact
   - anulus pancreatis

2. left lobe:
   - long

3. right lobe:
   - short
IN RUMINANTS:

1. body:
   - short

2. left lobe:
   - wide

3. right lobe:
   - long
     - follows the mesoduodenum descendens

4. Incisura pancreatis:
   - vena portae passes over the dorsal border

PANCREATIC DUCTS
(DUSTUS PANCREATICUS)

1. DUCTUS PANCREATICUS:
   - drains the part of pancreas arisen from the ventral primordium
   - opens on the papilla duodeni major
   - main duct in Eq
   - absent in Su, Bo

2. DUCTUS PANCREATICUS ACCESSORIUS:
   - emerges from the part that formed by the dorsal primordium
   - opens on the papilla duodeni minor
   - largest duct in Car
   - only one duct in Bo, Su

https://link.springer.com/chapter/10.1007/978-3-319-58256-6_2
BLOOD SUPPLY OF THE PANCREAS

1. ARTERIA PANCREATICODUODENALIS CRANIALIS:
   - branch of A. hepatica (from A. coeliaca)
   - supplies the right lobe

2. ARTERIA PANCREATICODUODENELIS CAUDALIS:
   - branch of A. mesenterica cranialis
   - supplies the left lobe and body

3. ARTERIA LIENALIS:
   - branch of A. coeliaca
   - gives Rr. pancreatici
   - supplies the left lobe and body
BLOOD SUPPLY OF THE PANCREAS

VEINS:
- drain into the portal vein
SPLEEN (LIEN, SPLEN)

FUNCTION:

DURING EMBRYONIC LIFE:
- production of erythrocytes

IN ADULT:
- production of lymphocytes
- destruction of erythrocytes
- storage of iron (hemosiderin)
- storage of blood


http://www.ucd.ie/vetanat/images/image.html

https://www.horsejournals.com/understanding-equine-liver
SPLEEN (LIEN, SPLEN)

POSITION:
- intraperitoneal
- CAPSULA LIENIS – below the peritoneum
- lies against the abdominal wall
- caudal to the diaphragm
- within the left cranial part of the abdomen
- covered by the ribs
- in Car, Eq, Su – the position depends on the fullness of stomach
SPLEEN (LIEN, SPLEN)

SHAPE:

1. **FALCIFORM** – in Eq
2. **TONGUE** – SHAPED – in Su
3. **BOOT** – SHAPED in Car
4. **LEAF**- **SHAPE**D - in small ruminants
5. **WIDE STRAP** – in Ox

A normal spleen in a medium sized dog

http://www1.zu.edu.eg/Plastination/spleen-Horse2.jpg

https://en.wikivet.net/Spleen_-_Anatomy_%26_Physiology

https://www.lbah.com/canine/spleen-disease/

http://www1.zu.edu.eg/Plastination/spleen-Horse2.jpg

http://gqb.co.za/product/pork-spleen/

https://vet.uga.edu/oldvpp/programs/aipv/a
ps_disturbances_of_growth_wk1.php

https://www.lbah.com/canine/spleen-disease/
SPLEEN (LIEN, SPLEN)

FACIES PARIETALIS (diaphragmatica):

- convex lateral surface
- faces diaphragma in Ru, Eq
- faces left cranial abdominal wall

http://www1.zu.edu.eg/Plastination/photo16.htm

http://gqb.co.za/product/pork-spleen/
SPLEEN (LIEN, SPLEN)

FACIES VISCERALIS:

- concave medial surface
- contains HILUS LIENIS
- in Ru largely free from peritoneum

http://www1.zu.edu.eg/Plastination/photo16.htm

http://bvetmed1.blogspot.com/2013/03/horse-and-pig-abdomen-lecture-164.html
SPLEEN (LIEN, SPLEN)

FACES VISCERALIS:

HILUS LIENIS:
- longitudinal ridge in Car, Su, Eq
- round depression in Ru
- entrance of nerves, A. lienalis
- exit of V. lienalis, lymphatic vessels

https://slideplayer.com/slide/4787166/

https://veteriankey.com/spleen/

http://gb.co.za/product/pork-spleen/

http://bvetmed1.blogspot.com/2013/03/horse-and-pig-abdomen-lecture-164.html

https://en.wikivet.net/Spleen_-_Anatomy_%26_Physiology

Hilus lienis
SPLEEN (LIEN, SPLEN)

1. EXTREMITAS DORSALIS
2. EXTREMITA VENTRALIS
3. MARGO CAUDALIS
4. MARGO CRANALIS

https://en.wikivet.net/Spleen_-_Anatomy_%26_Physiology
SPLEEN (LIEN, SPLEN)

ON FACIES VISCERALIS:

1. Facies renalis:
   - dorsal part of the visceral surface
   - faces the left kidney
   - absent in Ru

http://bvetmed1.blogspot.com/2013/03/horse-and-pig-abdomen-lecture-164.html
SPLEEN (LIEN, SPLEN)

ON FACIES VISCERALIS:

2. Facies gastrica:
   - cranial part of facies visceralis
   - faces stomach
   - in Ru the entire facies visceralis

http://bvetmed1.blogspot.com/2013/03/horse-and-pig-abdomen-lecture-164.html
SPLEEN (LIEN, SPLEN)

ON FACIES VISCERALIS:

3. Facies intestinalis:

- caudal segment of facies visceralis
- faces portion of jejunum and colon
- absent in Ru
LIGAMENTS OF SPLEEN

LIGAMENTUM GASTROSPLENICUM:
- attaches spleen to the stomach
- part of the omentum minus

LIGAMENTUM PHRENICOSPLENICUM:
- in Ru, Eq
- between parietal surface and diaphragm
LIGAMENTS OF THE SPLEEN

LIGAMENTUM LIENORENALE:

- in Eq
- between spleen and left kidney
- creates the nephroplenic space – in which the intestine can become trapped resulting in colic
SPLEEN

LIEN ACCESSORICUS:

- small island of additional splenic tissue
- in lig. gastrolienne
- in Su

https://quizlet.com/173282806/digestive-system-important-vocabulary-words-fetal-pig-dissection-lab-flash-cards/
BLOOD SUPPLY OF THE SPLEEN

ARTERIA LIENALIS:

- branch of A. coeliaca
- gives Rr. lienalis – enter capsule and trabecule as Aa. trabeculares – continue Arteriolae centrales – enter red pulp and branch into Aa. penicillares – open into capillary beds – splenic sinus
BLOOD SUPPLY OF THE SPLEEN

VEINS:

1. VENOUS SINUSES – communicate with each other – coalesce into veins of red pulp

2. VEINS OF RED PULP – become TRABECULAR VEINS

3. TRABECULAR VEINS open into VENA LIENALIS

4. VENA LIENALIS opens into VENA PORTAE

https://veteriankey.com/spleen/

THANK YOU FOR YOUR ATTENTION!
R. Nickel, A. Schummer, E. Seiferle: The Viscera of the Domestic Animals, 2nd revised edition


Klaus-Dieter Budras, W.O. Sack, Sabine Röck: Anatomy of the Horse 5th revised Edition

Klaus – Dieter Budras, Rober E. Habel: Bovine Anatomy, 1st Edition

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