

## **LIVER (HEPAR)**

**Facies diaphragmatica** - pars superior (area nuda – bare area)  
- pars anterior (covered by peritoneum)

lig. coronarium - lig. triangulare dextrum  
- lig. triangulare sinistrum - appendix fibrosa hepatis  
lig. falciforme hepatis - lobus dexter hepatis  
- lobus sinister hepatis  
lig. teres hepatis (v. umbilicalis)

**Facies visceralis** - fissura sagittalis dextra - sulcus v. cavae inf. (lig. venae cavae ), fossa vesicae biliaris  
- fissura sagittalis sinistra – lig. teres hepatis, lig. venosum (ductus venosus)  
- porta hepatis- vena portae, a. hepatica propria, ductus hepaticus communis  
lobus caudatus - processus caudatus  
lobus quadratus  
lobus dexter - impressio renalis, suprarenalis, duodeni, colica  
lobus sinister – tuber omentale, impressio oesophagea, gastrica

### **Hepatic segments (Couinaud)**

lobus caudatus – 1<sup>st</sup> segment  
lobus sinister - 2<sup>nd</sup> to 4<sup>th</sup> segments  
lobus dexter - 5<sup>th</sup> to 8<sup>th</sup> segments  
Cantlie`s line

### **Structure of the liver**

capsula fibrosa- capsula fibrosa perivascularis  
lobulus venae centralis (hepaticus)  
Glisson`s triad – a., v., ductus interlobularis  
sinusoids  
trabeculae  
v. centralis  
v. sublobularis  
v. hepatica

### **Blood flow in the liver**

functional circulation – v. portae  
nutritive circulation – a. hepatica propria

### **Intrahepatic bile ducts:**

canaliculus bilifer  
ductulus bilifer  
ductus bilifer interlobularis

### **Extrahepatic bile ducts:**

ductus hepaticus dexter et sinister  
ductus hepaticus communis  
ductus cysticus  
ductus choledochus - m. sphincter ductus choledochi  
Vater`s papilla (papilla duodeni major)- m. sphincter ampullae hepatopancreaticae (Oddi)

The liver fills the whole right diaphragmatic dome and reaches over the midline to the left diaphragmatic dome where it reaches the left midclavicular line. The lower border of the liver follows the right costal arch to the right midclavicular line (9<sup>th</sup> costal cartilage) where it ascends obliquely toward the end of the left 8<sup>th</sup> costal cartilage. This part of the liver between costal arches is in contact with the anterior abdominal wall. The superior part neighbors through the diaphragm with the right lung and the heart in the pericardium.

### **Vesica biliaris (fellea)**

fundus

corpus

collum

ductus cysticus- plica spiralis

The fundus of the gallbladder is in contact with the anterior abdominal wall in the crossing of the right midclavicular line and the 9<sup>th</sup> costal cartilage.

### **PANCREAS**

caput - incisura pancreatis - processus uncinatus

corpus - tuber omentale

cauda

capsula pancreatis

facies anterior

facies posterior

margo superior

margo inferior

ductus pancreaticus - m. sphincter ductus pancreatici - papilla duodeni major (Vateri)

ductus pancreaticus accessorius - papilla duodeni minor

succus pancreaticus

islets of Langerhans - insulin, glucagon

The head of the pancreas lies in front of the L2.

### **SPLEEN (LIEN, SPLEN)**

extremitas anterior

extremitas posterior

margo superior - crenae lienis

margo inferior

facies diaphragmatica

facies visceralis - hilum lienis - facies gastrica, facies renalis, facies colica

capsula fibrosa

red pulp

white pulp

segments

The spleen reaches from the 9<sup>th</sup> to the 11<sup>th</sup> ribs, the anterior pole does not reach over the **costoarticular line** – the connection between the end of the 11<sup>th</sup> costal cartilage and left sternoclavicular joint. In healthy man the spleen is not palpable. The posterior pole is about 4 cm from the 10<sup>th</sup> thoracic vertebra.

### **PERITONEUM**

peritoneum parietale

peritoneum viscerale  
cavitas peritonealis - pars supramesocolica  
                                  - pars inframesocolica

spatium retroperitoneale  
spatium subperitoneale  
spatium preperitoneale

**Intraperitoneal organs:** stomach, bulbus duodeni, jejunoileum, appendix vermiformis, colon transversum, colon sigmoideum, liver, gallbladder, and spleen

The supramesocolic part - stomach, superior part of the duodenum, liver with bile ducts, spleen - truncus coeliacus

The inframesocolic part - coils of the small intestine, large intestine - a. mesenterica sup. et inf.

**Secondarily retroperitoneal organs:** most of the duodenum, caecum, colon ascendens, descendens, pancreas

### PERITONEAL FOLDS

omentum minus – lig. hepatogastricum  
                                  - lig. hepatoduodenale

omentum majus - lig. gastrocolicum

mesenterium - radix mesenterii

mesocolon transversum

mesoappendix vermiformis

mesocolon sigmoideum

lig. gastrosplenicum (-lienale)

lig. phrenicosplenicum (-lienale)

lig. splenorenale

lig. phrenicocolicum

### RECESSUS PERITONEI

herniae internae

bursa omentalis - foramen epiploicum – vestibulum, recessus superior, splenicus, inferior

recessus duodenales: recessus duodenalis inferior - plica duodenalis inf.

                                  recessus duodenalis superior - plica duodenalis sup.

                                  recessus duodenalis sinister - plica duodenalis lat. - v. mesenterica inf.

                                  recessus retroduodenalis

recessus ileocaecalis sup. - plica ileocaecalis sup.

recessus ileocaecalis inf. - plica ileocaecalis inf.

recessus retrocaecalis

recessus paracolici

recessus intersigmoideus