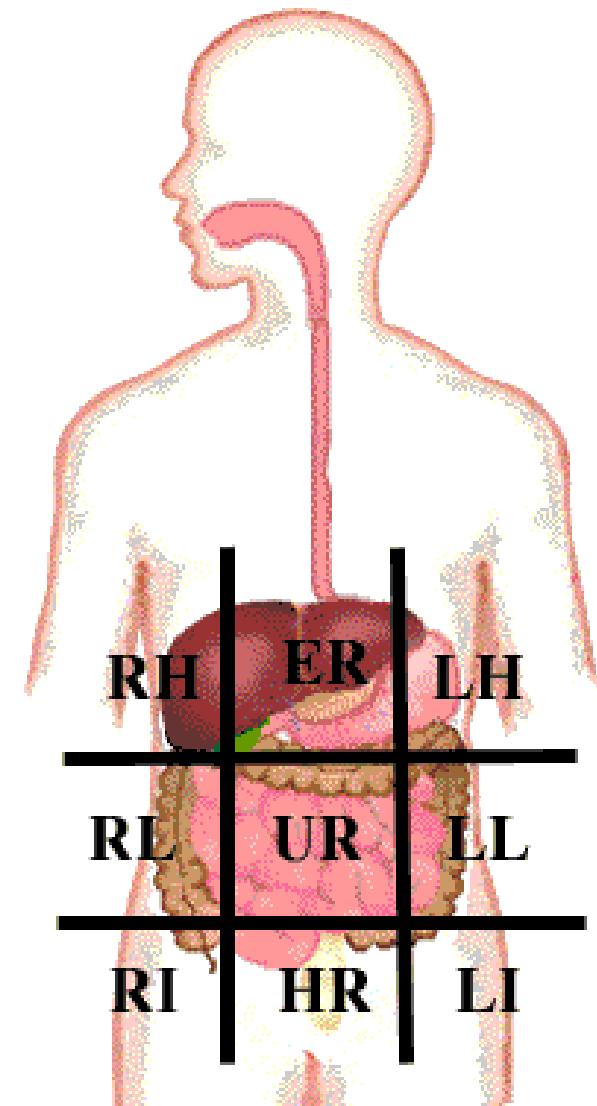
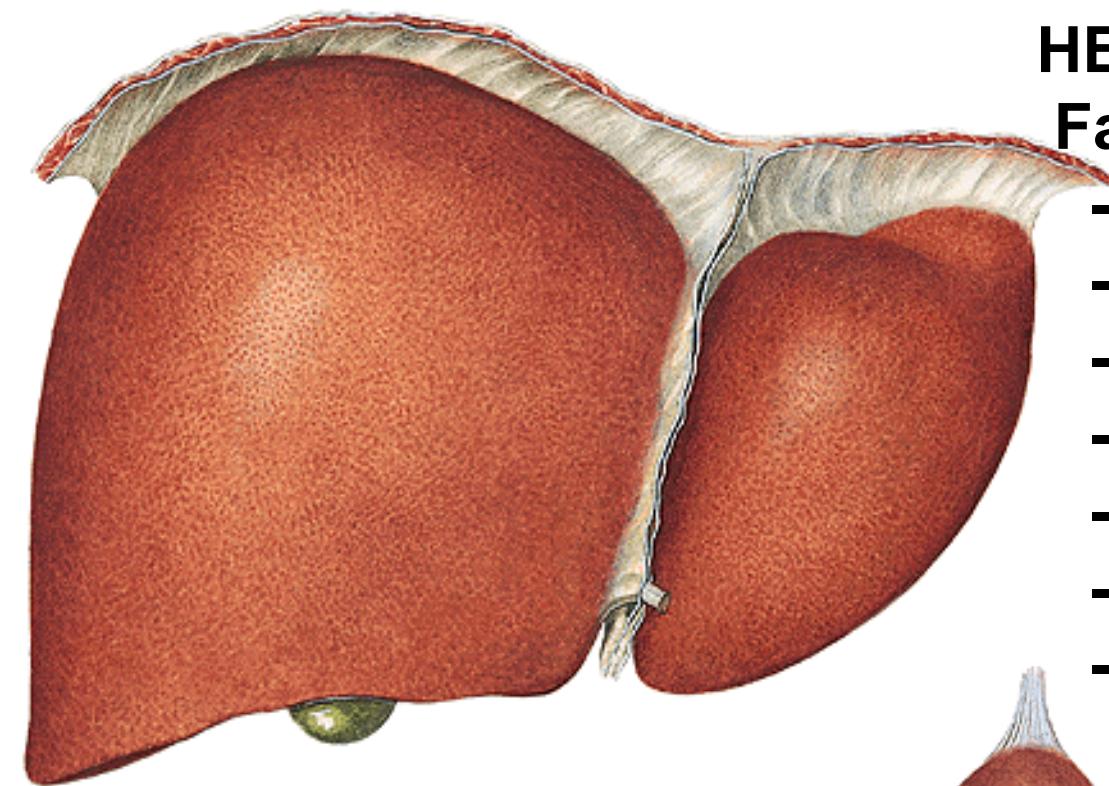


# **DIGESTIVE SYSTEM III.**

# Liver

**Regio hypochondriaca dx. + regio epigastrica**





## HEPAR (IECUR)

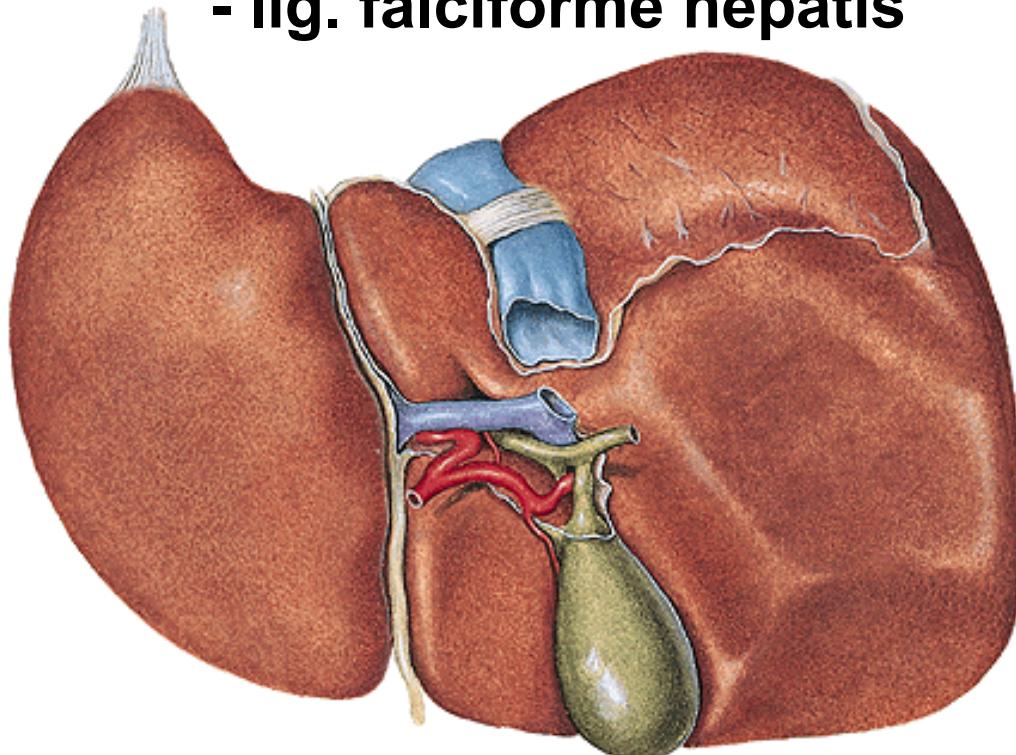
### Facies diaphragmatica

- pars superior (area nuda)
- pars anterior
- lig. coronarium
- lig. triangulare dextrum
- lig. triangulare sinistrum
- appendix fibrosa hepatis
- lig. falciforme hepatis

### Facies visceralis

#### Fissura sagittalis sinistra

- lig. teres hepatis
- lig. venosum



## **Fissura sagittalis dextra**

- **fossa vesicae biliaris**
- **sulcus v. cavae inferioris (lig. venae cavae)**

## **Lobus dexter**

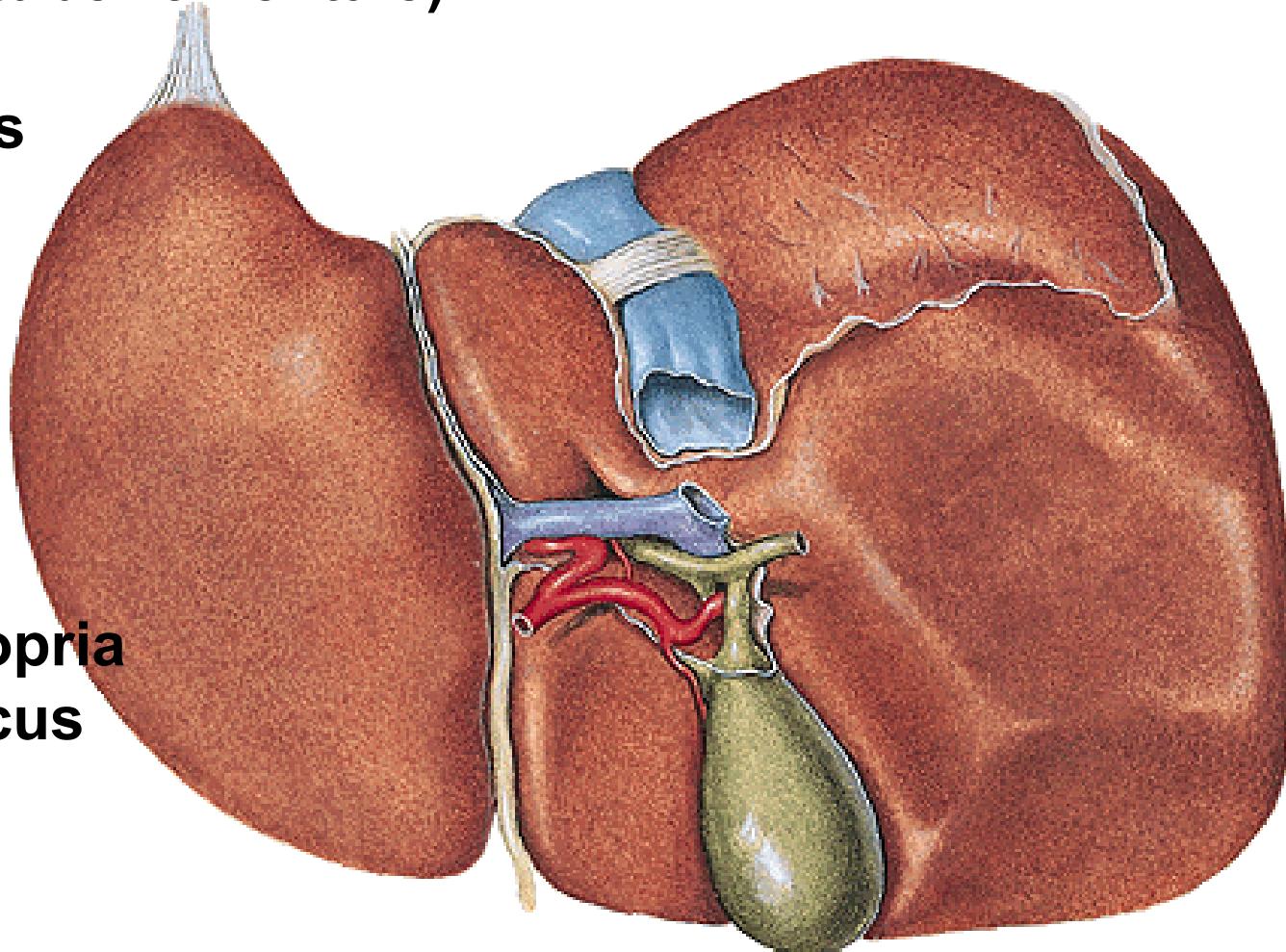
- sinister (tuber omentale)**
- caudatus**
- quadratus**

## **Processus**

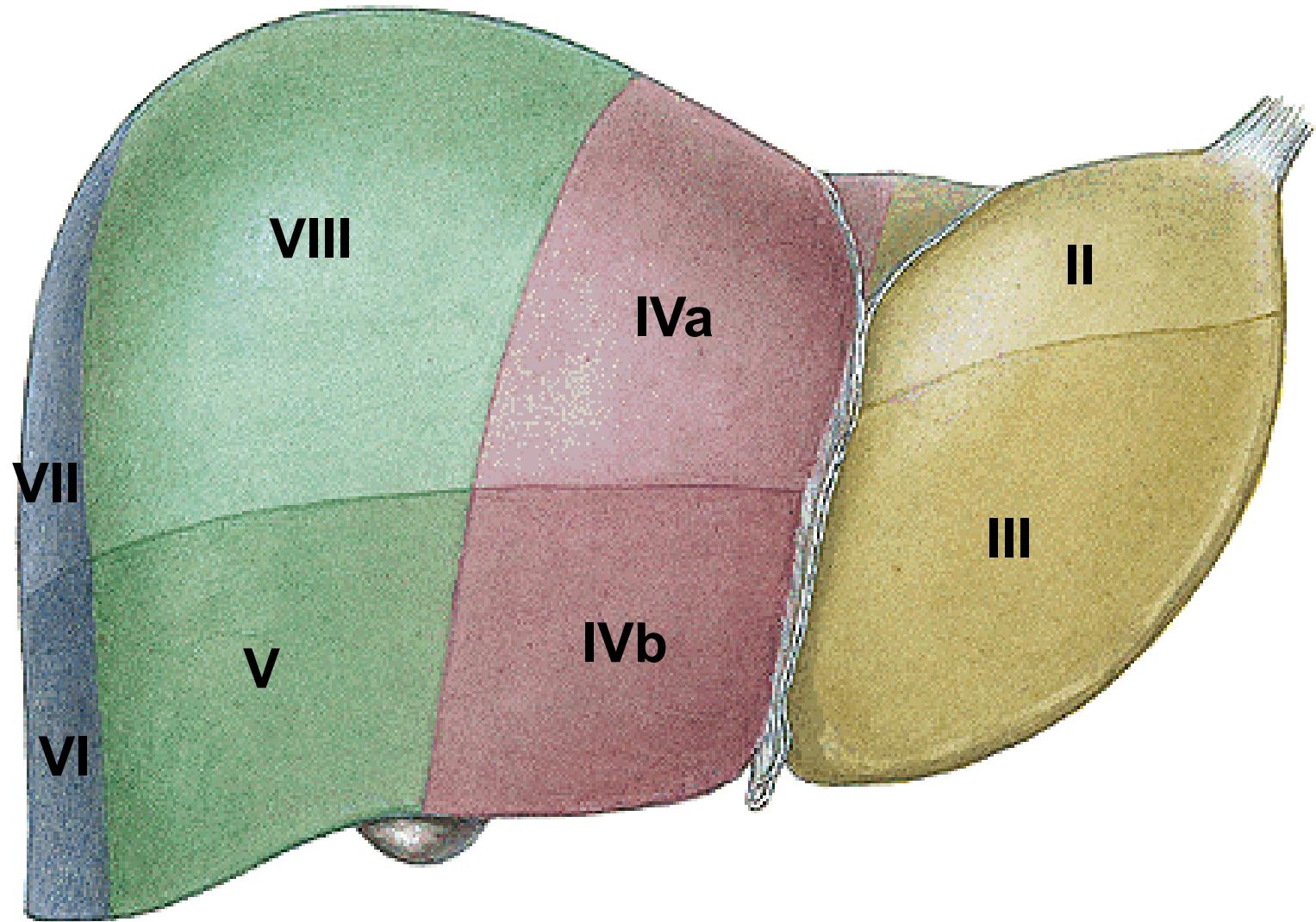
**caudatus,  
papillaris**

## **Porta hepatis**

- **vena portae**
  - **a. hepatica propria**
  - **ductus hepaticus  
communis**
- (portal triad)**



# Hepatic segments

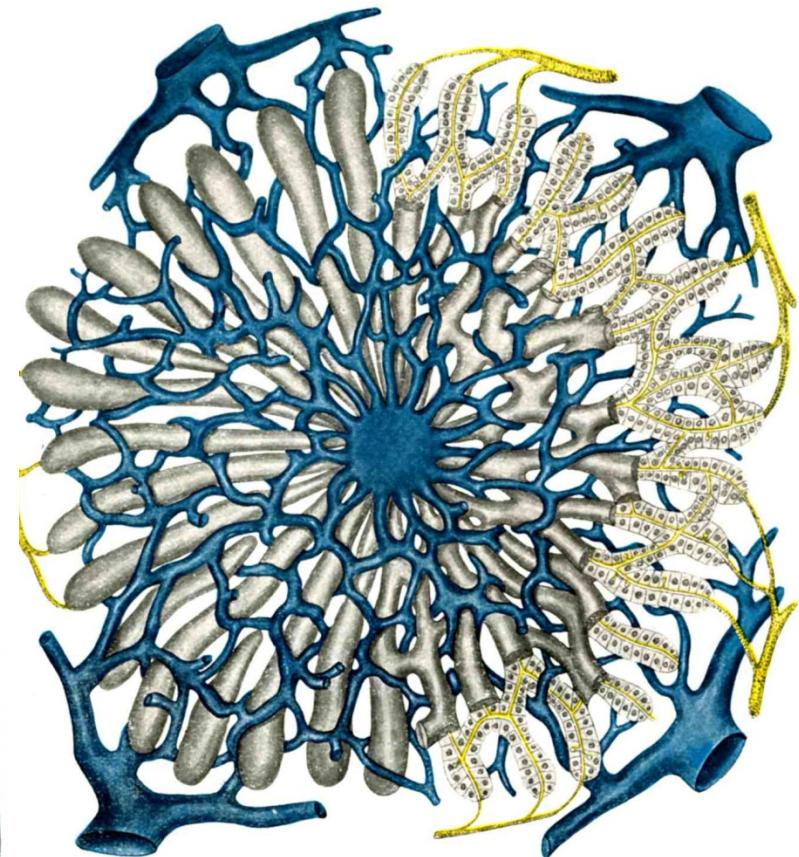
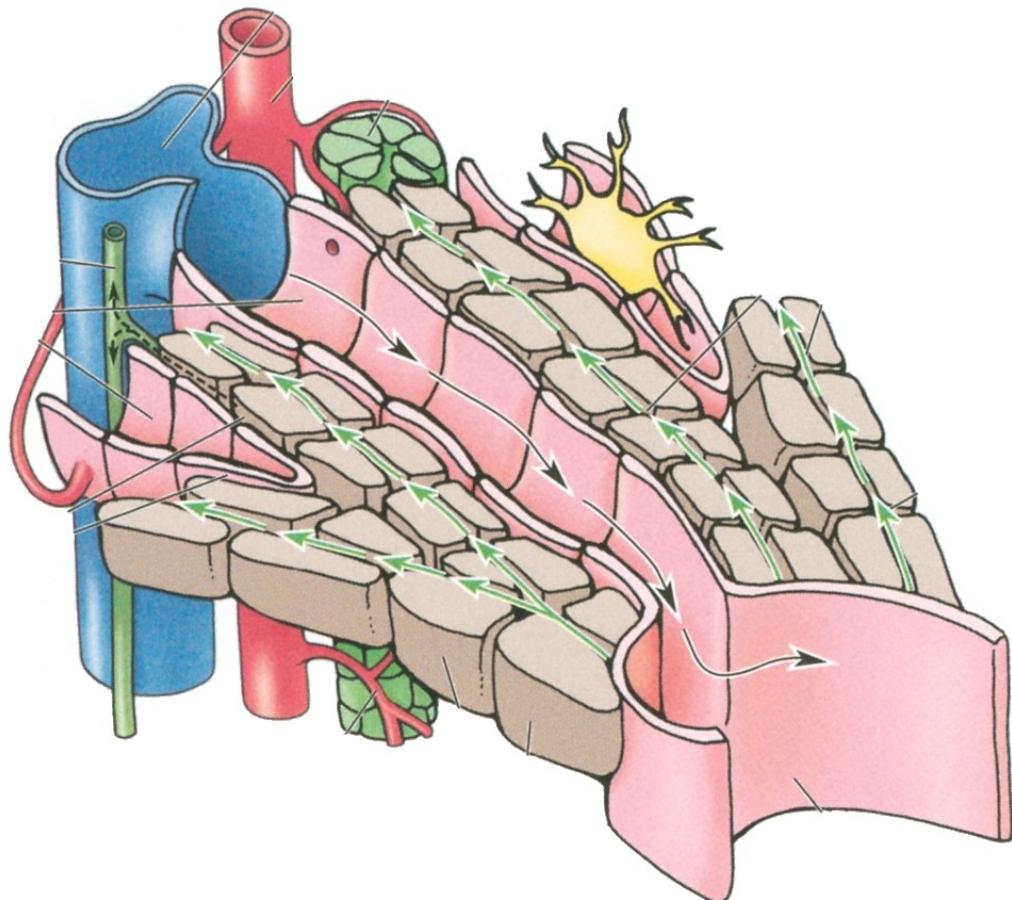


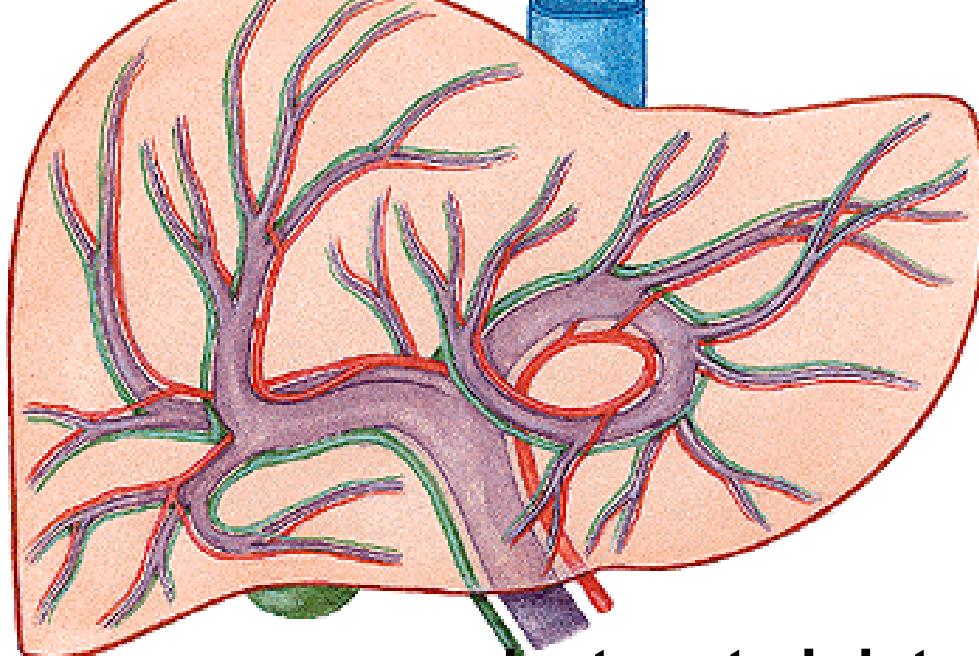
# Capsula fibrosa – capsula fibrosa perivascularis

- v. interlobularis, a. interlobularis, ductus interlobularis

→ sinusoids → v. centralis

Lobulus venae centralis

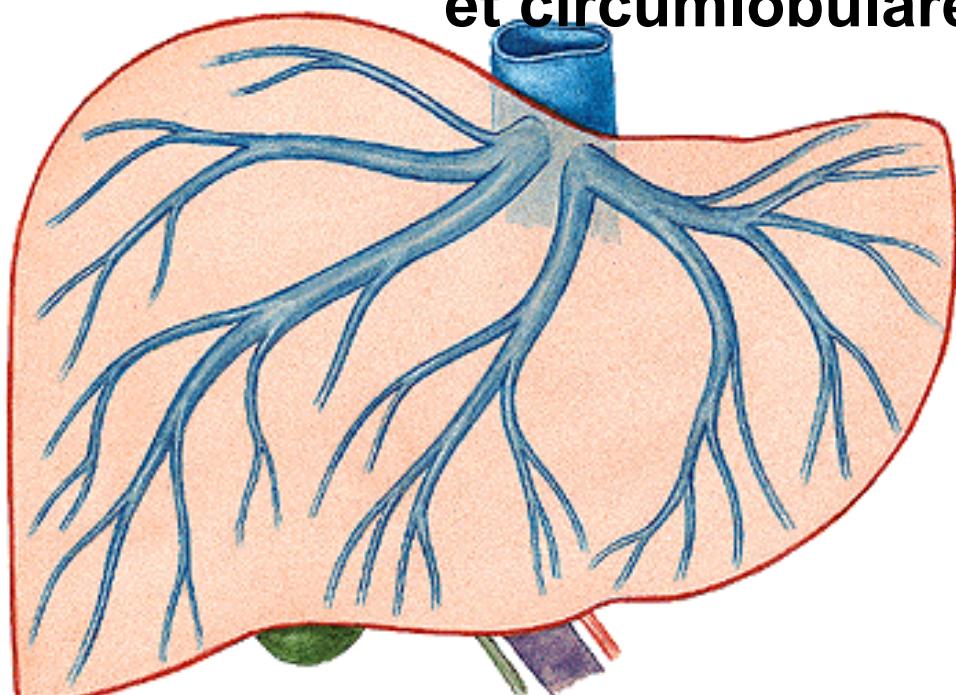




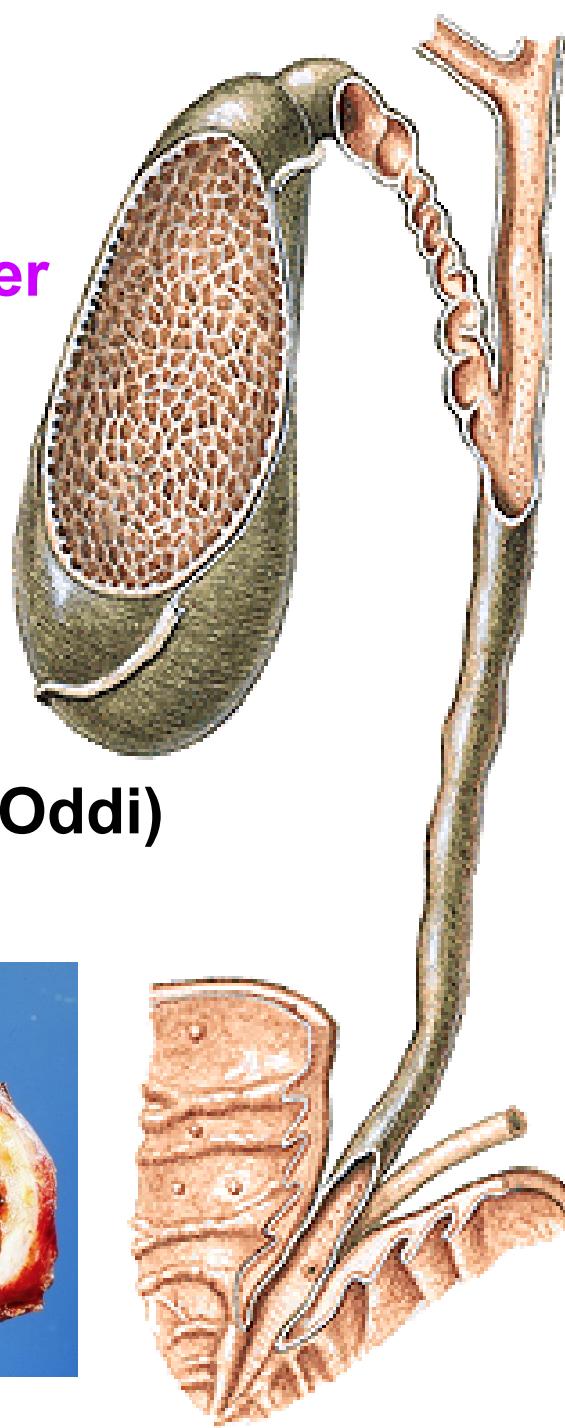
**V. PORTAE**  
(v. mesenterica sup.  
+ v. lienalis)  
**A. HEPATICA PROPRIA**

- ramus dexter et sinister..... aa. et vv. interlobulares  
et circumlobulares

→ sinusoids → v. centralis  
→ vv. sublobulares  
→ VV. HEPATICAE

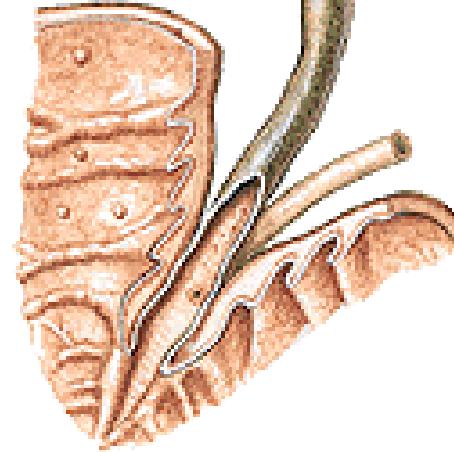


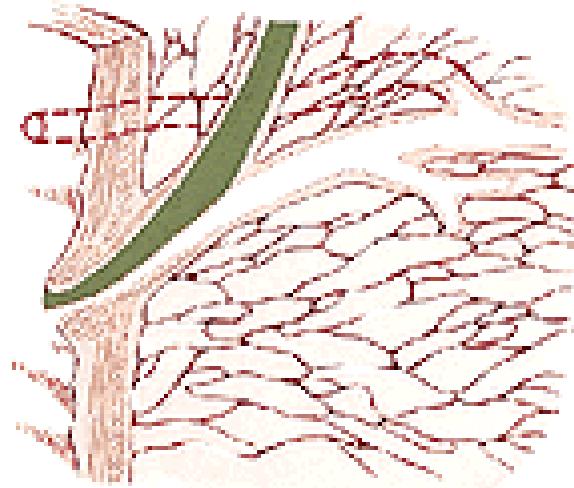
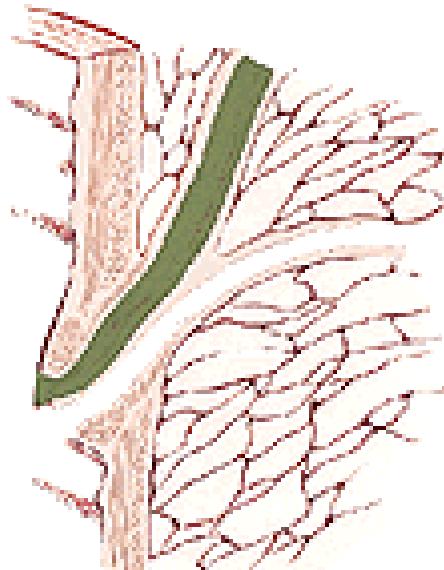
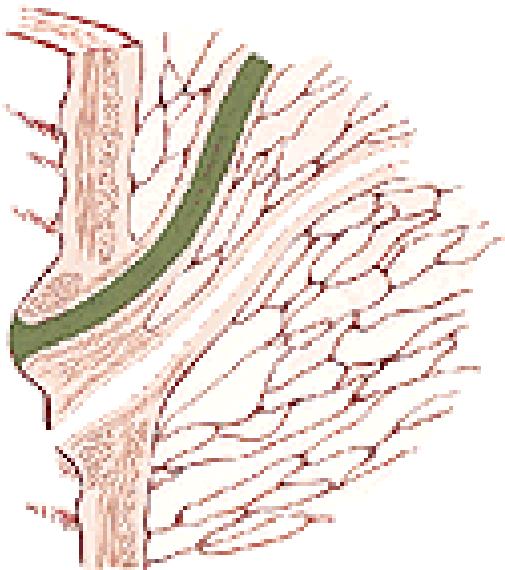
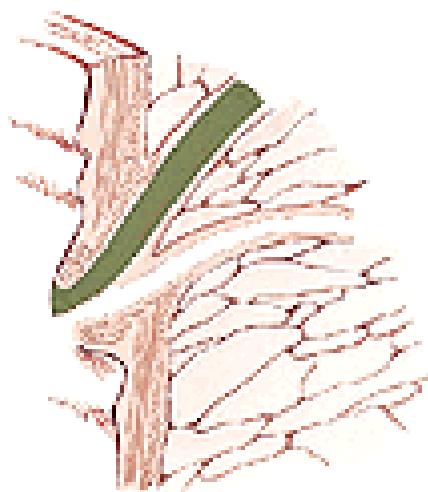
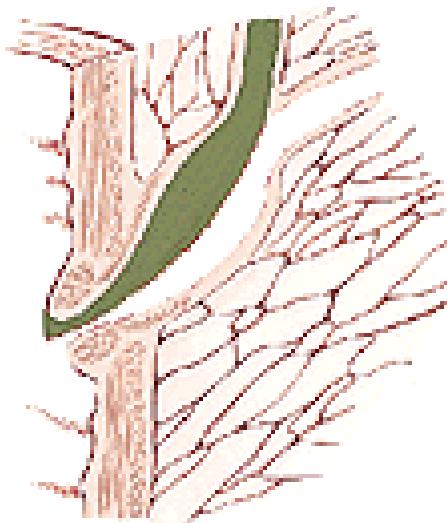
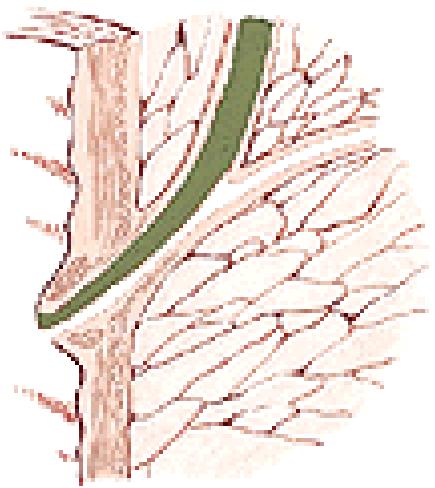
**Canaliculus bilifer – ductulus bilifer**  
– **ductus bilifer interlobularis**  
– **collecting ducts** → **ductus hepaticus dexter et sinister** – **ductus hepaticus communis**  
+ **ductus cysticus** = **ductus choledochus**

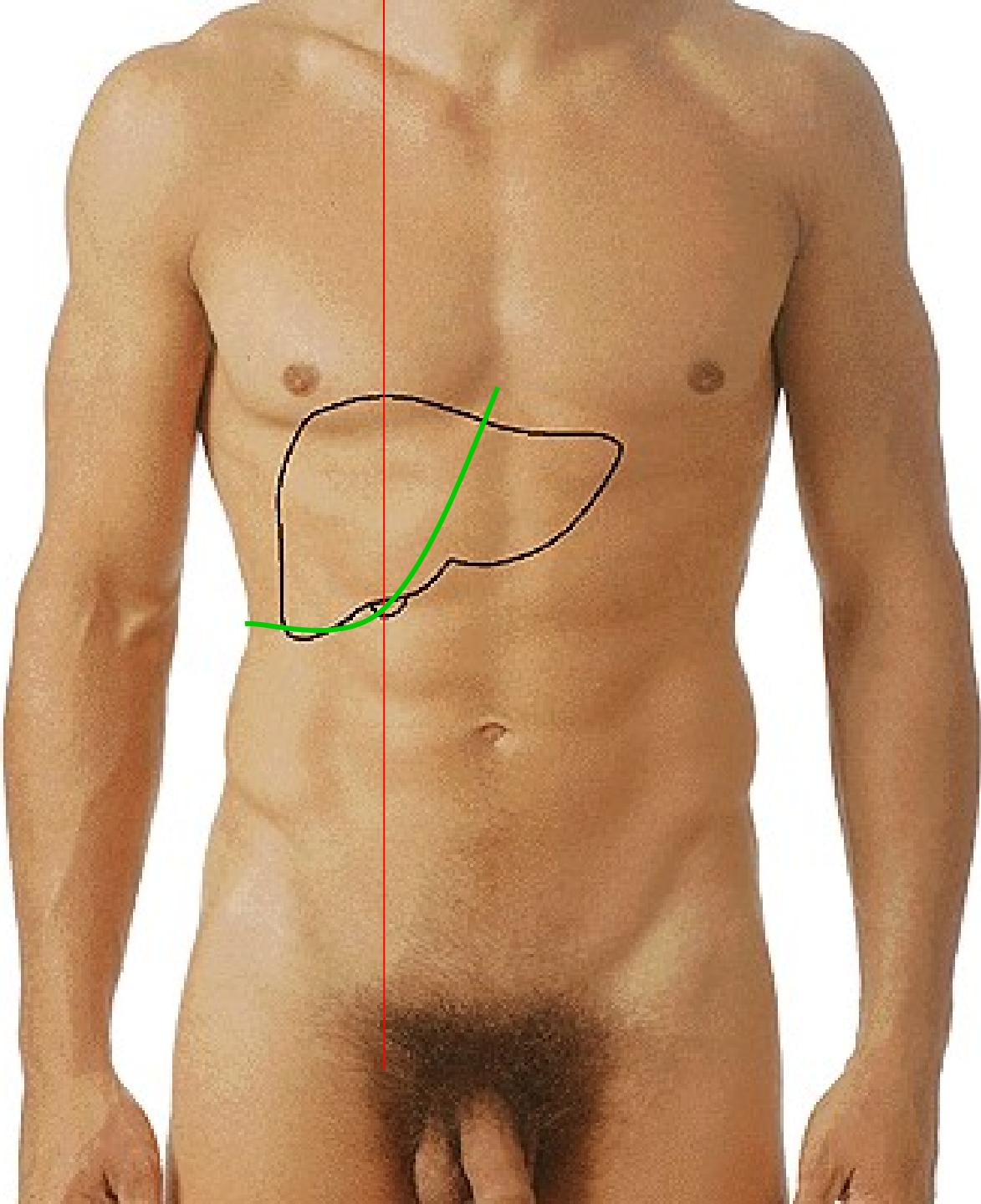


**Plica longitudinalis duodeni**  
**Ampulla hepatopancreatica**  
**M. sphincter ampullae hepatopancreaticae (Oddi)**  
**Papilla duodeni major (Vater)**

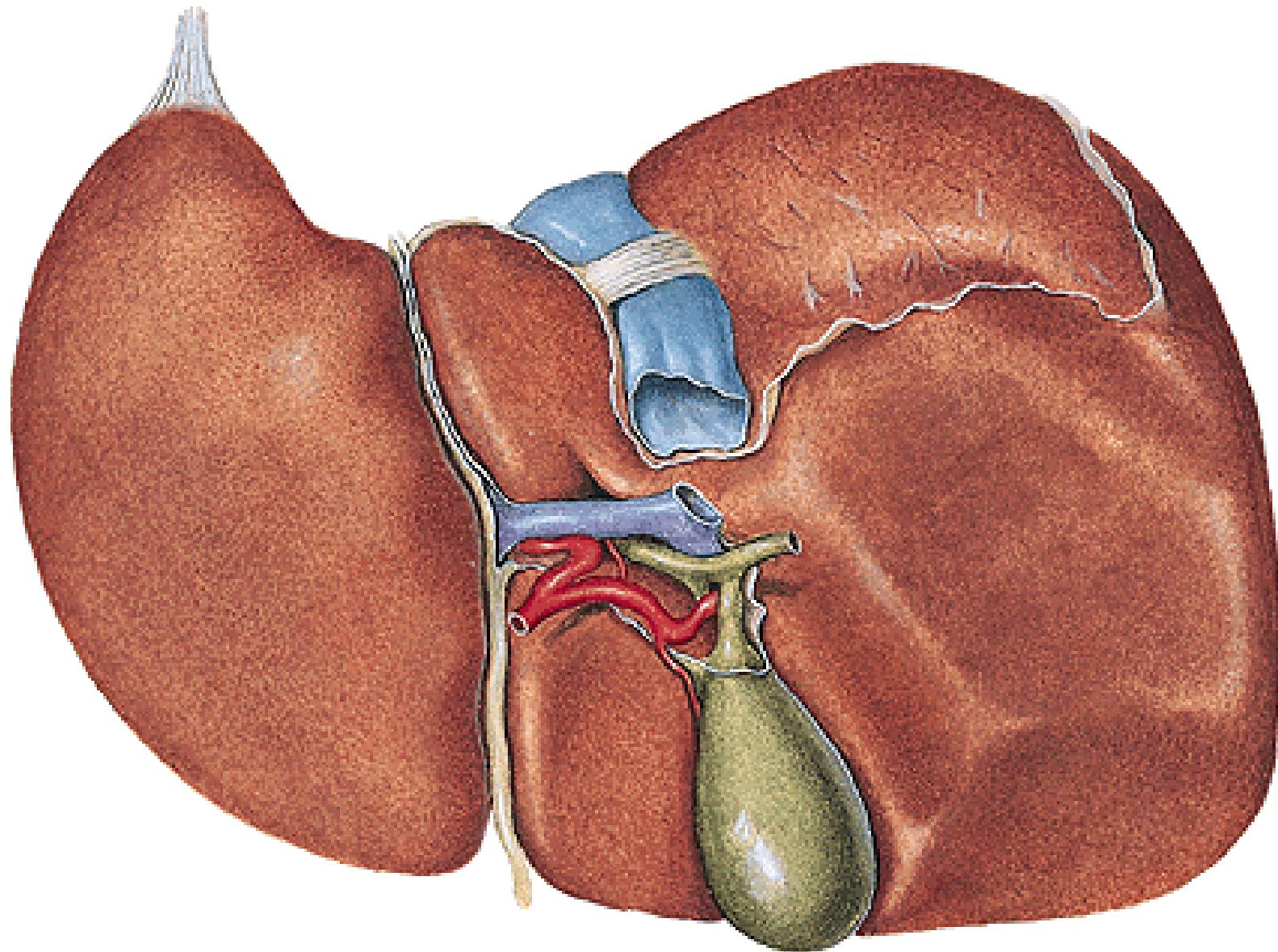
**Vesica biliaris (fellea)**  
- **fundus, corpus,**  
**collum - plica spiralis**



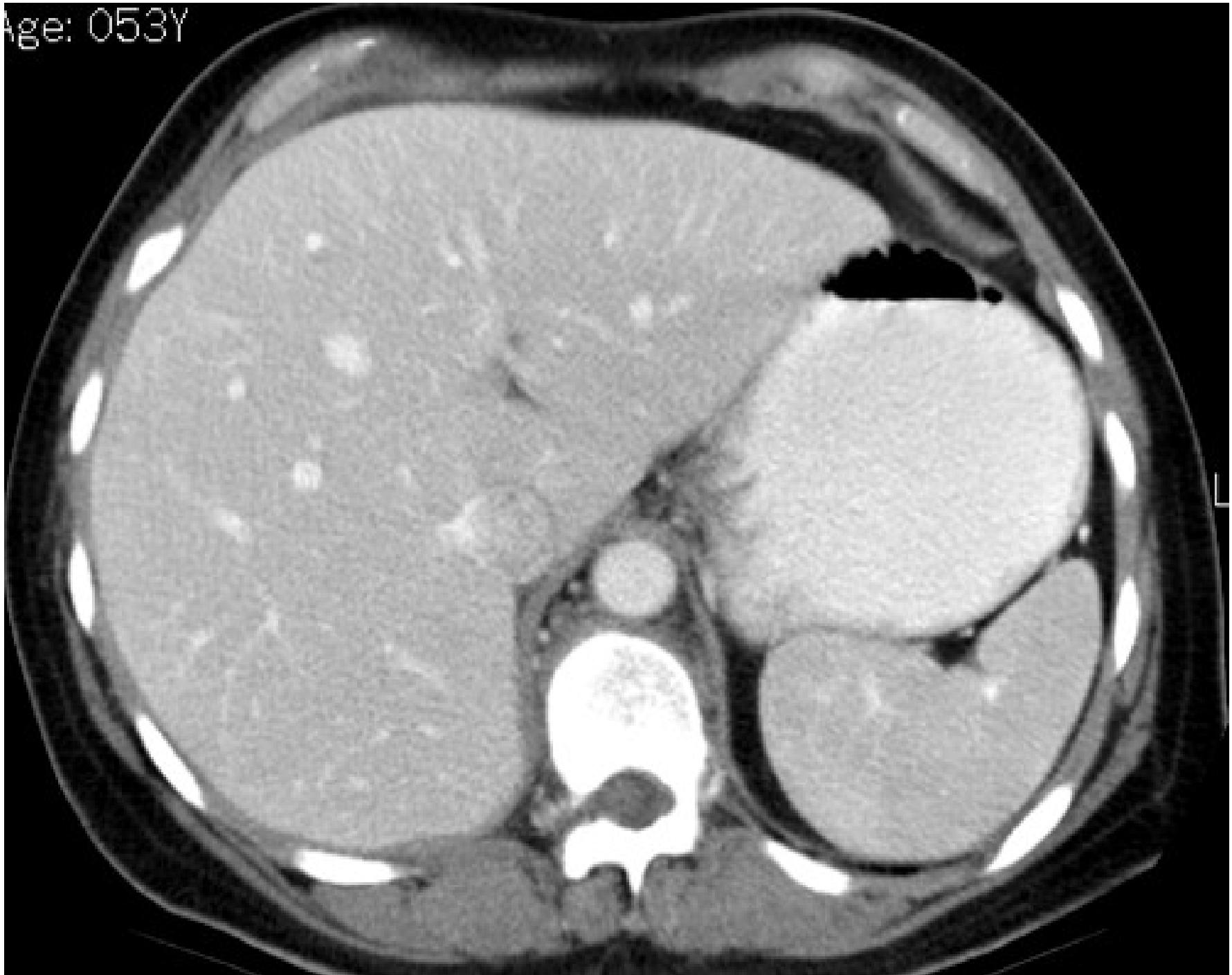




**Impressio renalis. suprarenalis, duodeni, colica  
Impressio oesophagea, gastrica**



Age: 053Y



# PANCREAS

**caput, corpus, cauda**

**incisura pancreatis**

**processus uncinatus**

**facies anterior**

**facies posterior**

**facies inferior**

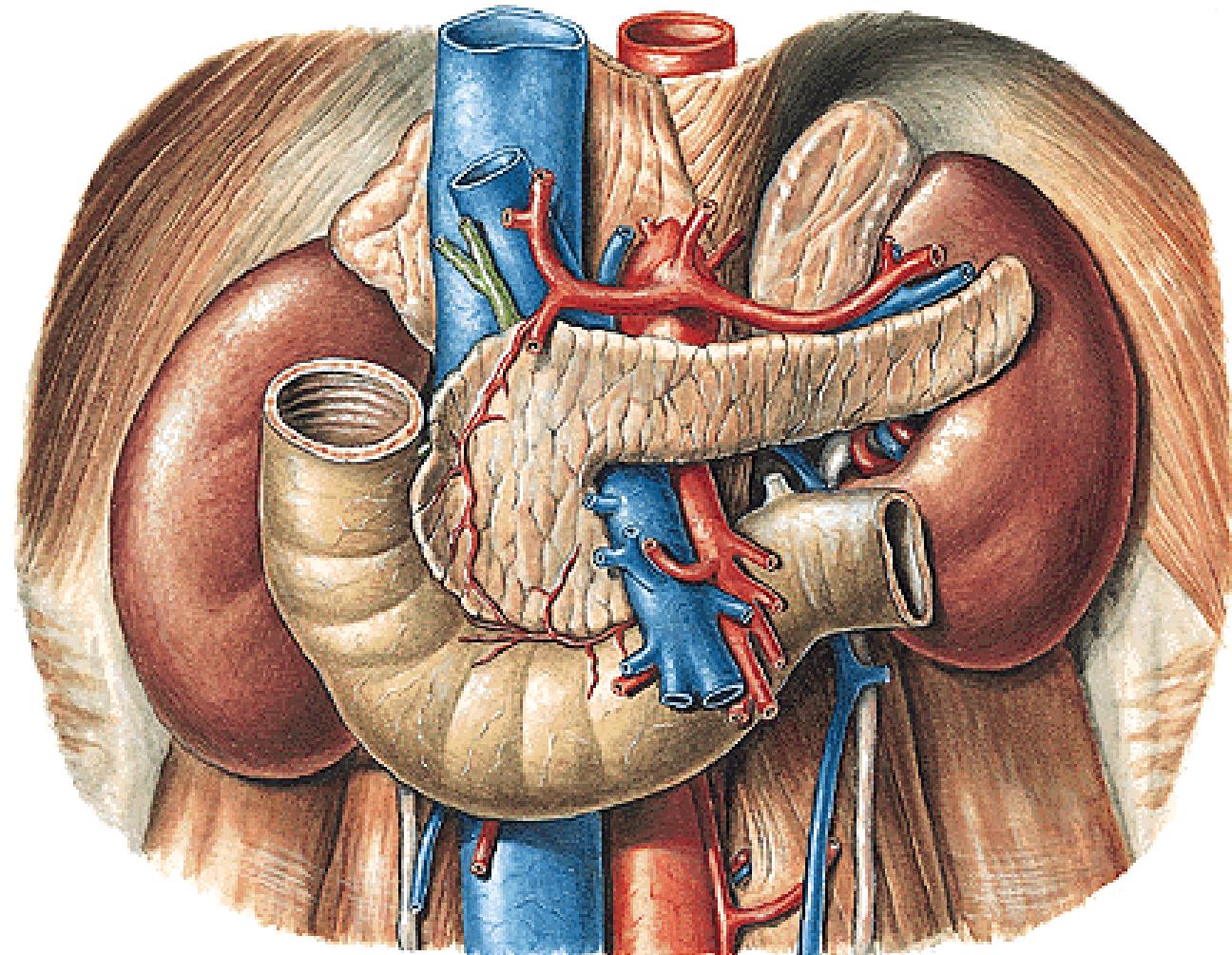
**margo superior**

**margo anterior**

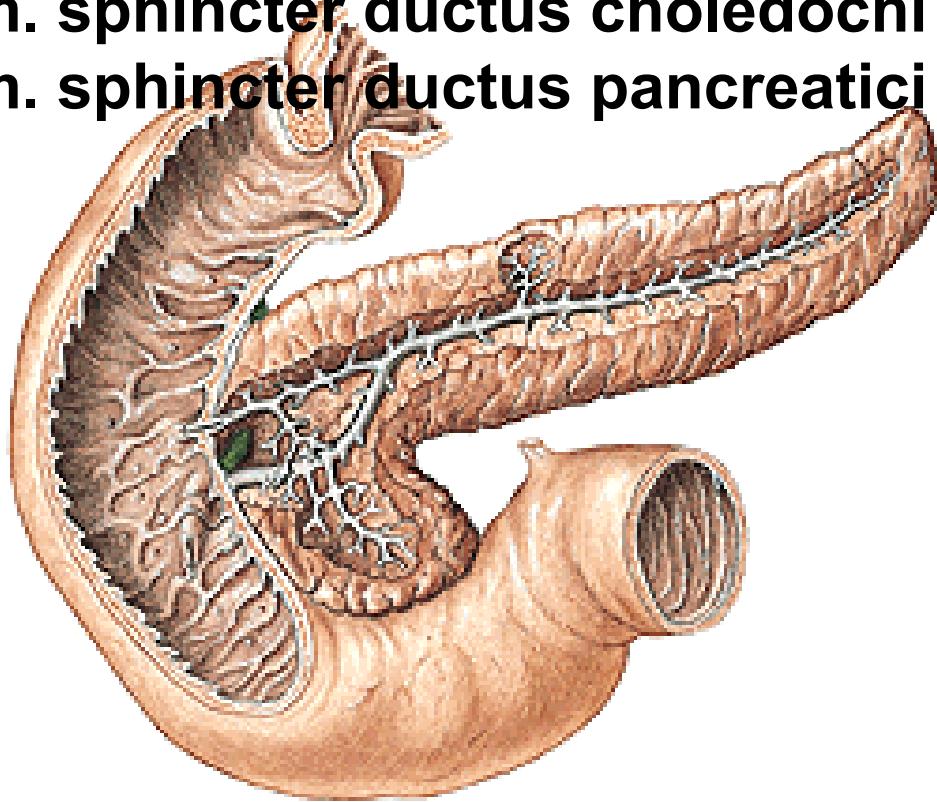
**margo inferior**

**membrana retropancreatica (Treitz)**

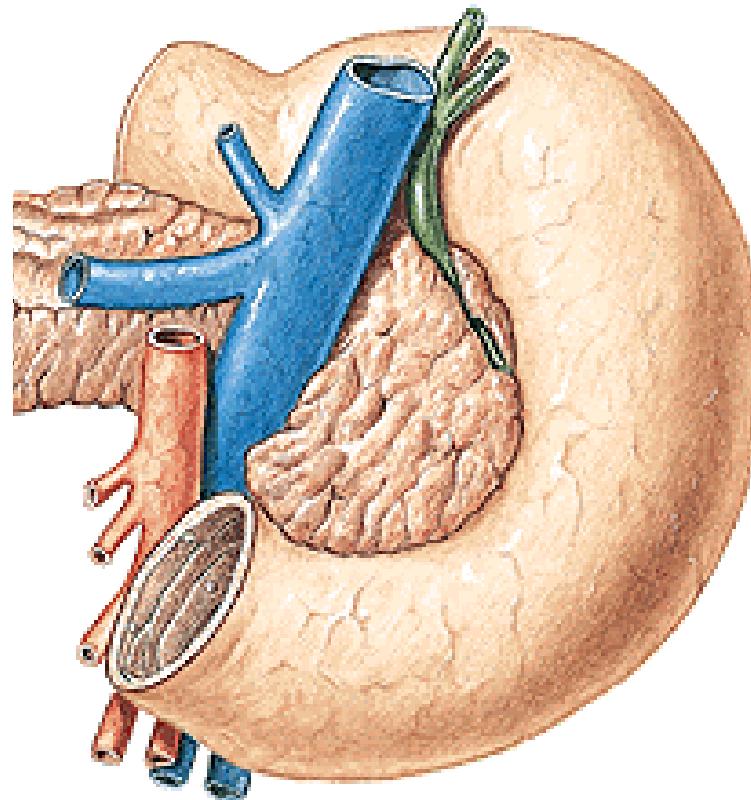
**tuber omentale**



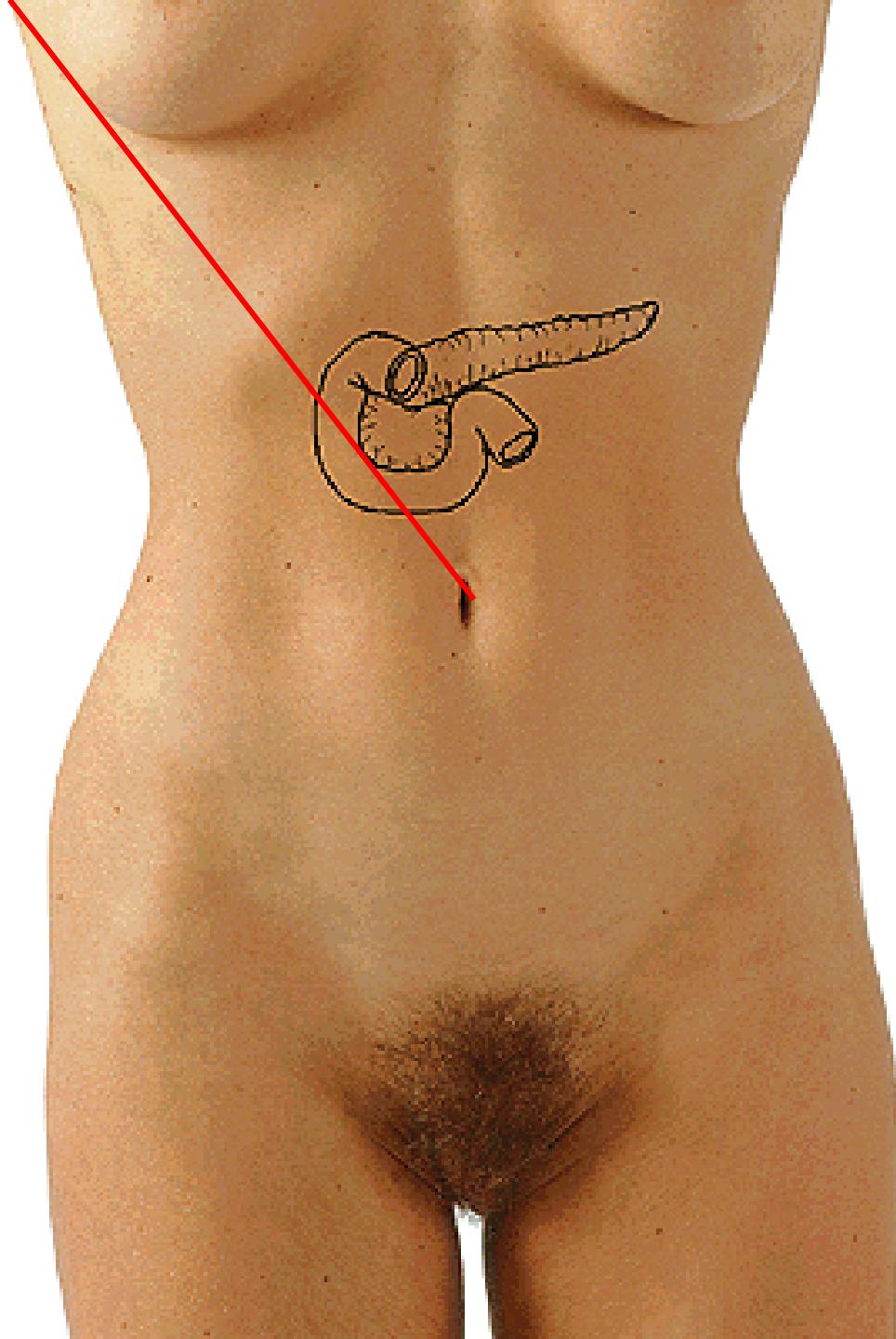
**Exocrine pancreas:**  
**capsula pancreatis**  
**succus pancreaticus**  
**ductus pancreaticus**  
**ductus pancreaticus accessorius**  
**m. sphincter ampullae hepatopancreatice**  
**m. sphincter ductus choledochi**  
**m. sphincter ductus pancreatici**



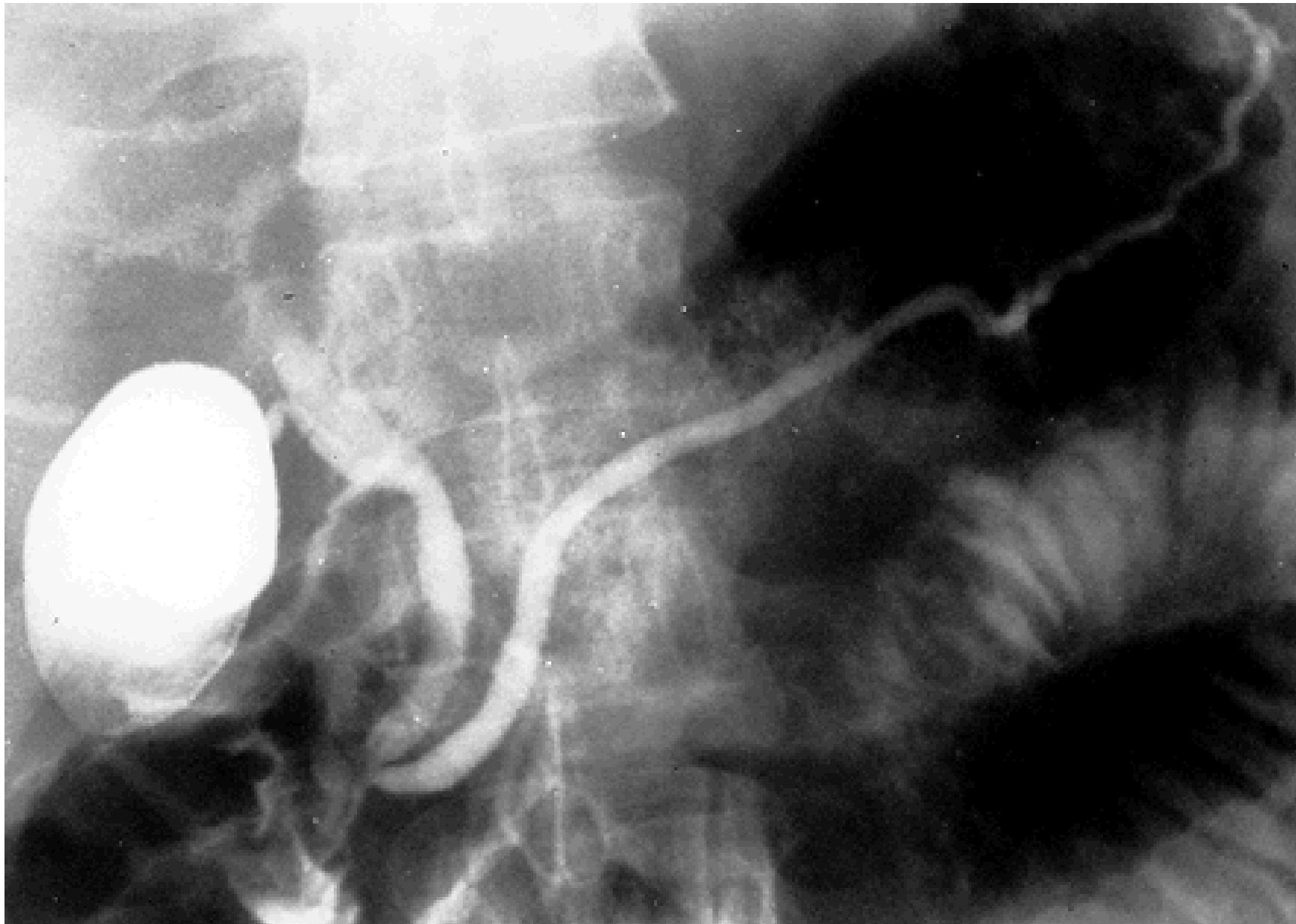
**Endocrine pancreas:**  
**islets of Langerhans**  
**insulin, glucagon**

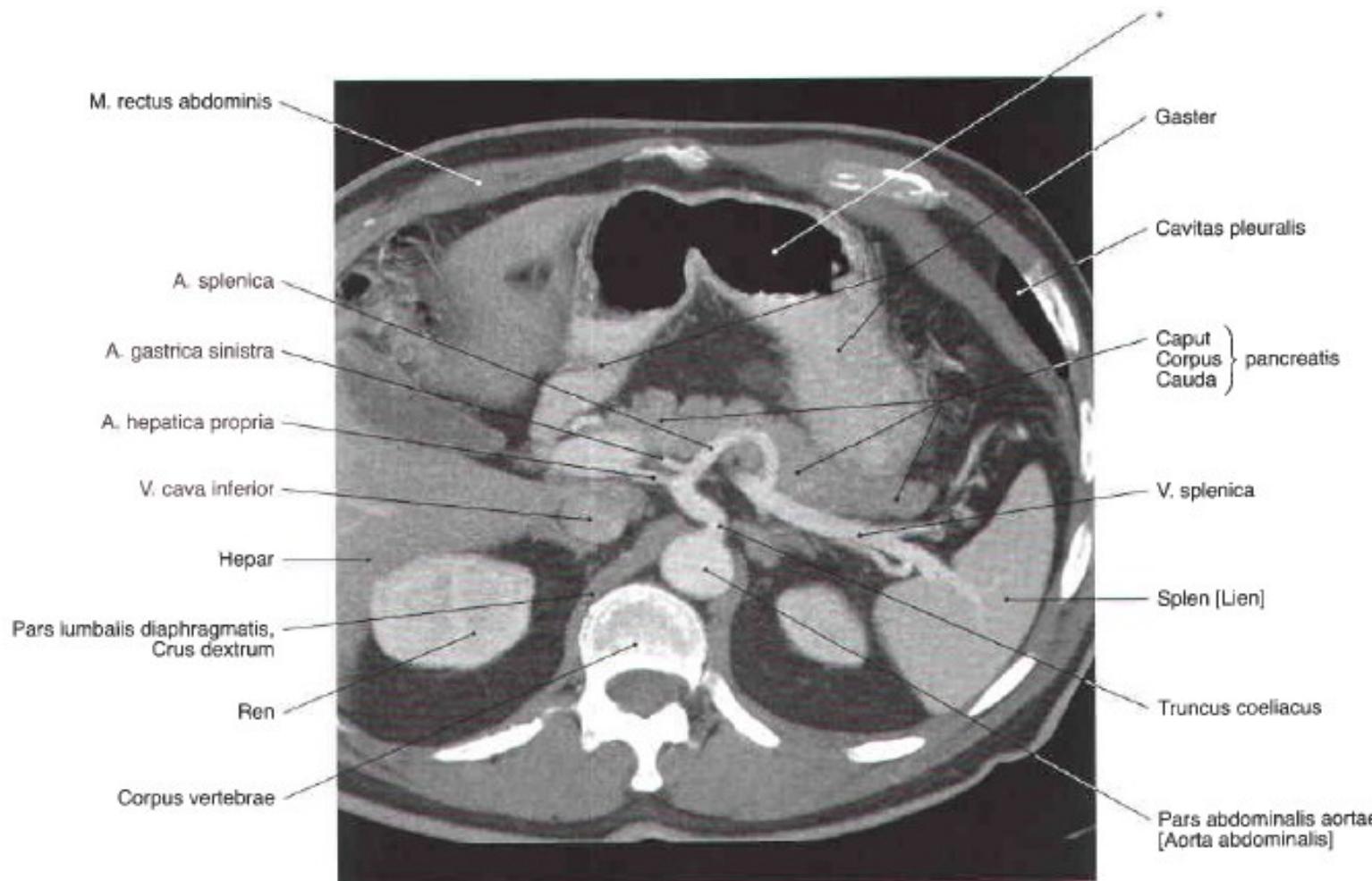


## **Umbilico-axillary line - point of Desjardin**



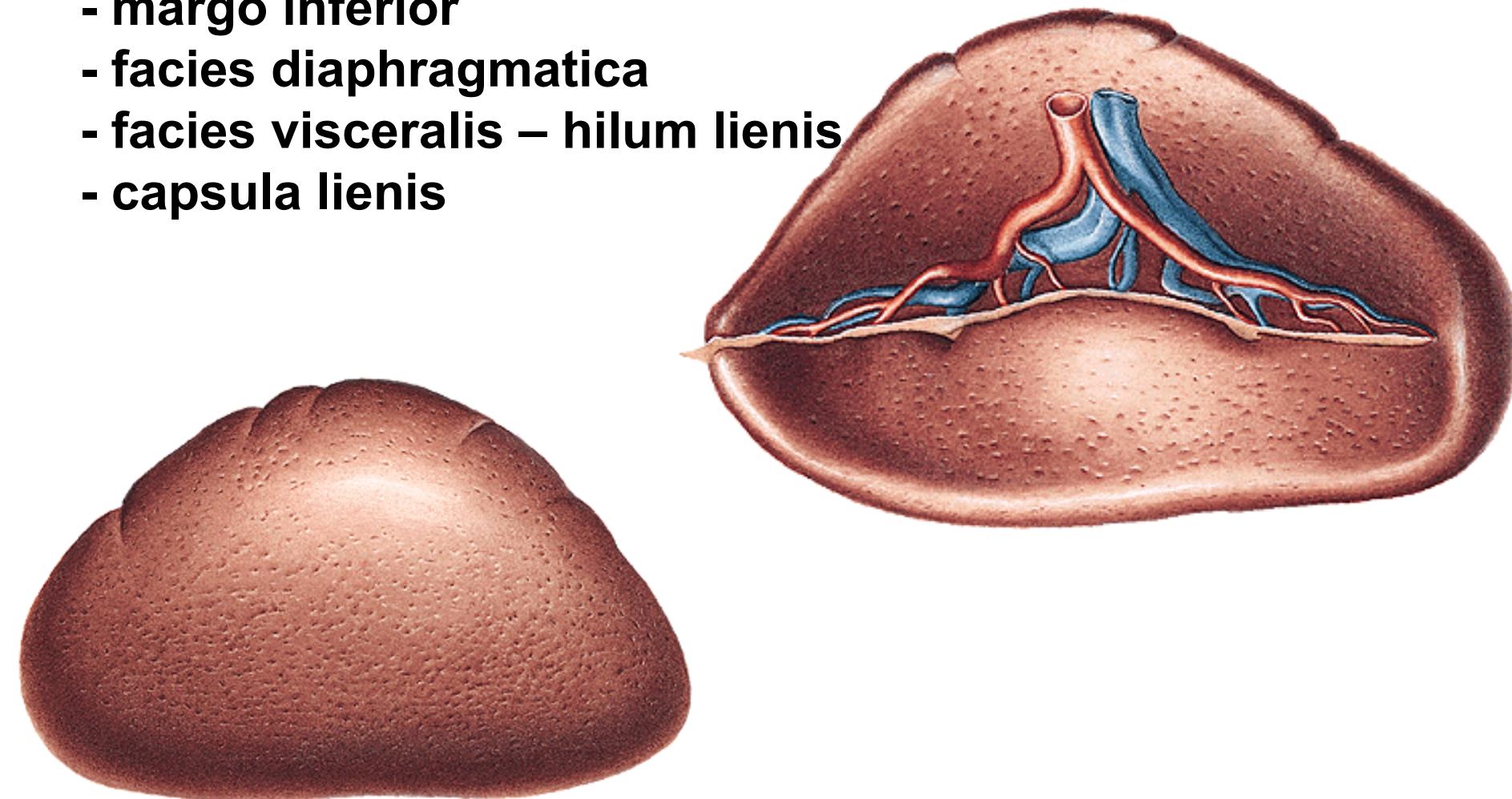
# ERCP – endoscopic retrograde cholangiopancreatography

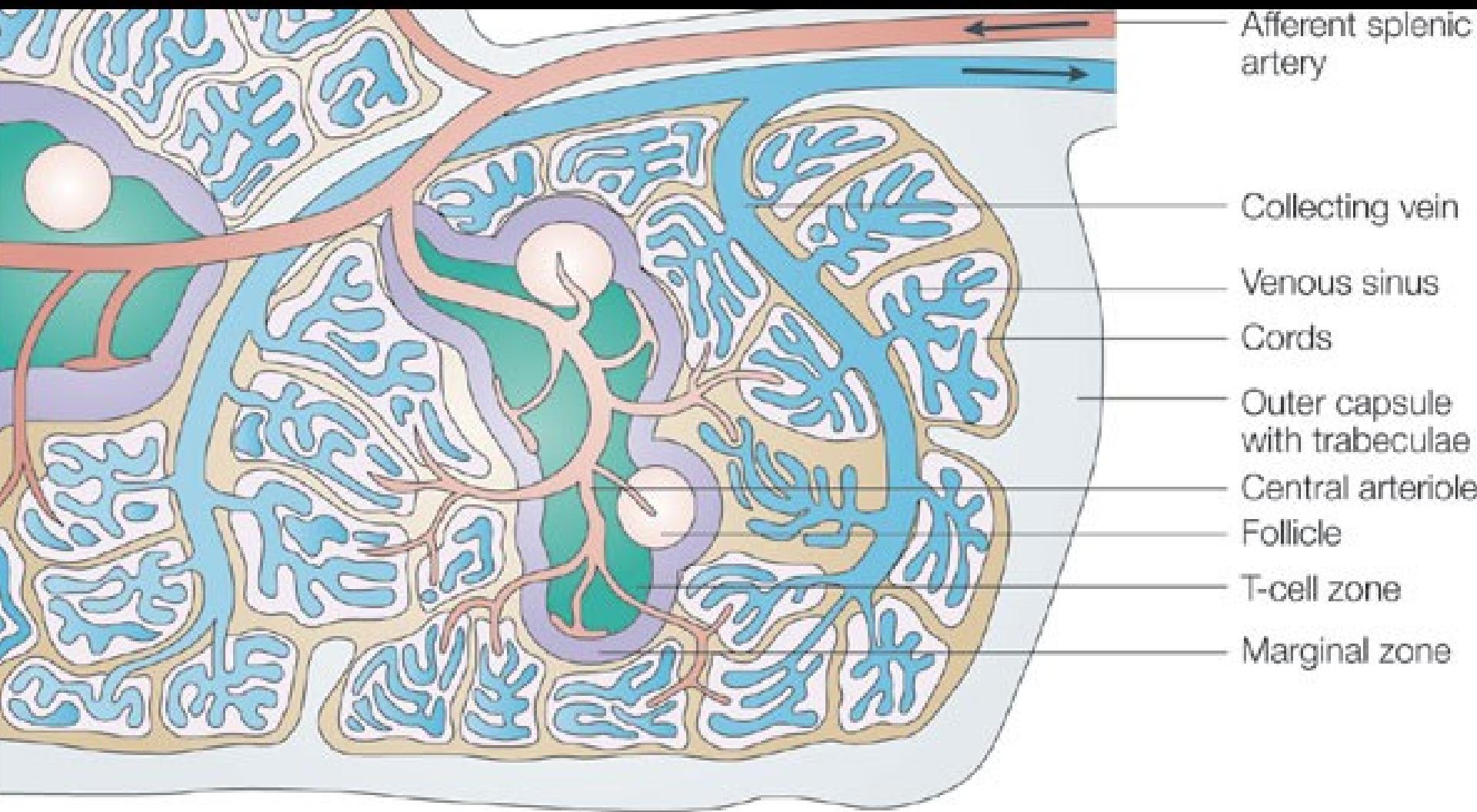




## **LIEN, SPLEN**

- **extremitas anterior**
- **extremitas posterior**
- **margo superior – crenae lienis**
- **margo inferior**
- **facies diaphragmatica**
- **facies visceralis – hilum lienis**
- **capsula lienis**

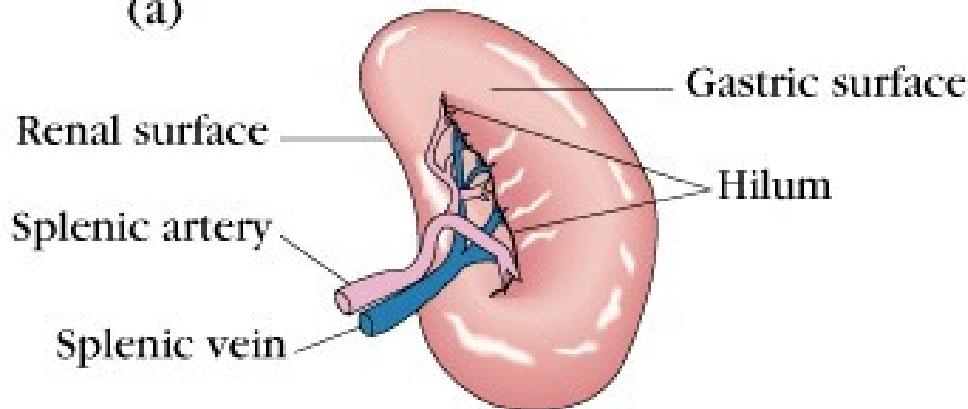




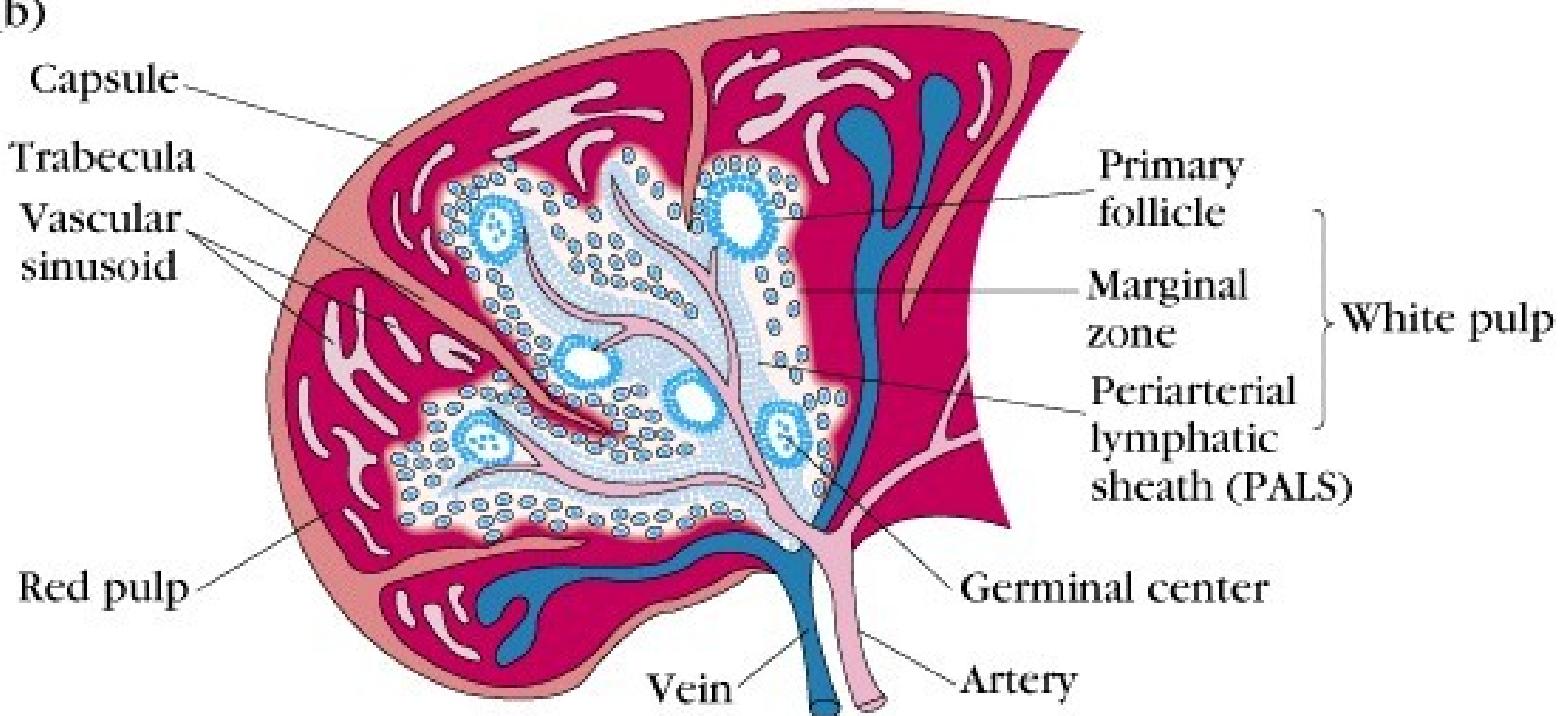
White pulp, red pulp

Splenectomy

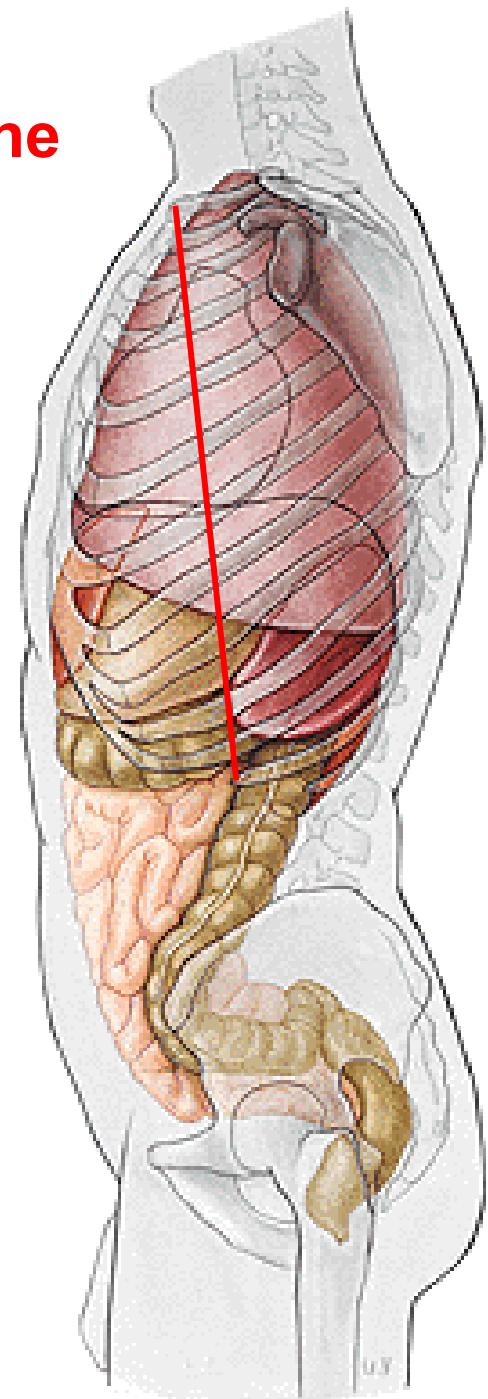
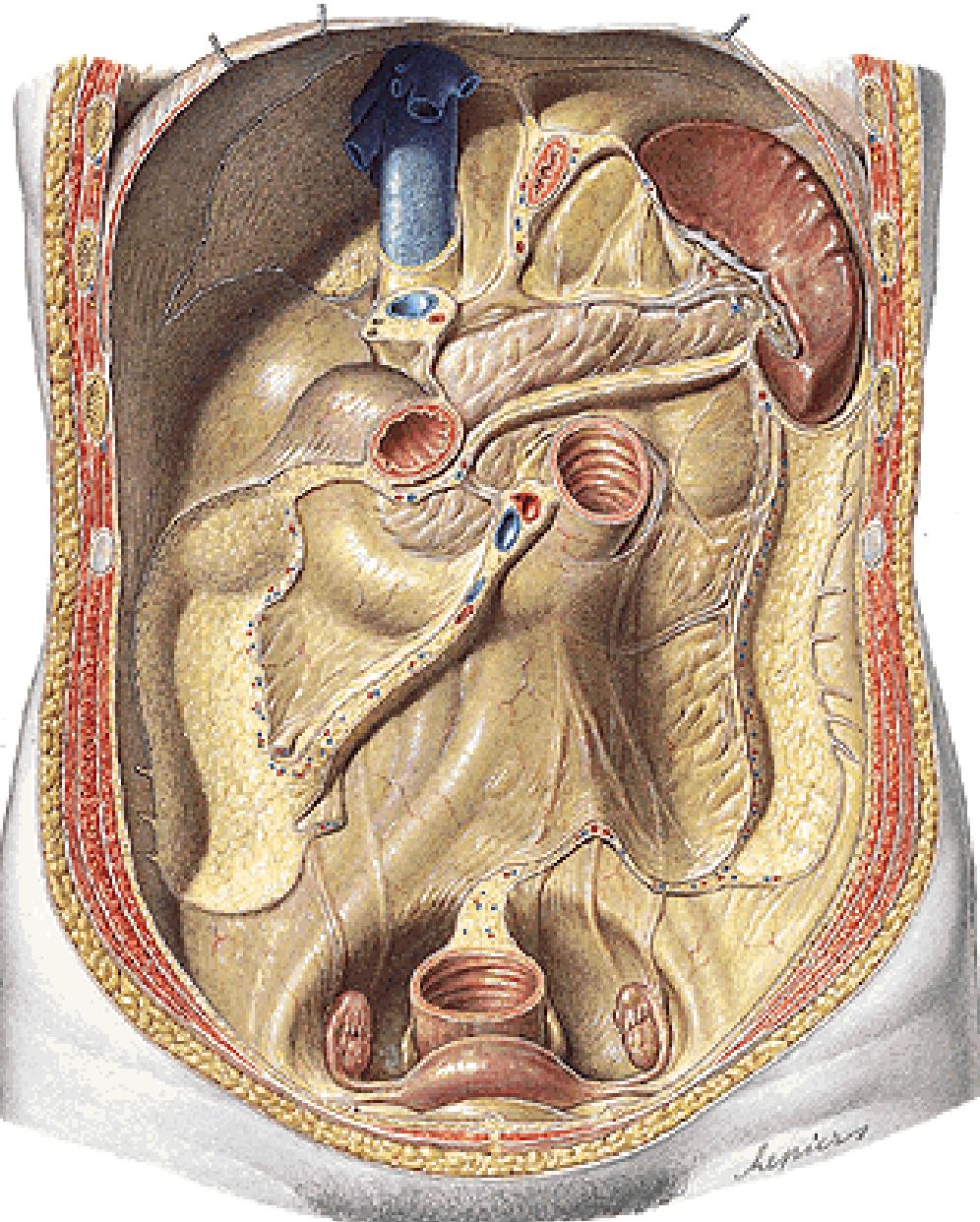
(a)



(b)



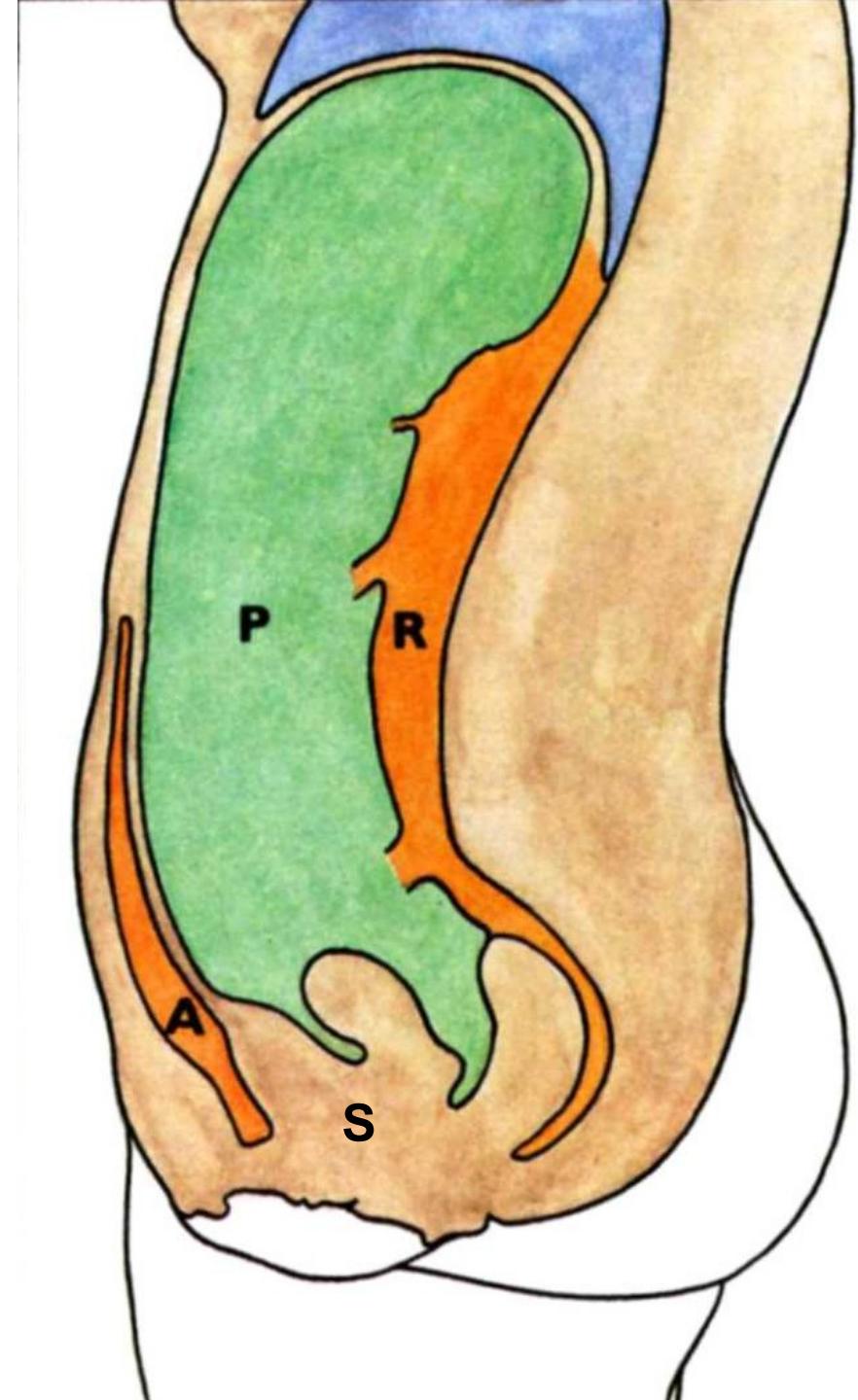
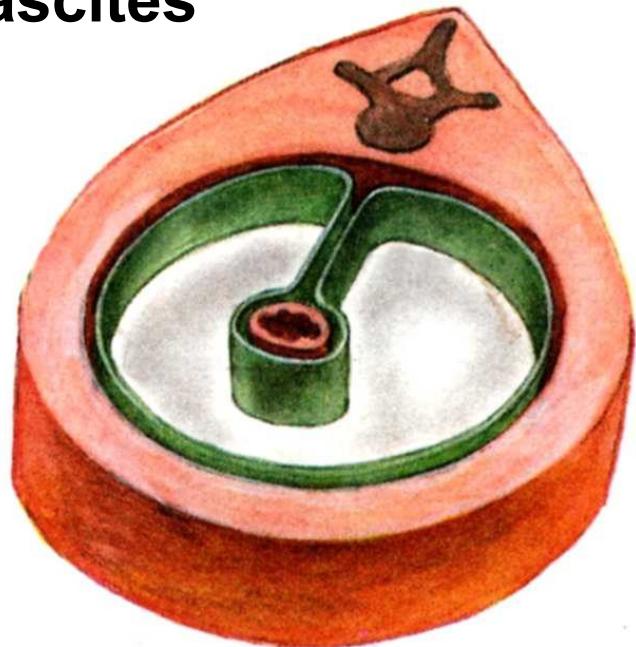
## Costoarticular line



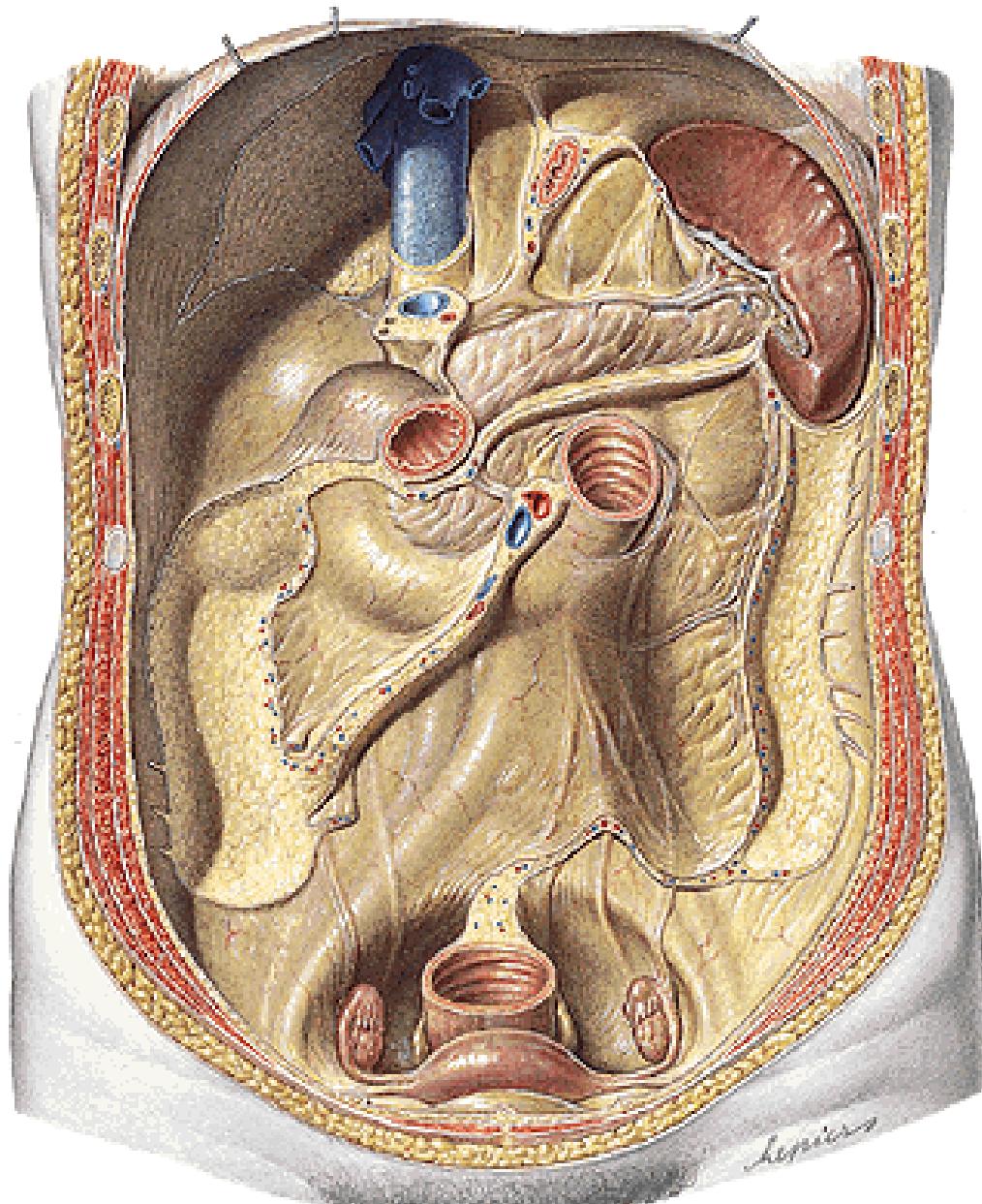
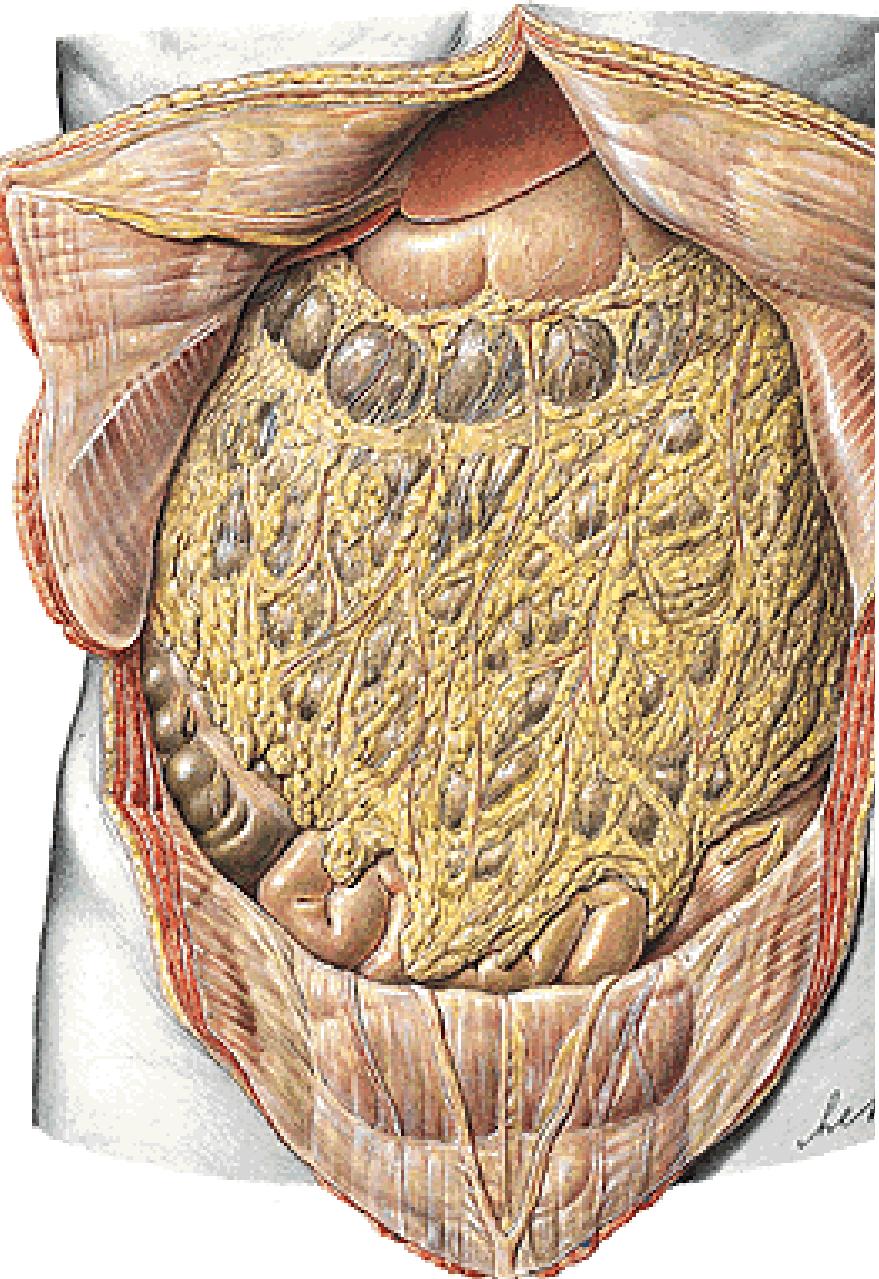
# CAVITAS ABDOMINALIS

P – cavitas peritonealis  
A – spatium preperitoneale  
R – spatium retroperitoneale  
S – spatium subperitoneale  
(infraperitoneale)

ascites

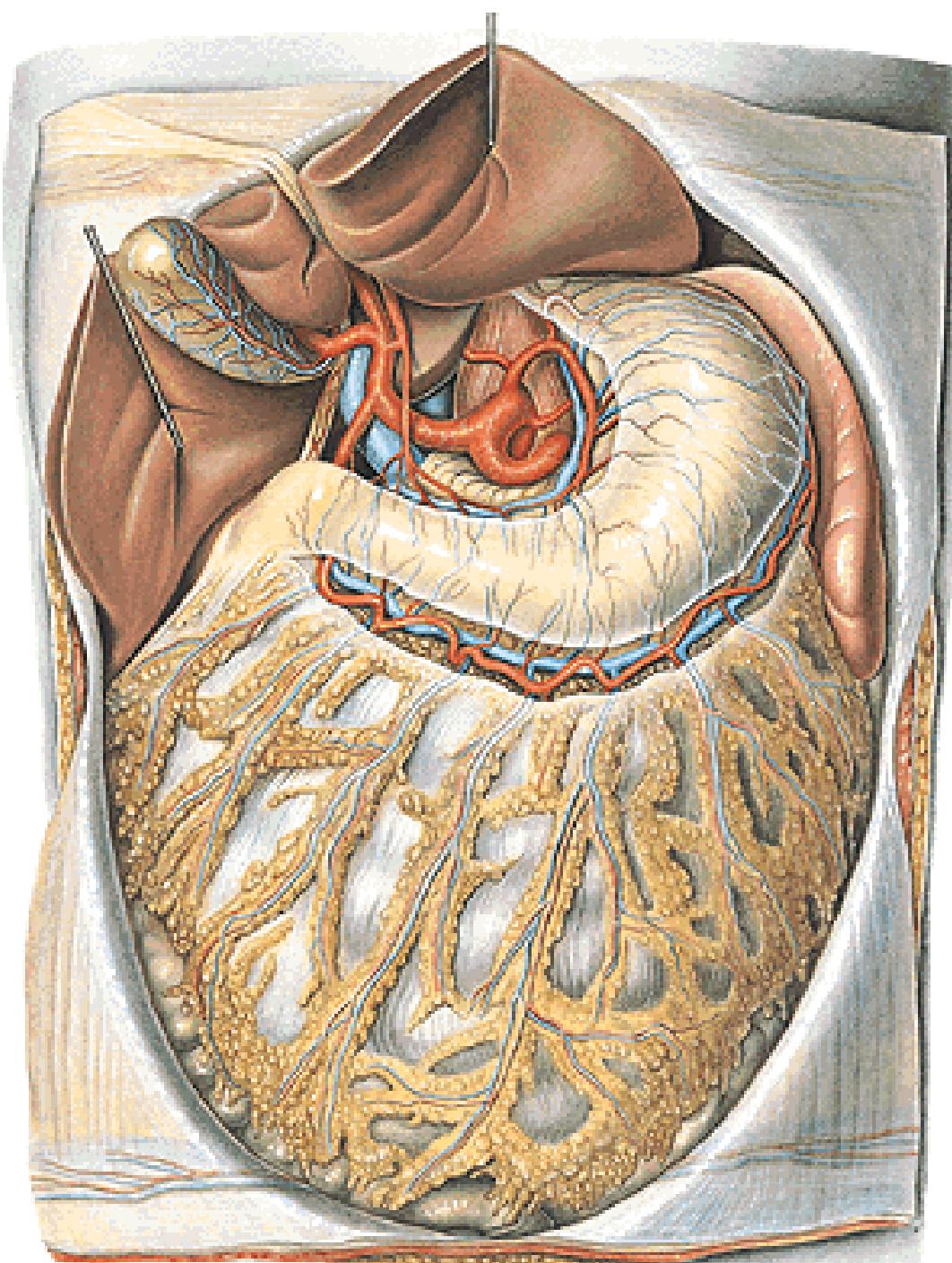


# Cavitas peritonealis - pars supramesocolica, inframesocolica



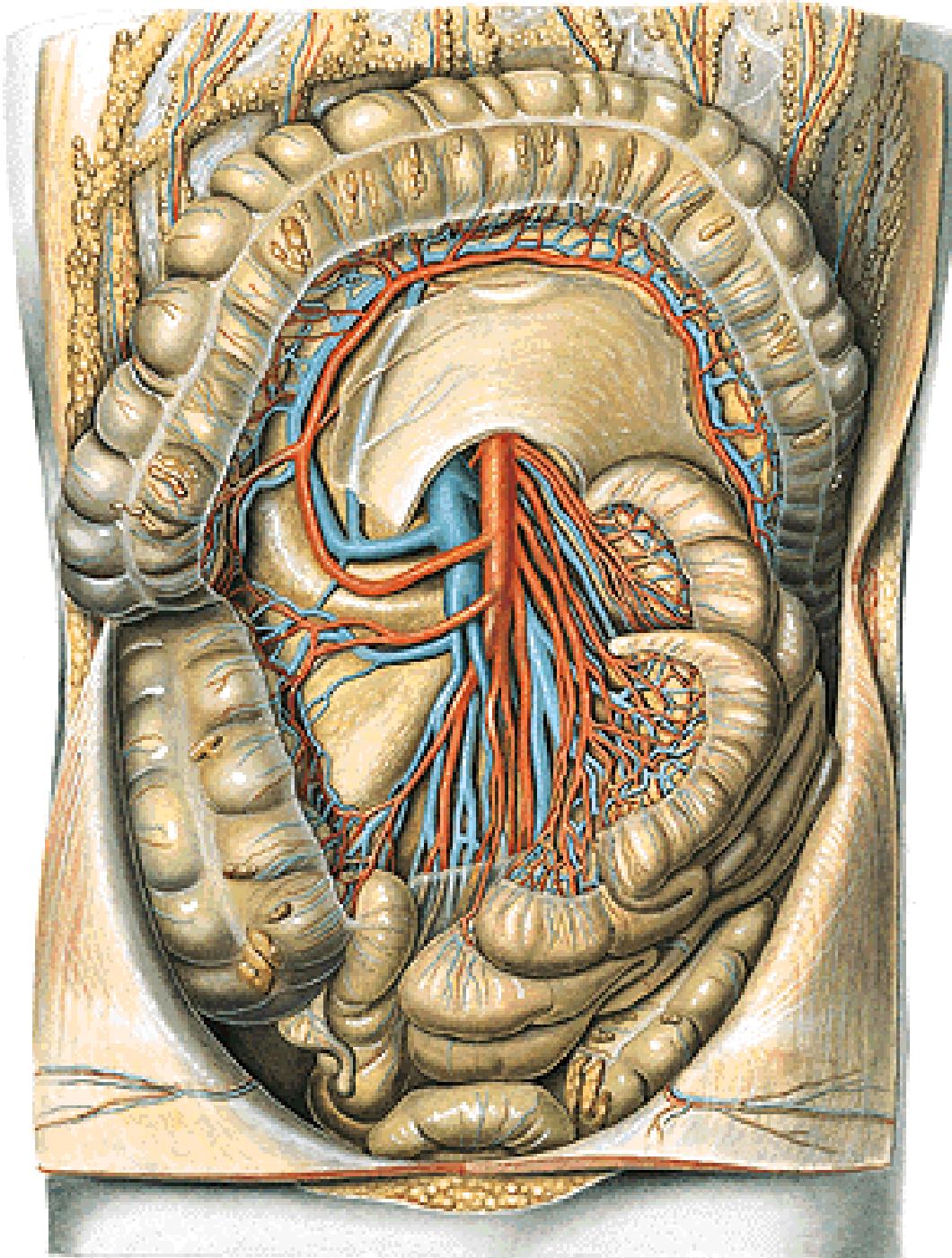
**Pars supramesocolica**

**Truncus coeliacus**



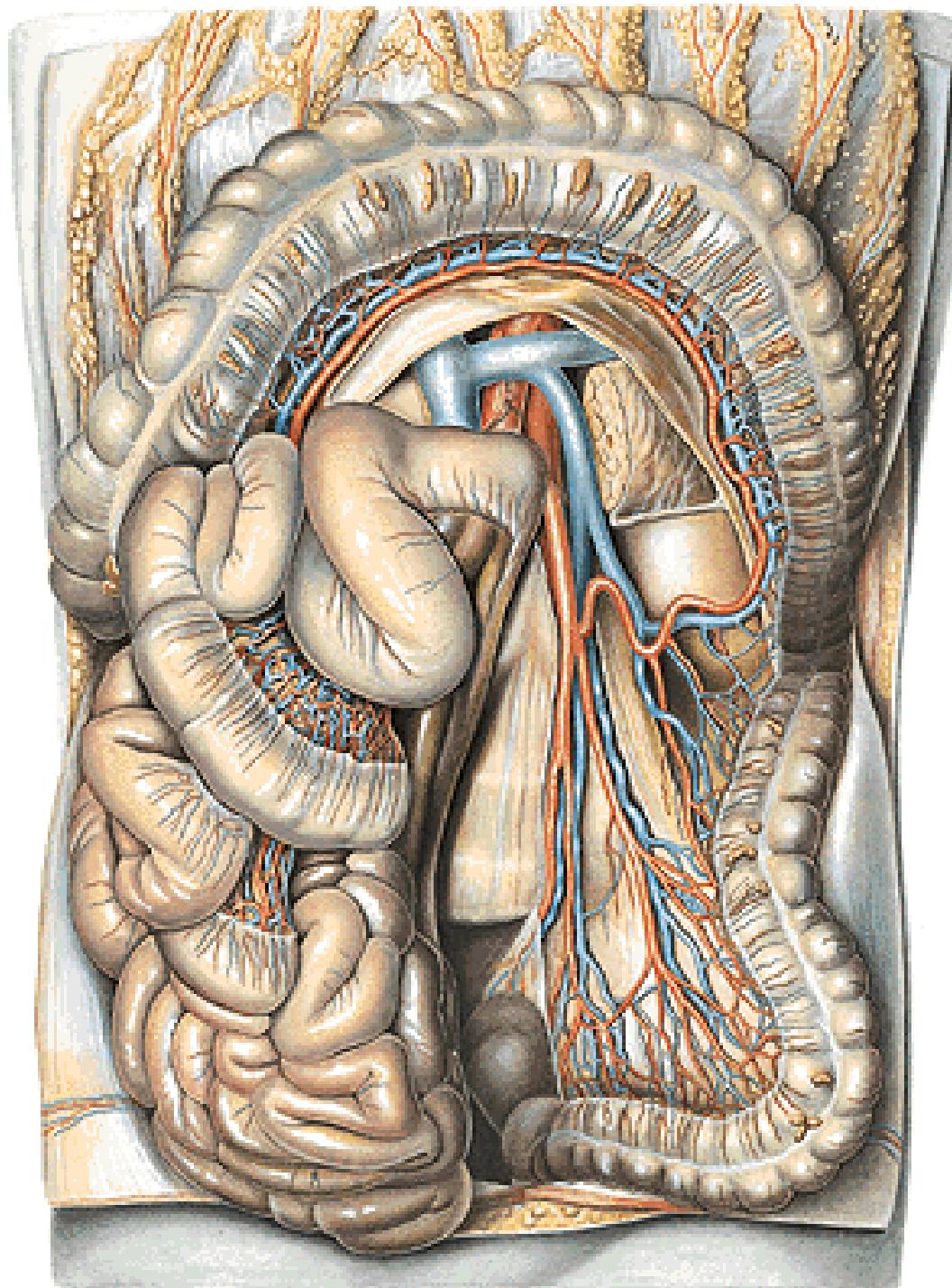
## Pars inframesocolica

### A. mesenterica superior



# **Pars infrramesocolica**

## **A. mesenterica inferior**



Omentum minus - lig. hepatogastricum

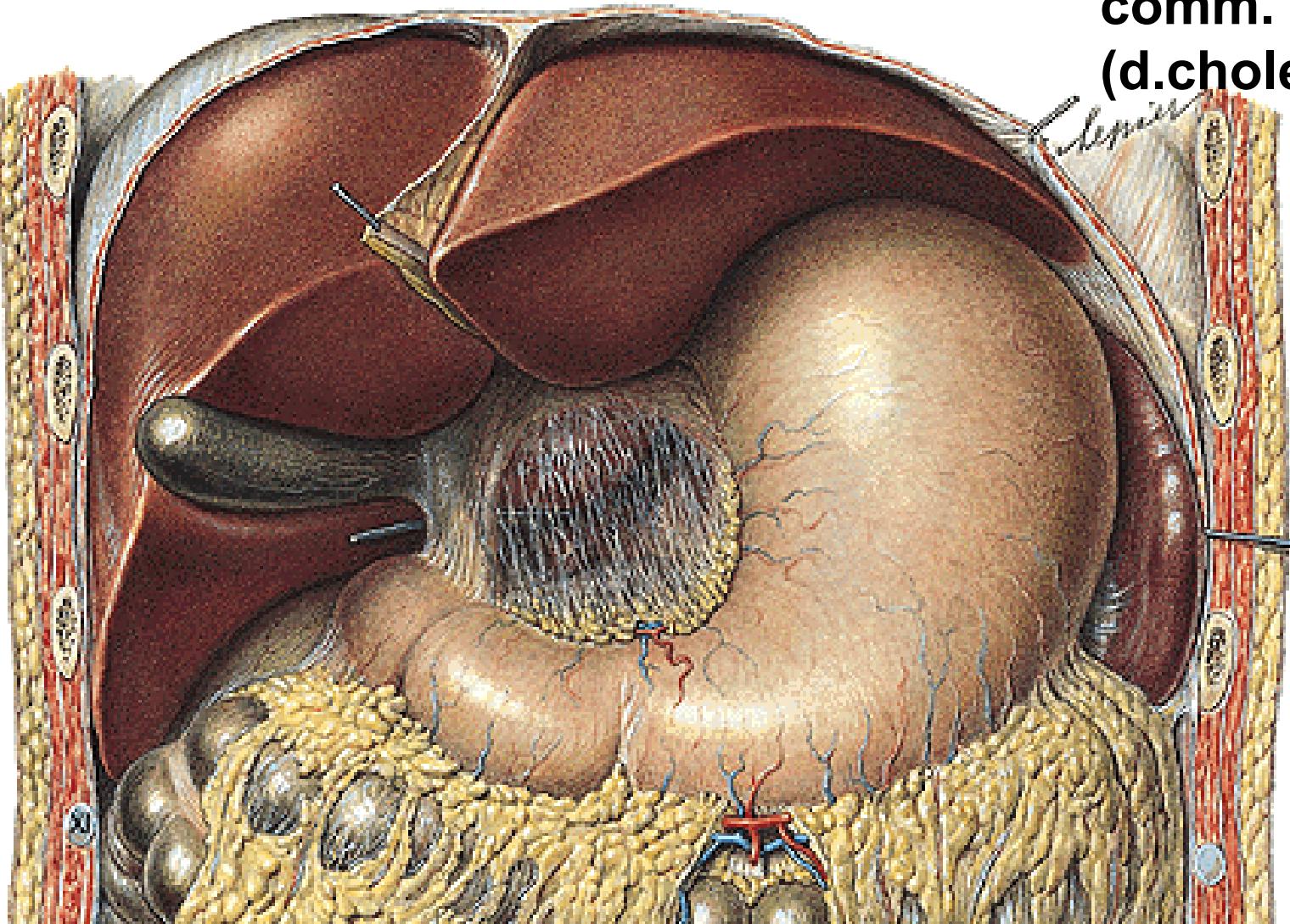
- lig. hepatoduodenale - a. hepatica propria

- v. portae

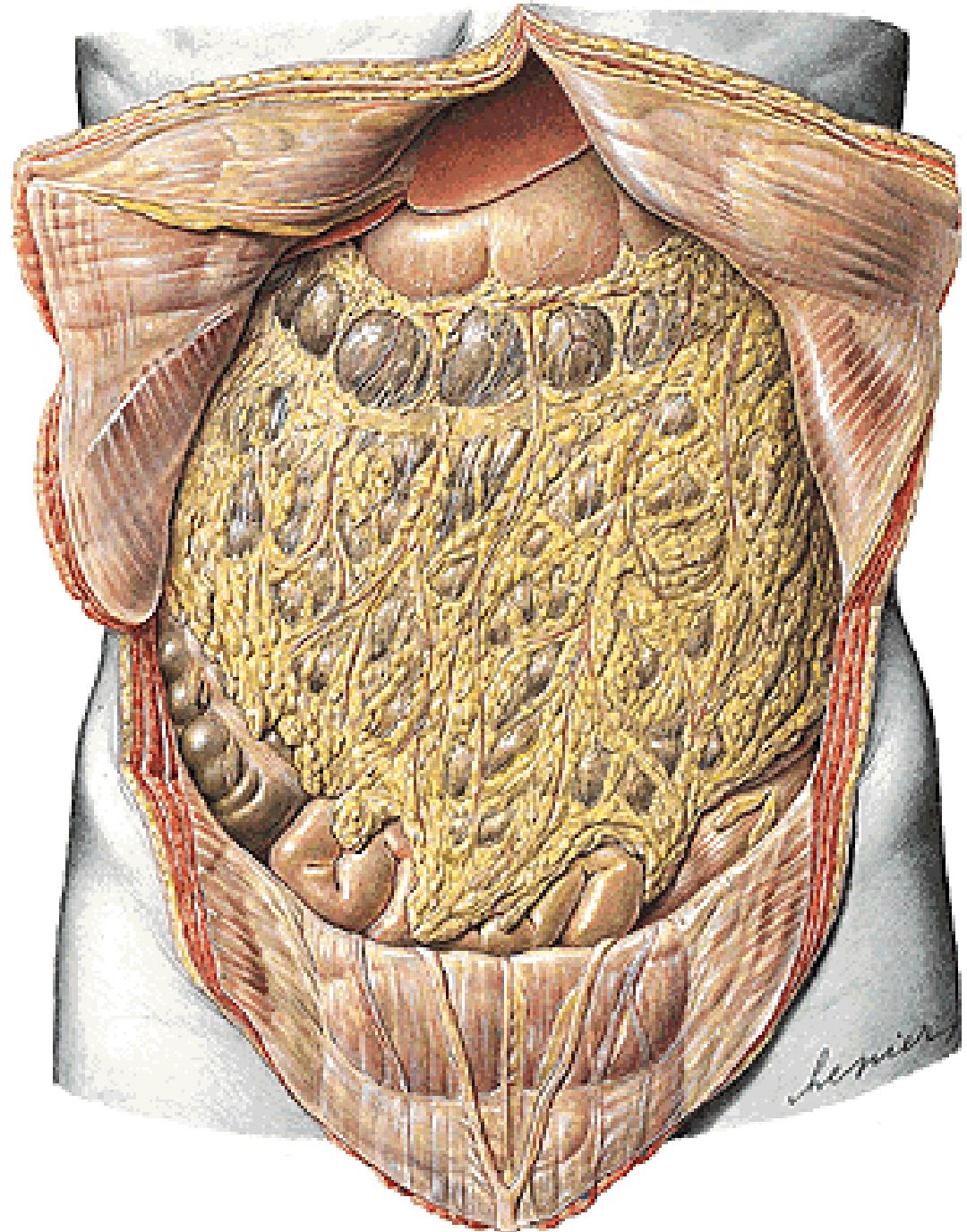
- ductus hepaticus

comm.

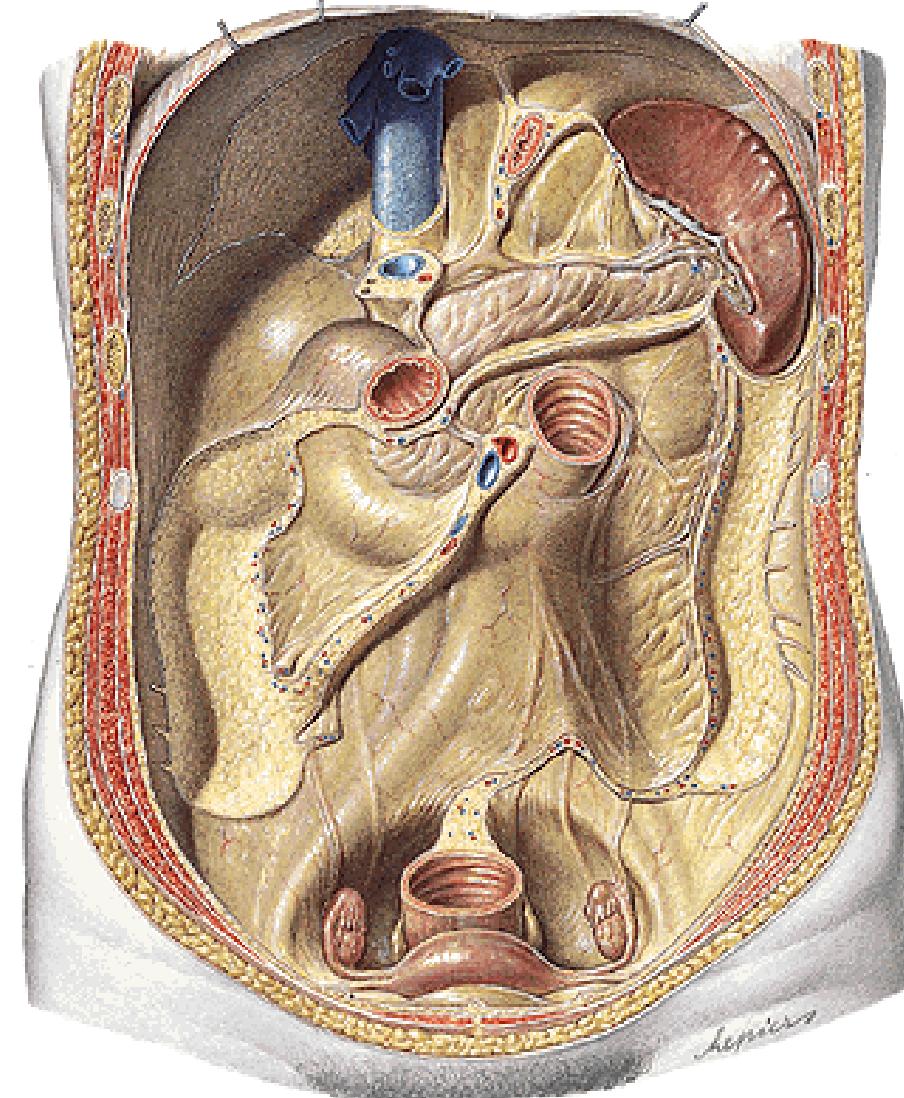
(d.choledochus)



# Omentum majus - lig. gastrocolicum

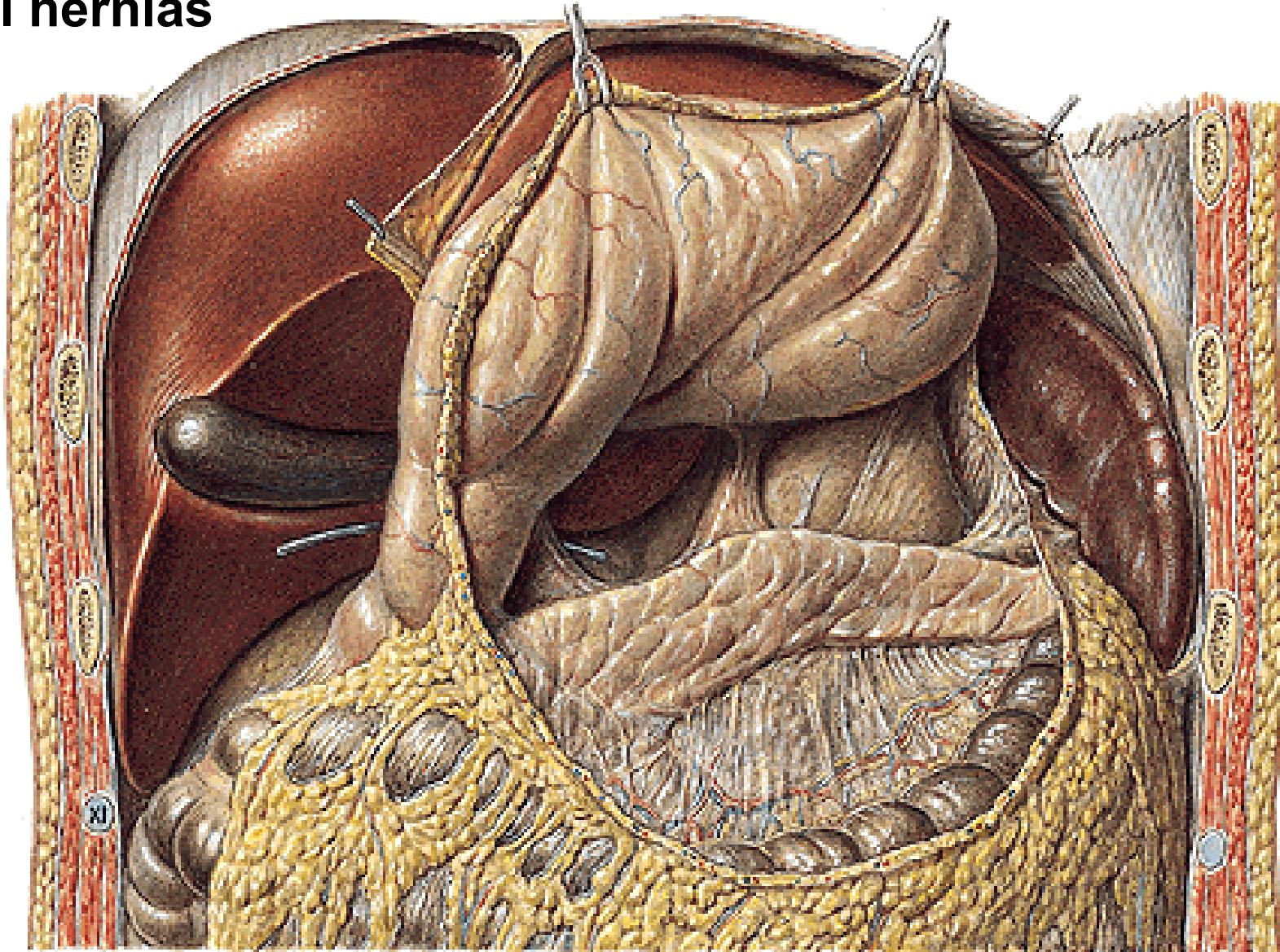


**Lig. gastrosplenicum, phrenicosplenicum, splenorenale**  
**Mesenterium – radix mesenterii**  
**Mesocolon transversum, mesoappendix, mesocolon**  
**sigmoideum, lig. phrenicocolicum**

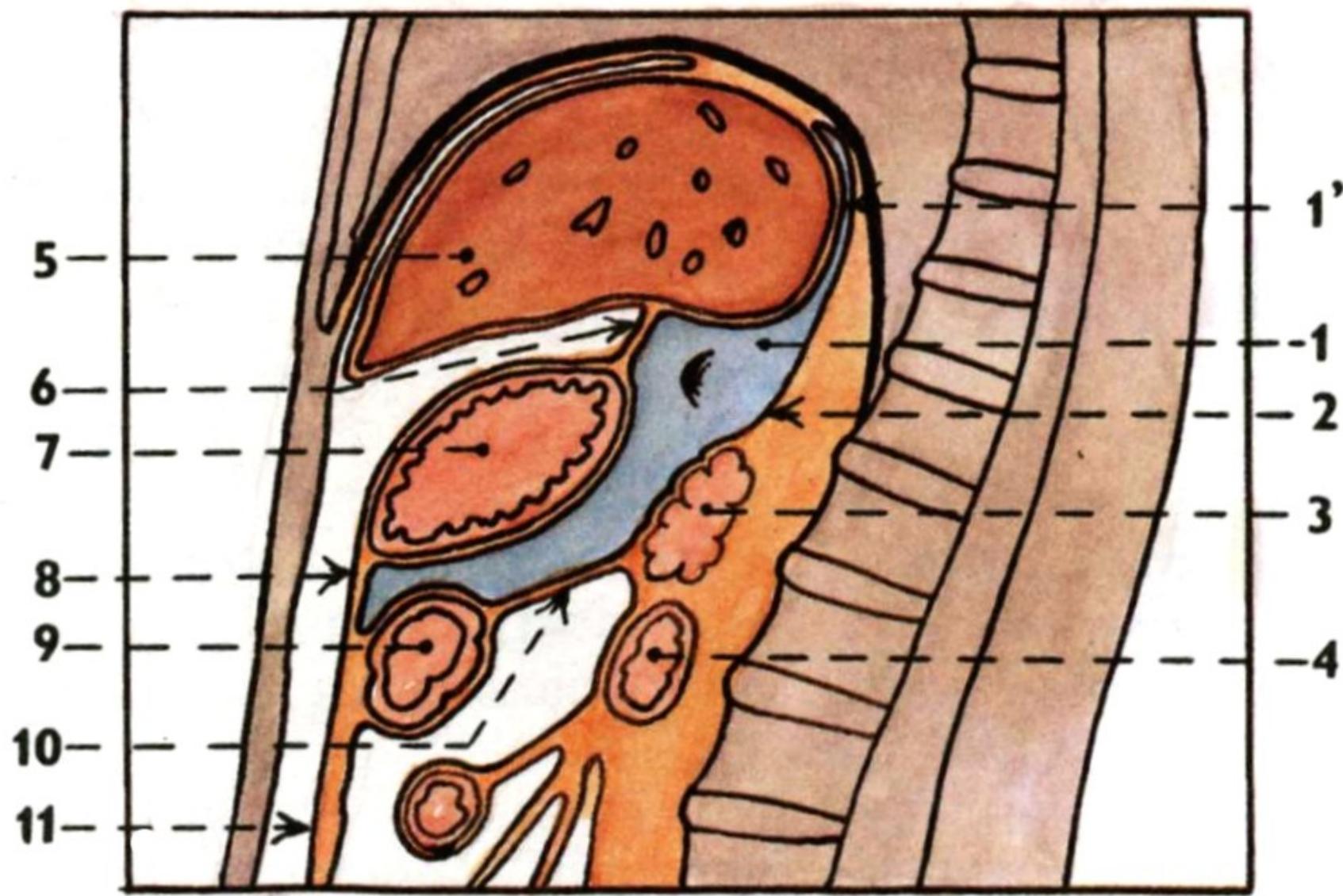


# Bursa omentalis

## Internal hernias

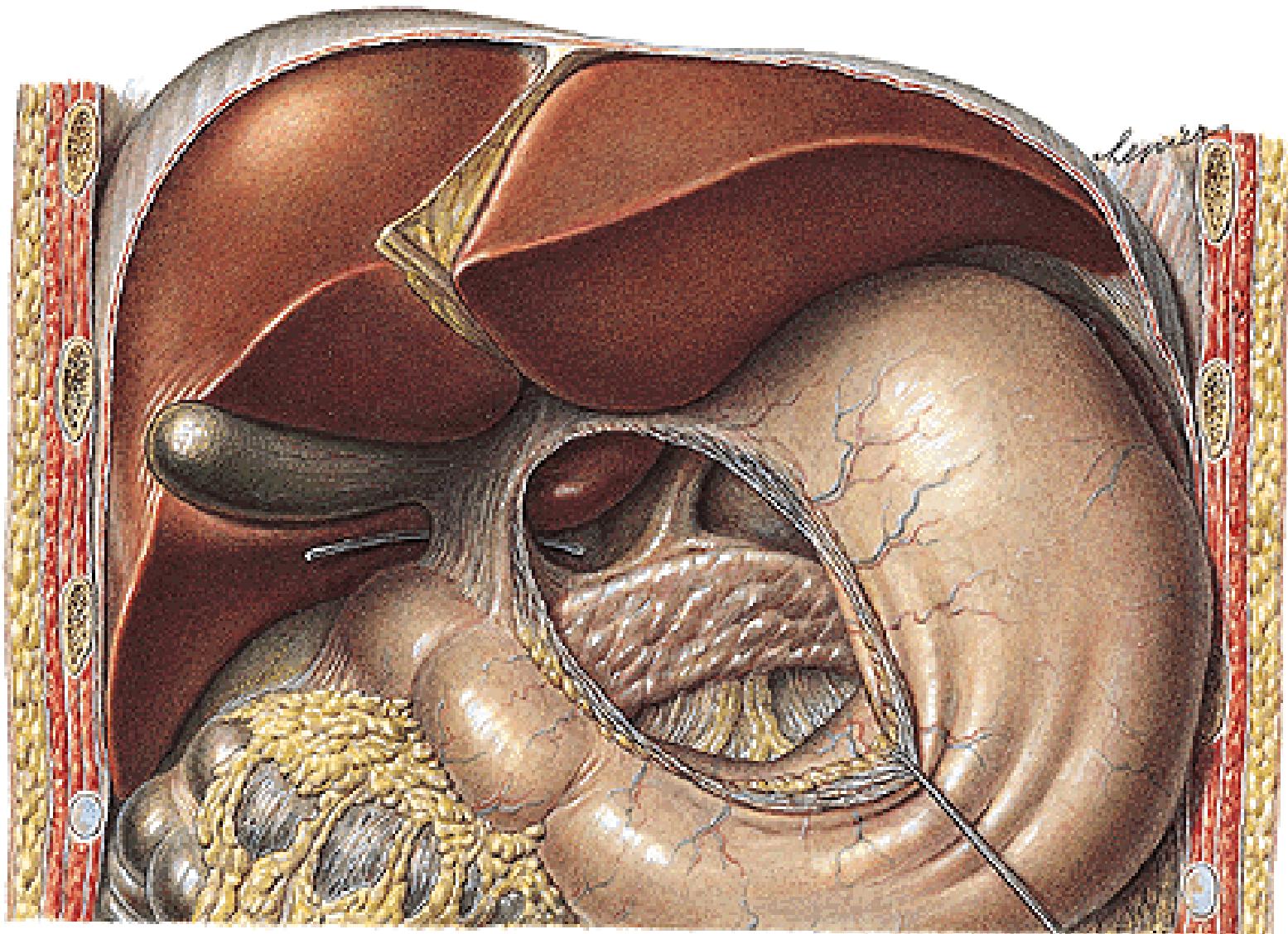


# Bursa omentalis

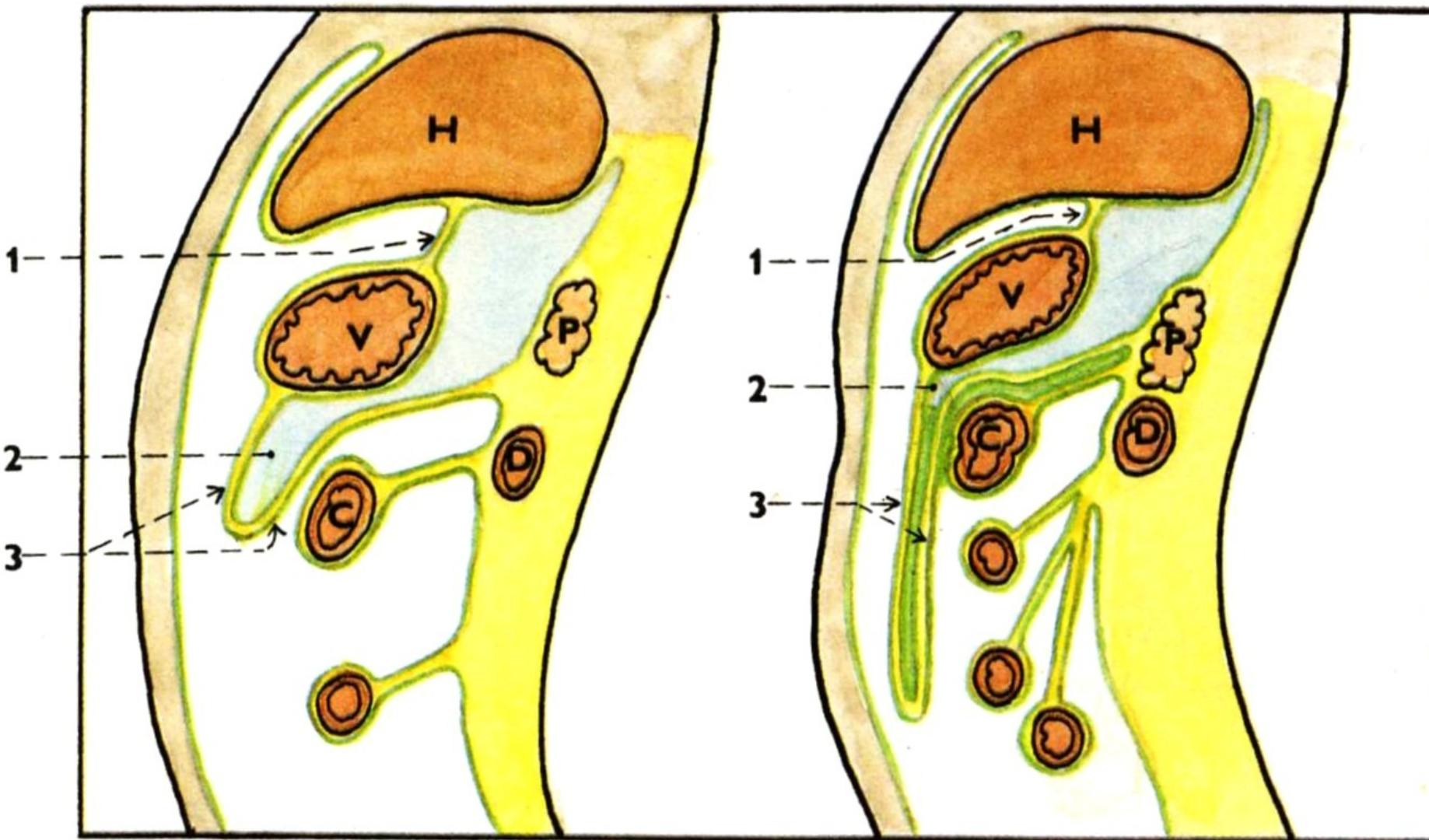


# Foramen epiploicum/omentale (Winslow)

Recessus sup., splenicus, inf.

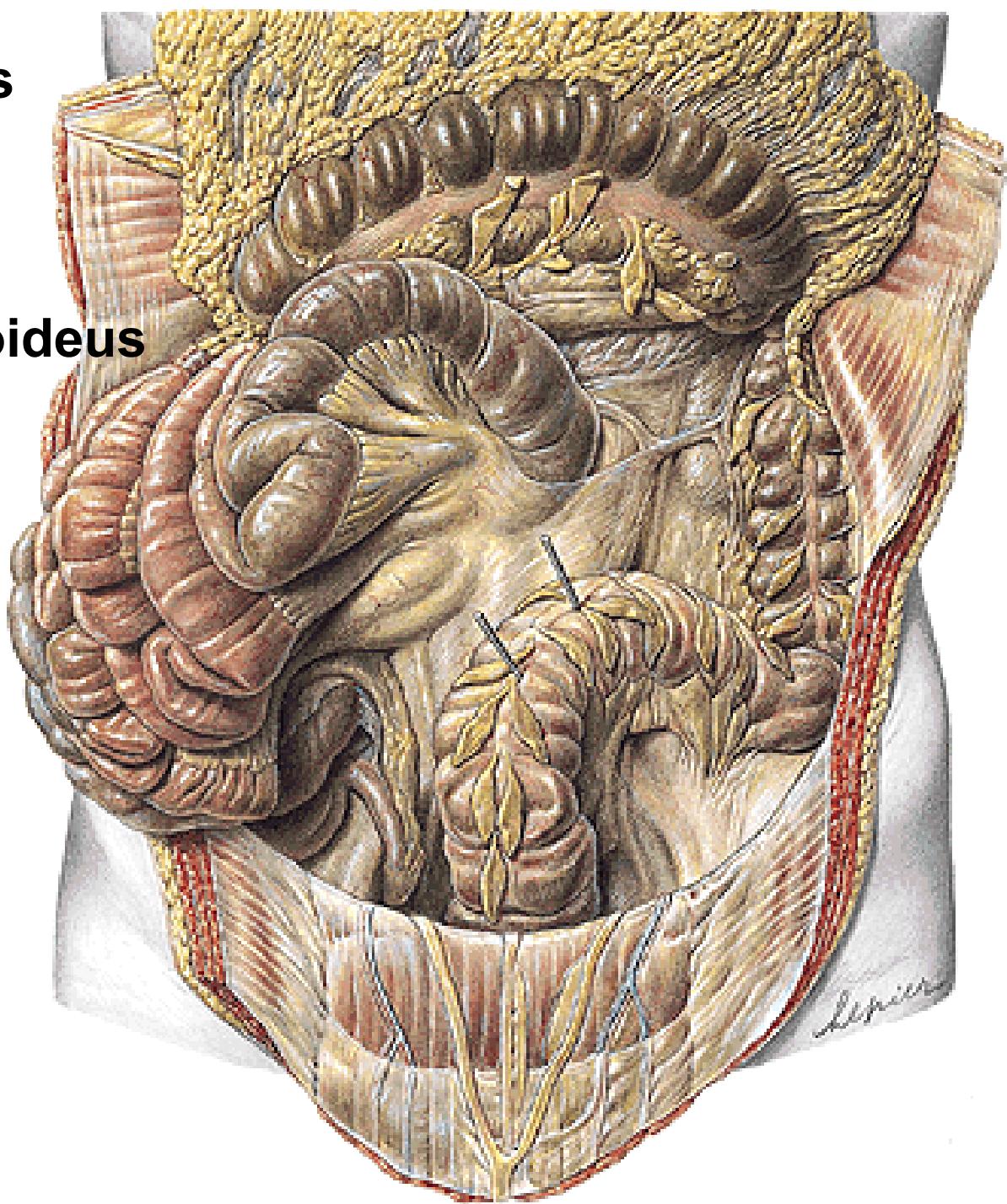


# Recessus inferior bursae omentalis

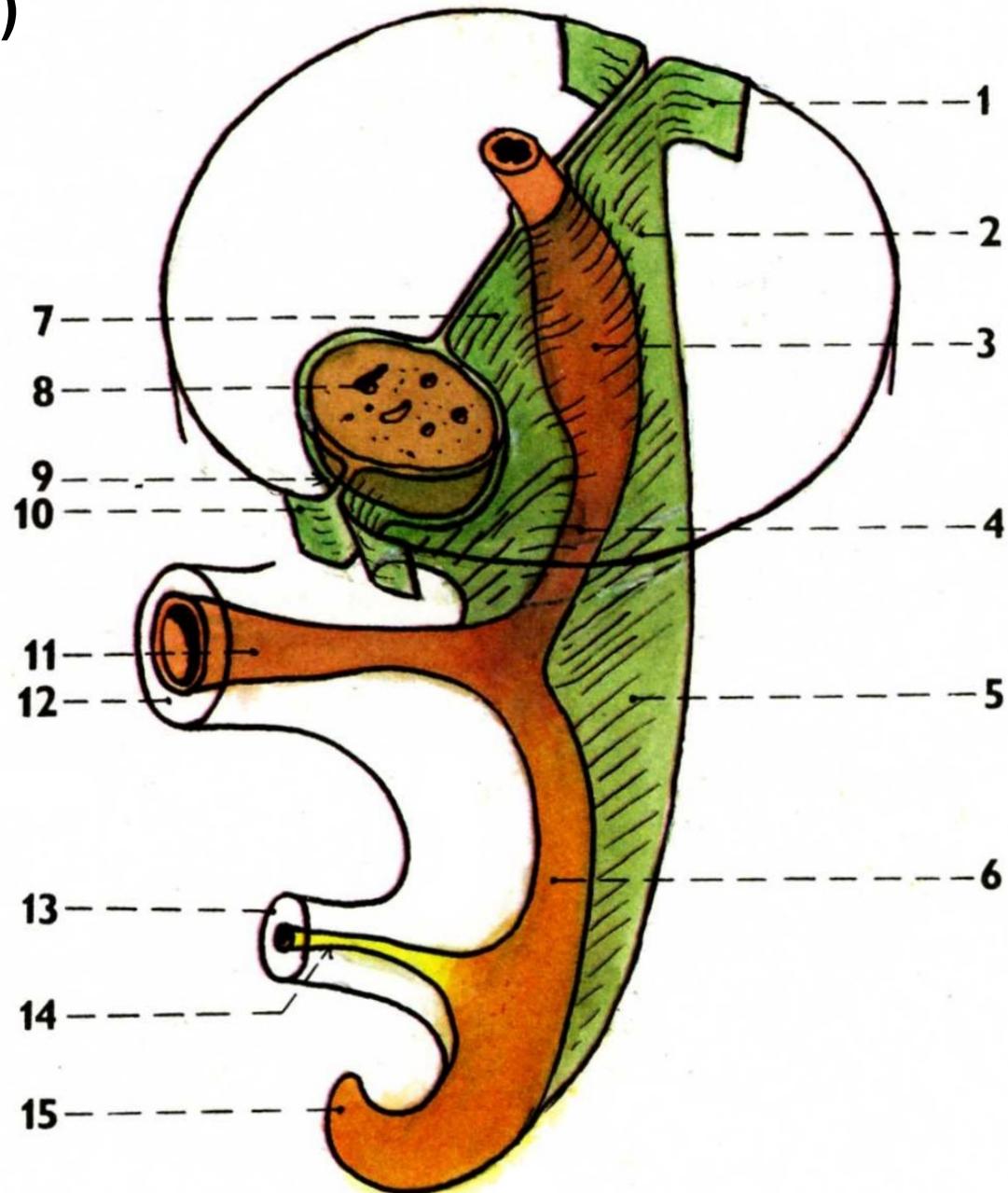
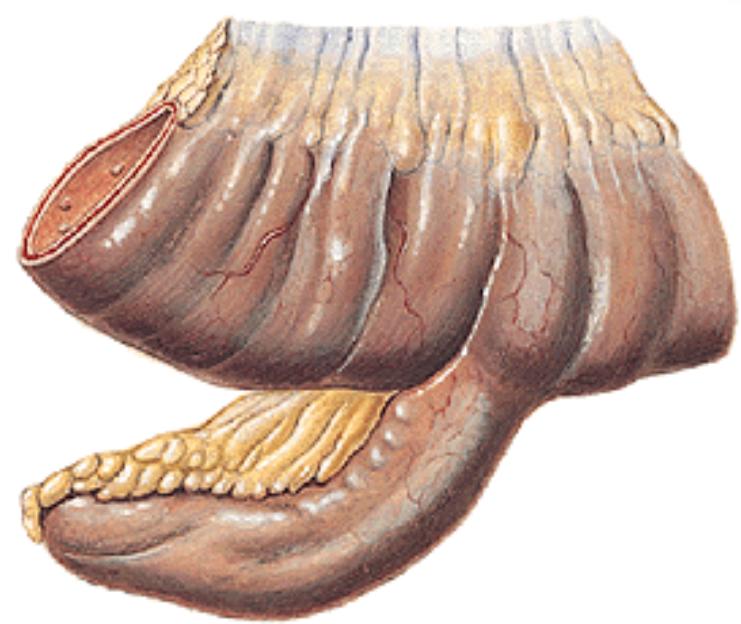


**Recessus duodenalis  
sup., inf., sinister,  
retroduodenalis**

**Recessus intersigmoideus**



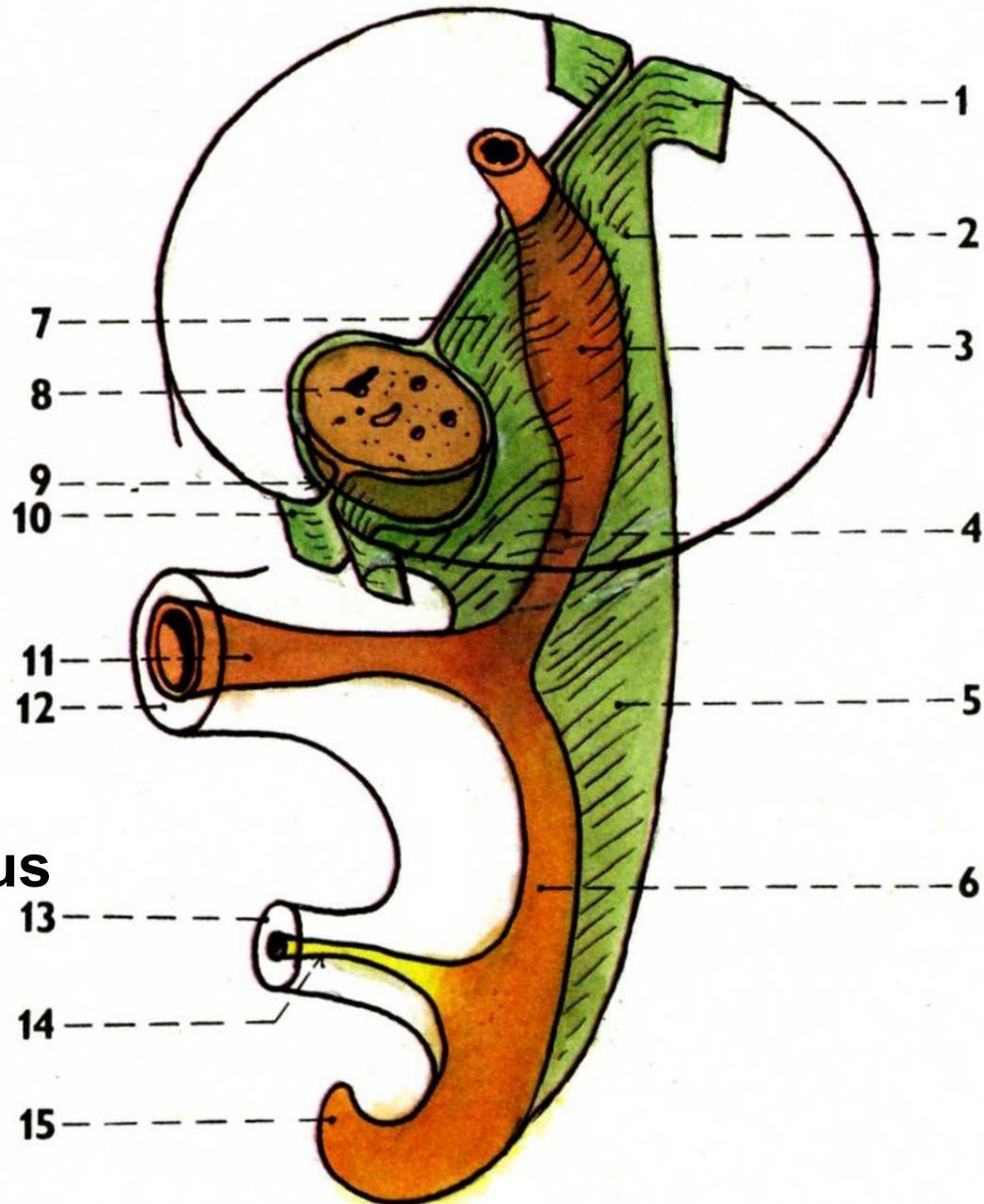
# Ductus omphaloentericus Ileal diverticulum (Meckel)



**Mesenterium dorsale**  
**Septum transversum**  
**Mesogastrium ventrale**

# Development of the peritoneum

1. peritoneum parietale
2. mesogastrium dorsale
3. anlage of the stomach
4. anlage of the duodenum
5. mesenterium
6. hindgut
7. mesogastrium ventrale
8. liver
9. mesogastrium ventrale
10. peritoneum parietale
11. ductus omphaloentericus
12. umbilicus
13. connecting stalk
14. allantois
15. hindgut



# Development of the peritoneum

16.anlage of the bursa  
omentalis

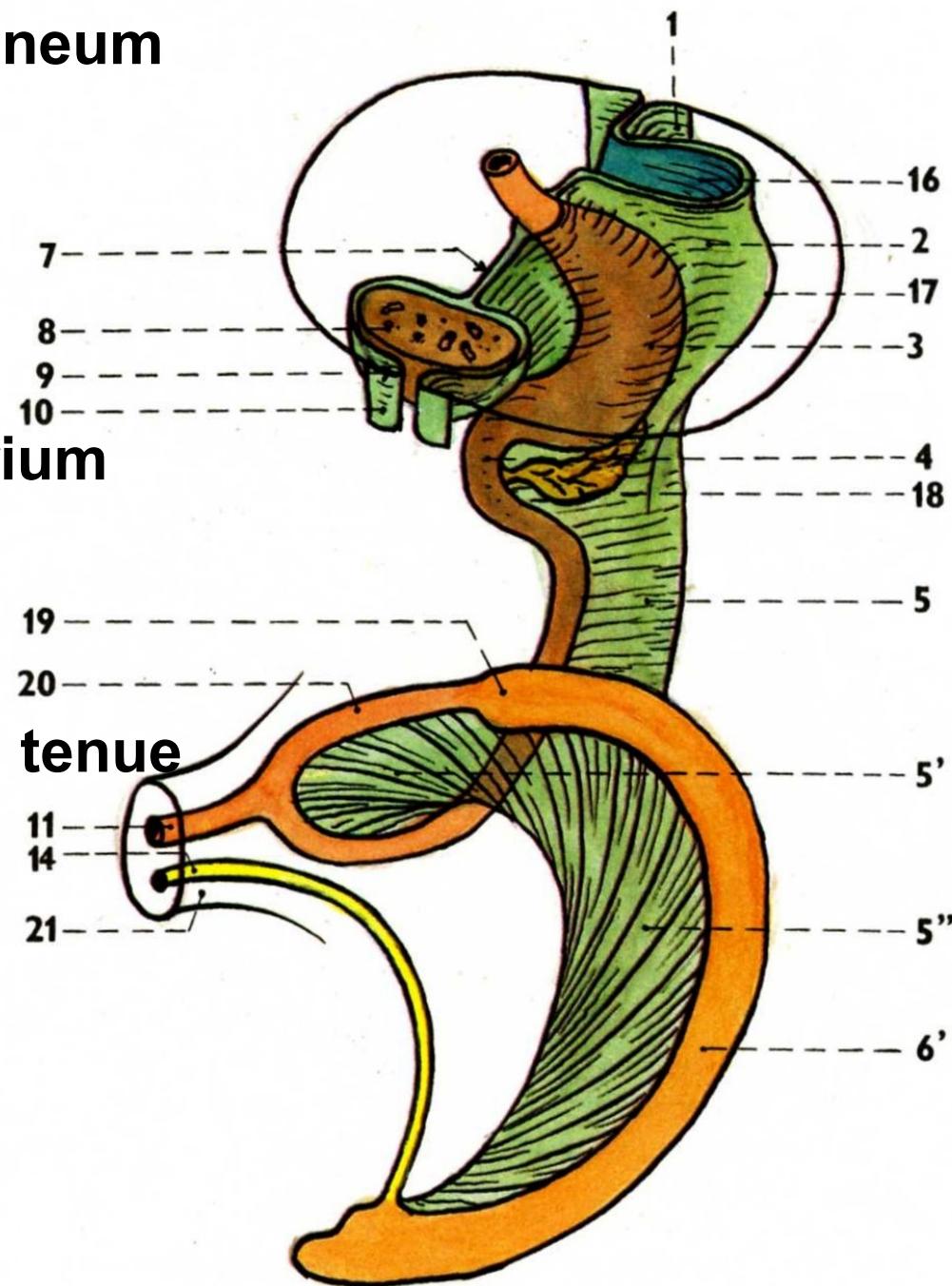
17.spleen in the mesogastrium  
dorsale

18.anlage of the pancreas

19.anlage of the caecum

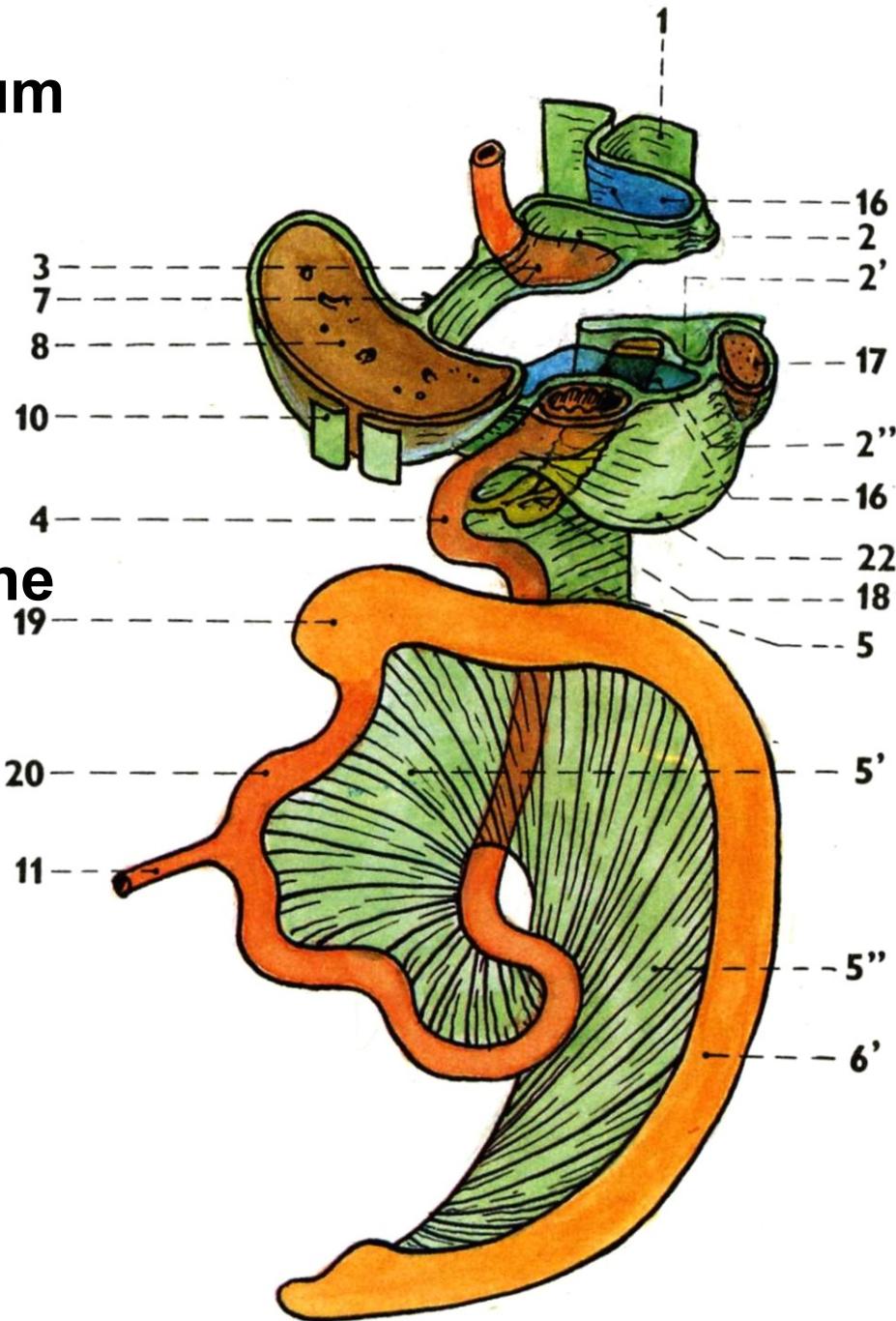
20.anlage of the intestinum tenue

21.umbilicus



# Development of the peritoneum

- 2'. lig. phrenicolienale
- 2''. lig. gastrolienale
- 5'. mesenterium
- 5''. mesocolon
- 6'. anlage of the large intestine
- 22. omentum majus



# Development of the peritoneum

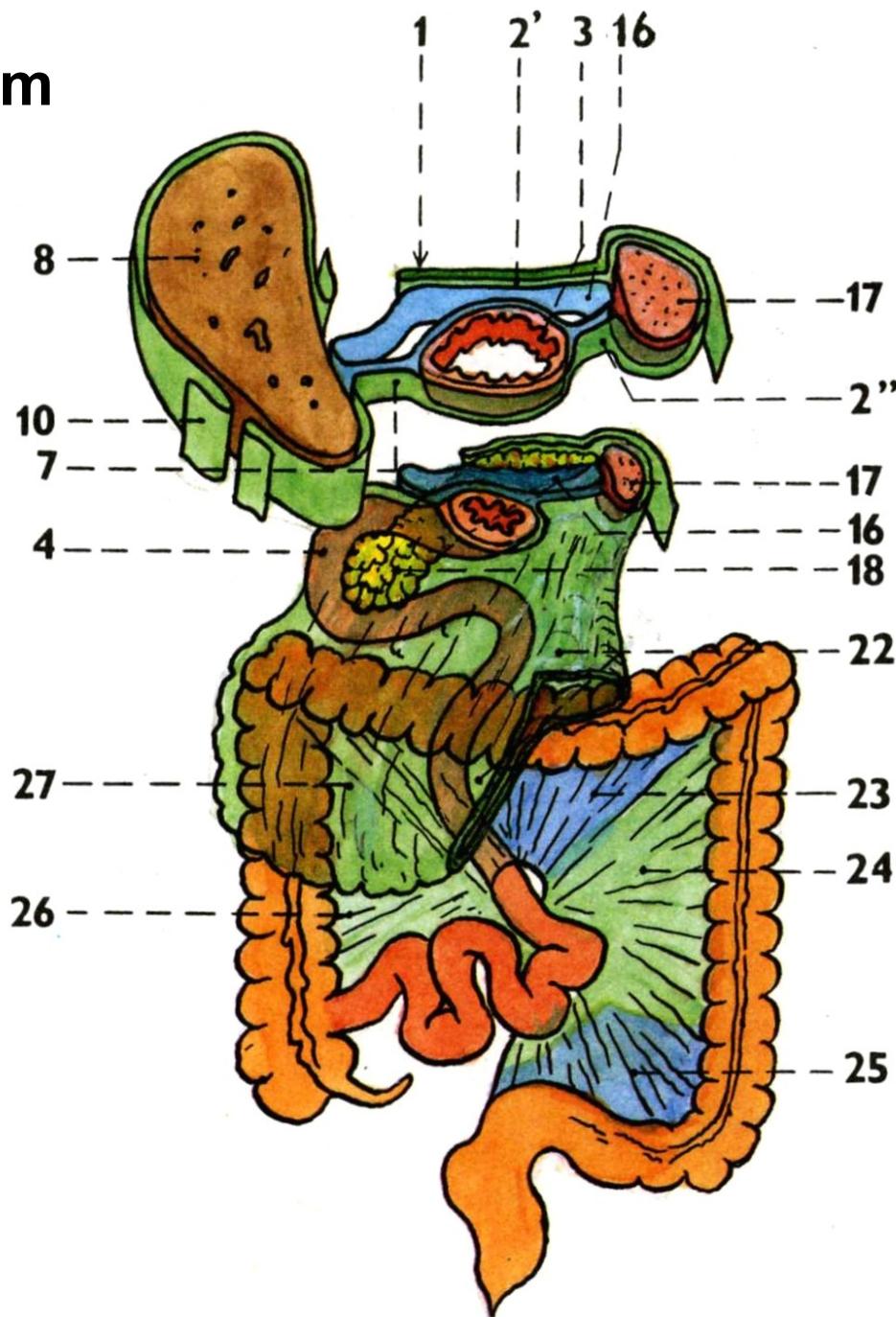
23. mesocolon transversum

24. mesentery of the colon  
descendens

25. mesocolon sigmoideum

26. mesentery of the colon  
ascendens

27. omentum majus



Illustrations 34, 43, 45, 47-49 were copied from:

**Čihák R: Anatomie 2 (Splanchnologia). Avicenum,  
zdravotnické nakladatelství, Praha, 1988.**

Remaining illustrations, photographs, and radiographs were copied from:

**Atlas der Anatomie des Menschen/Sobotta.  
Putz,R., und Pabst,R. 20. Auflage. München:  
Urban & Schwarzenberg, 1993**