

# **DIGESTIVE SYSTEM III.**

**Liver**

**Regio hypochondriaca dx. + regio epigastrica**



## HEPAR (IECUR)

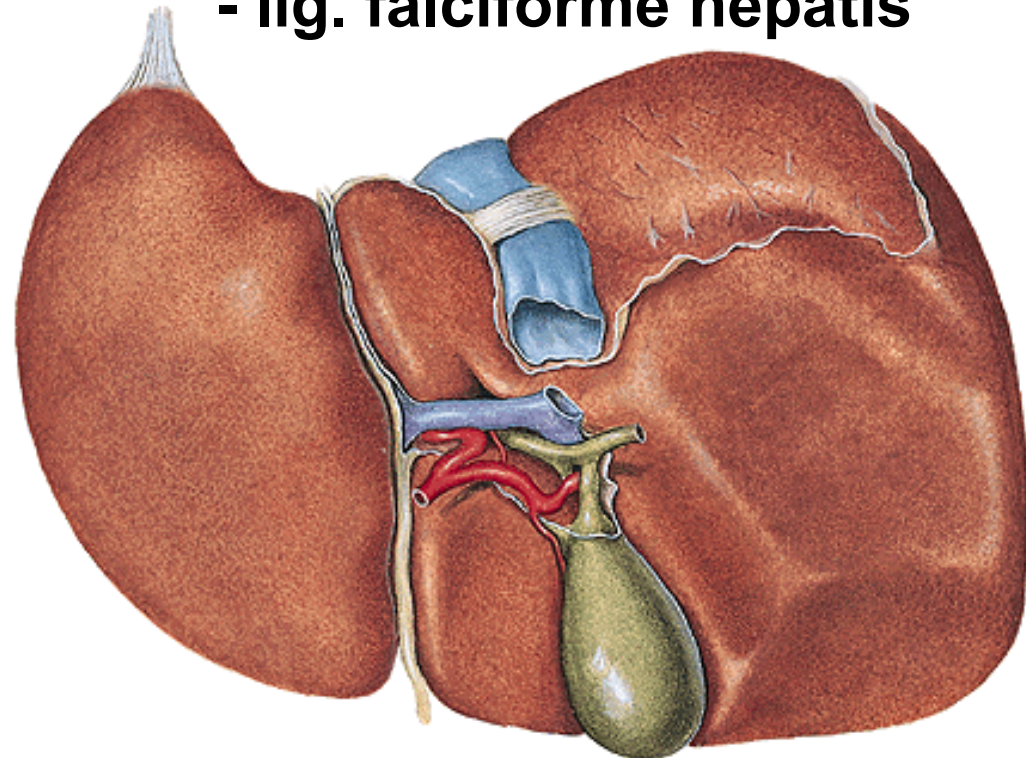
### Facies diaphragmatica

- 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**

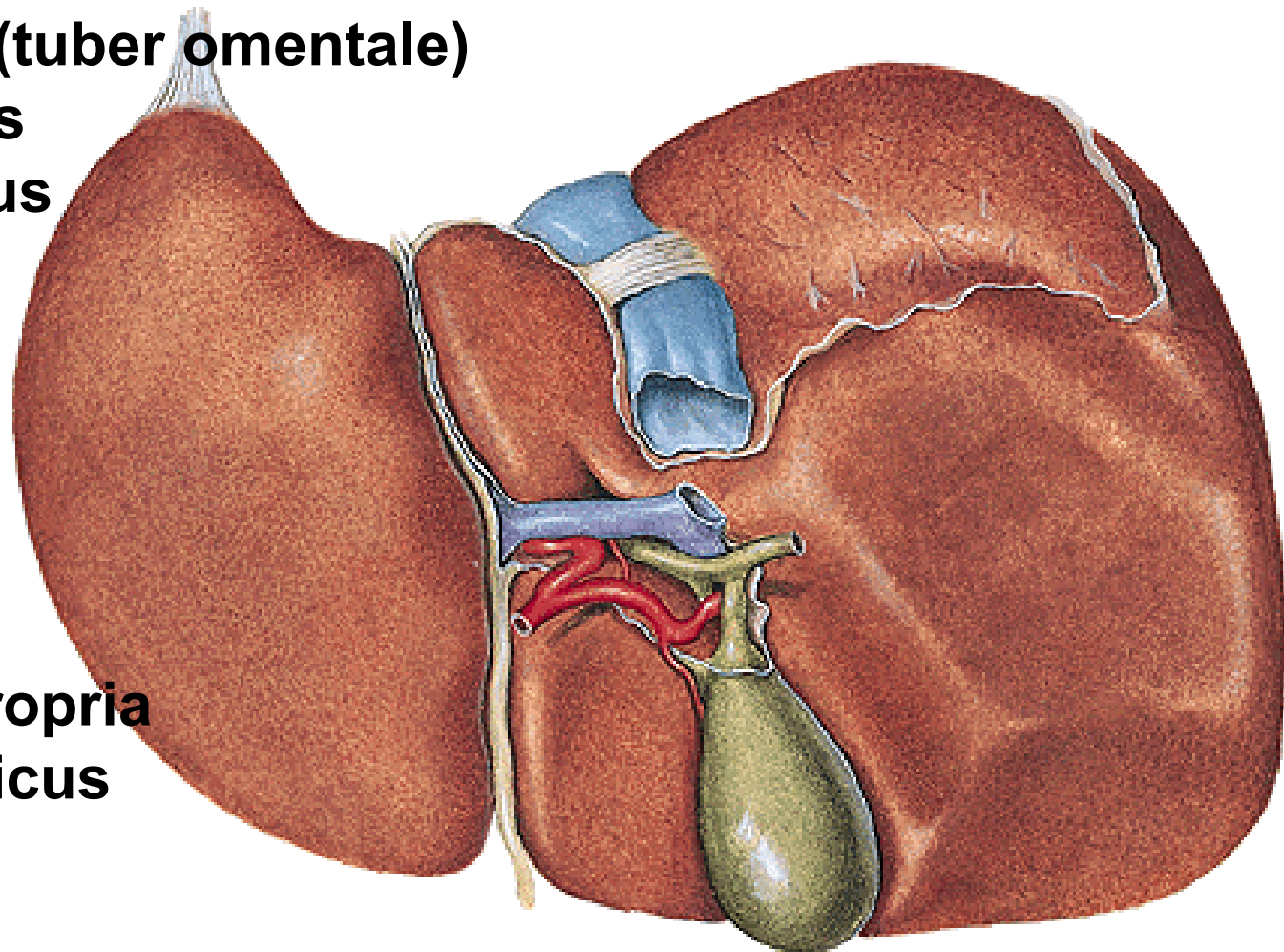
**quadratus**

## **Processus**

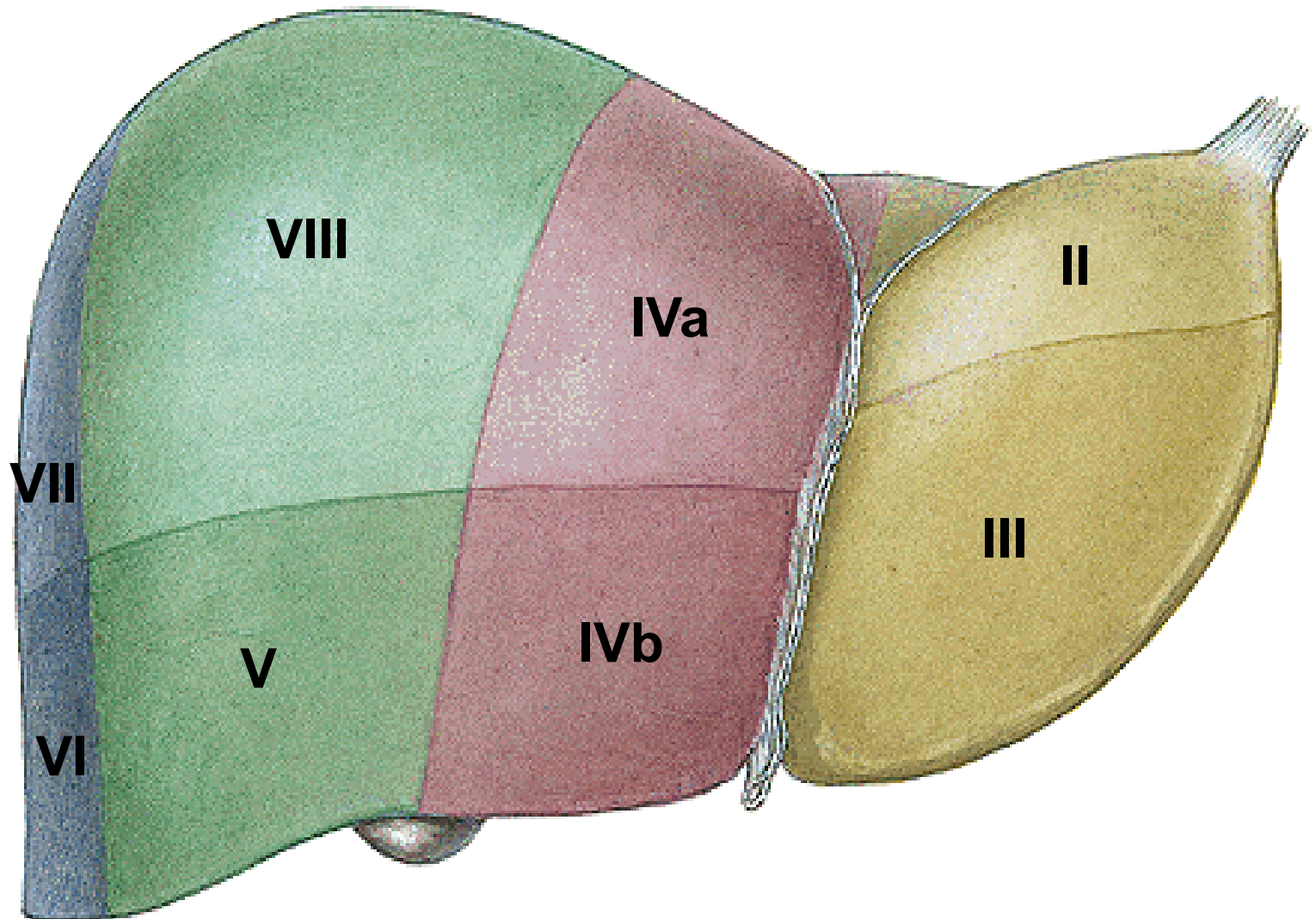
**caudatus,  
papillaris**

## **Porta hepatis**

- vena portae
- a. hepatica propria
- ductus hepaticus communis



# Hepatic segments



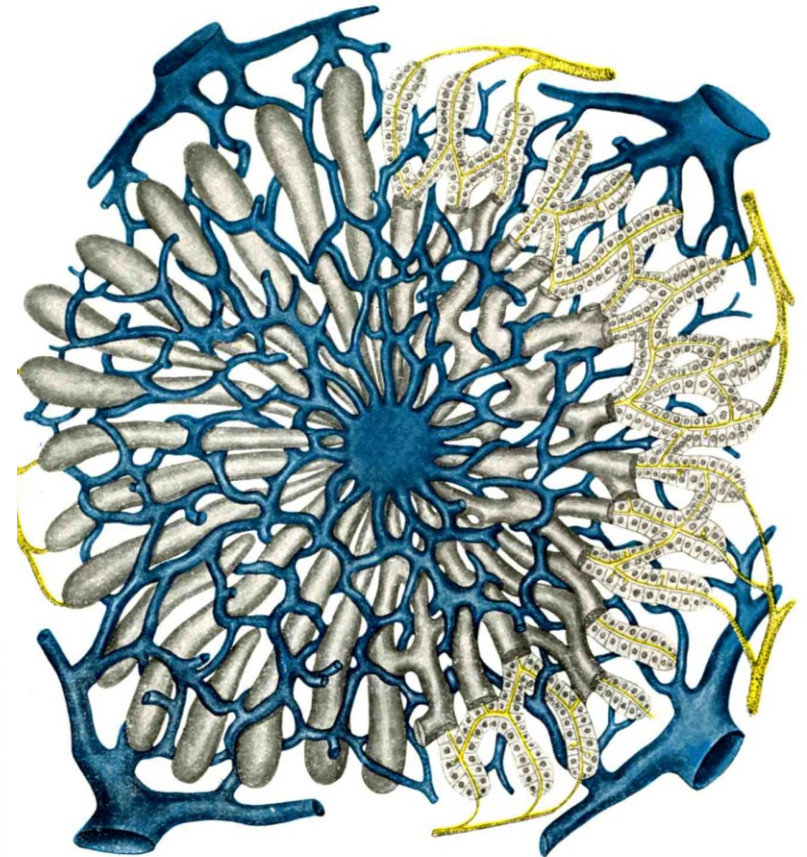
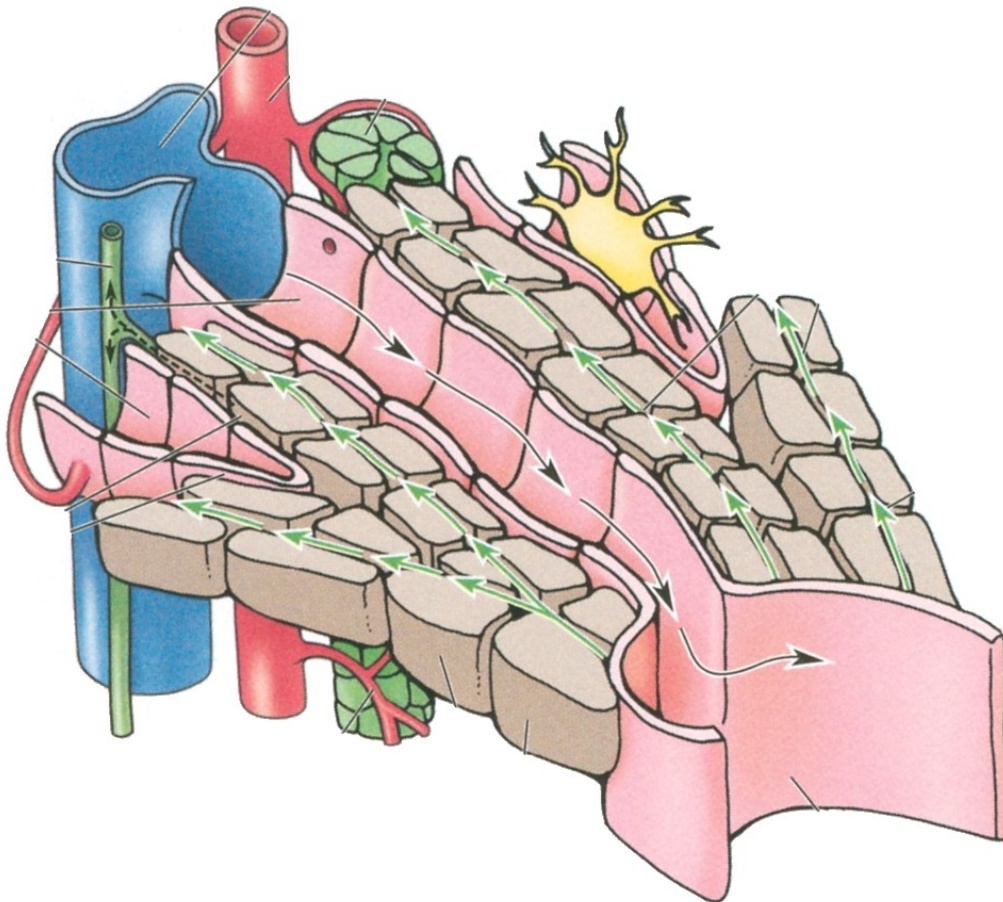


# Capsula fibrosa – capsula fibrosa perivascularis

- v. interlobularis, a. interlobularis, ductus interlobularis

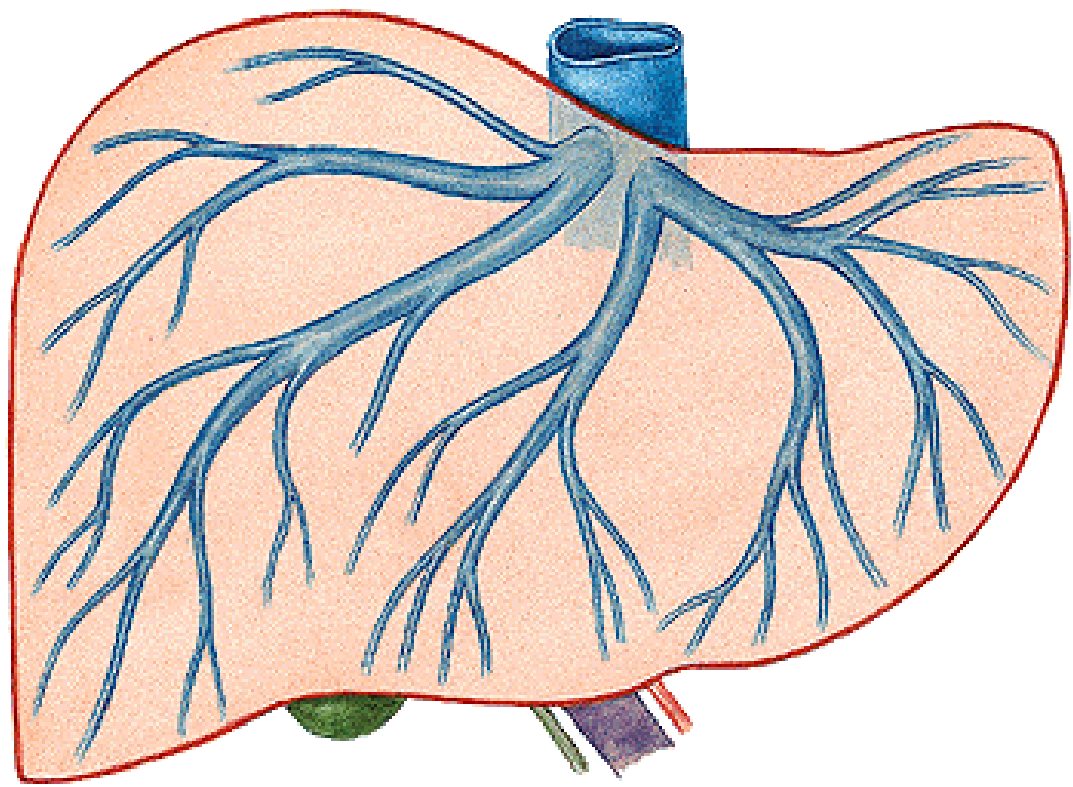
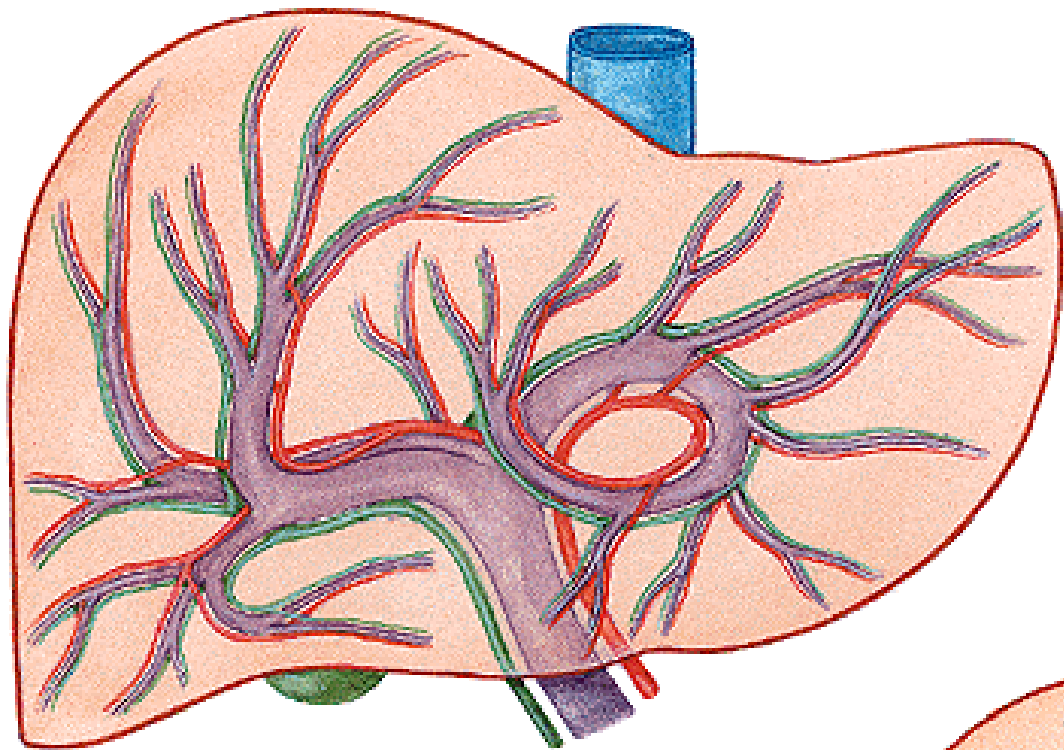
→ sinusoids → v. centralis

## Lobulus venae centralis



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

- ramus dexter et sinister..... aa. et vv. interlobulares,  
aa. et vv. circumlobulares → sinusoids → v. centralis  
→ vv. sublobulares → vv. hepaticae





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

**Plica longitudinalis duodeni**

**Ampulla hepatopancreatica**

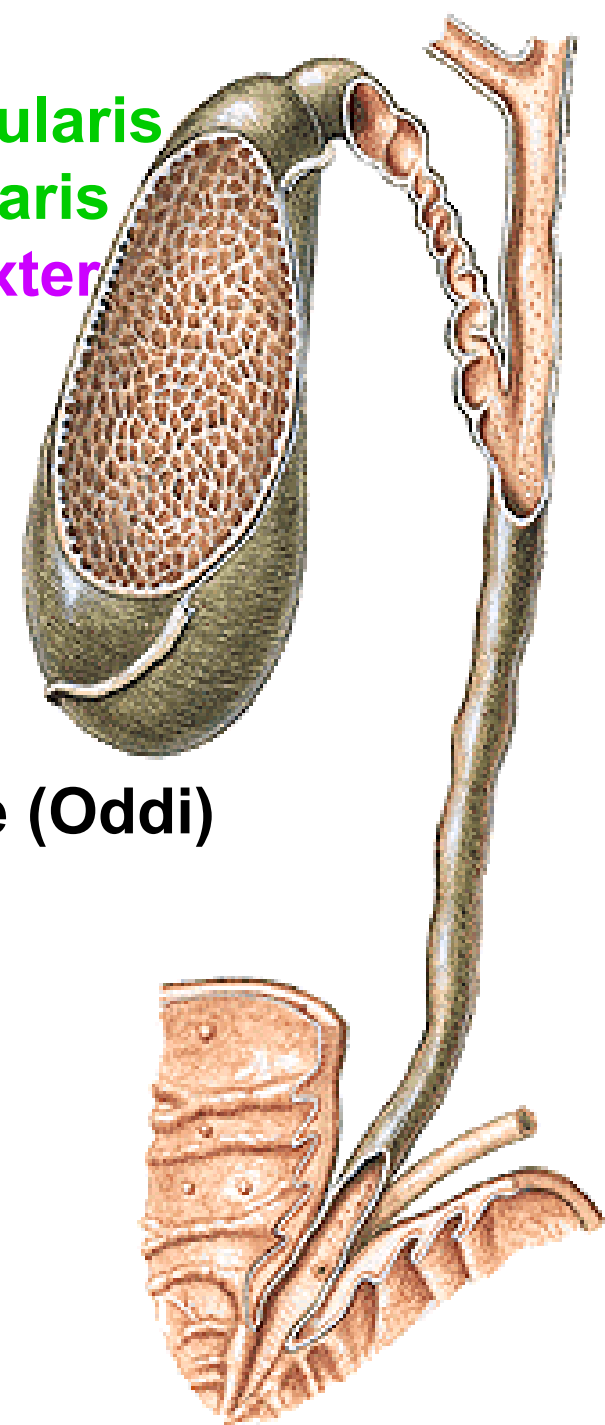
**M. sphincter ampullae hepatopancreaticae (Oddi)**

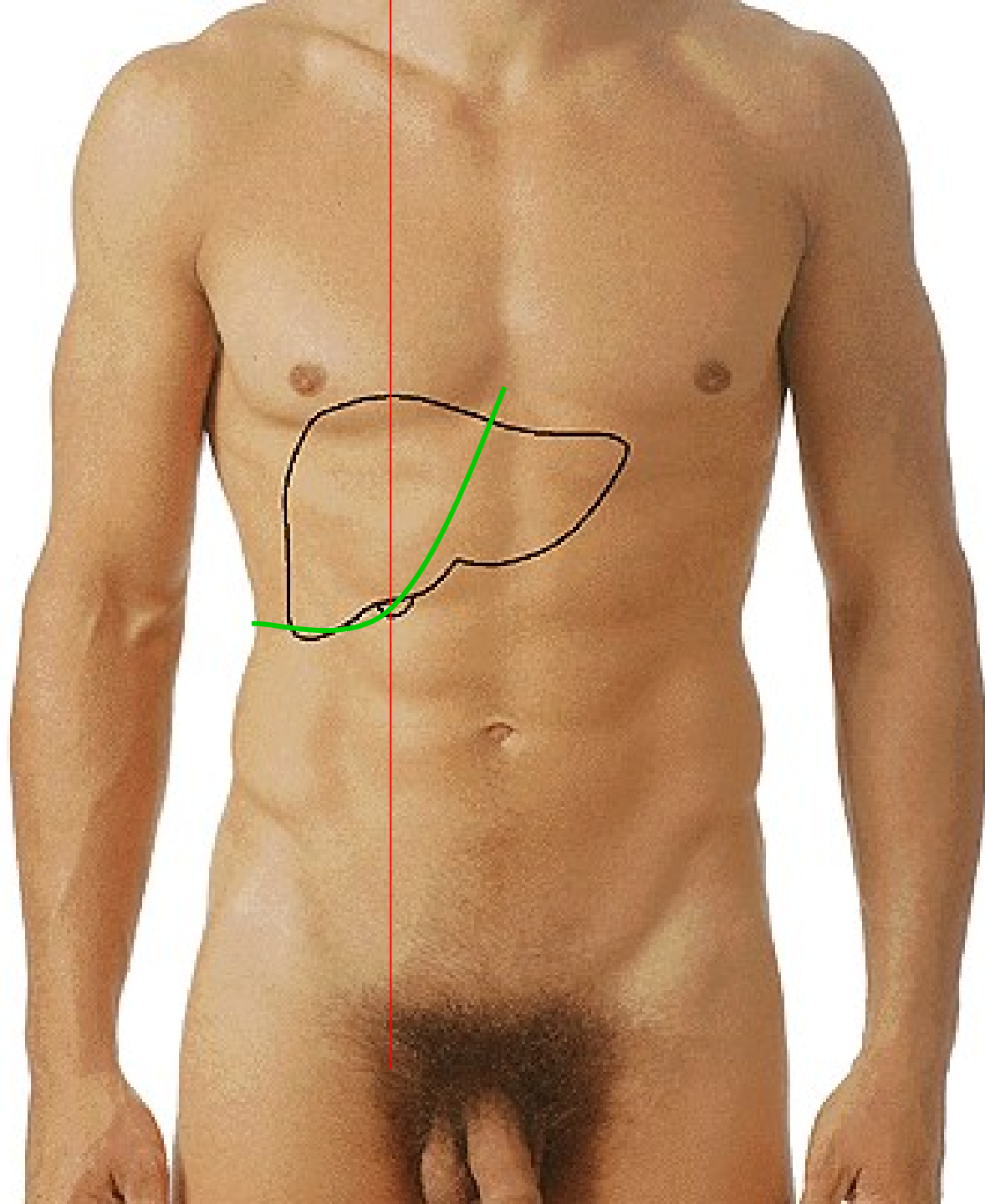
**Papilla duodeni major (Vater)**

**Vesica biliaris (fellea)**

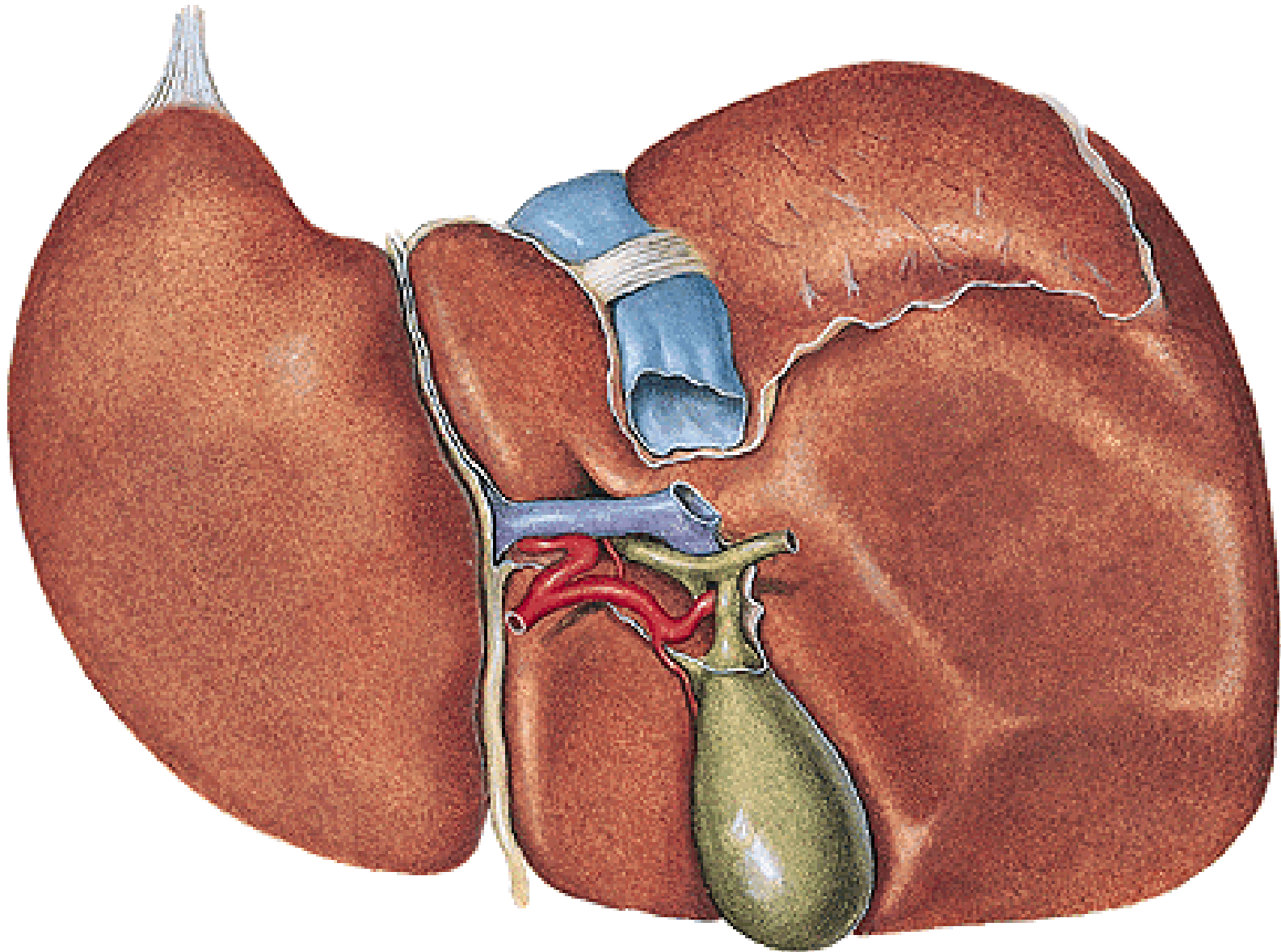
**- fundus, corpus, collum**

**- plica spiralis**





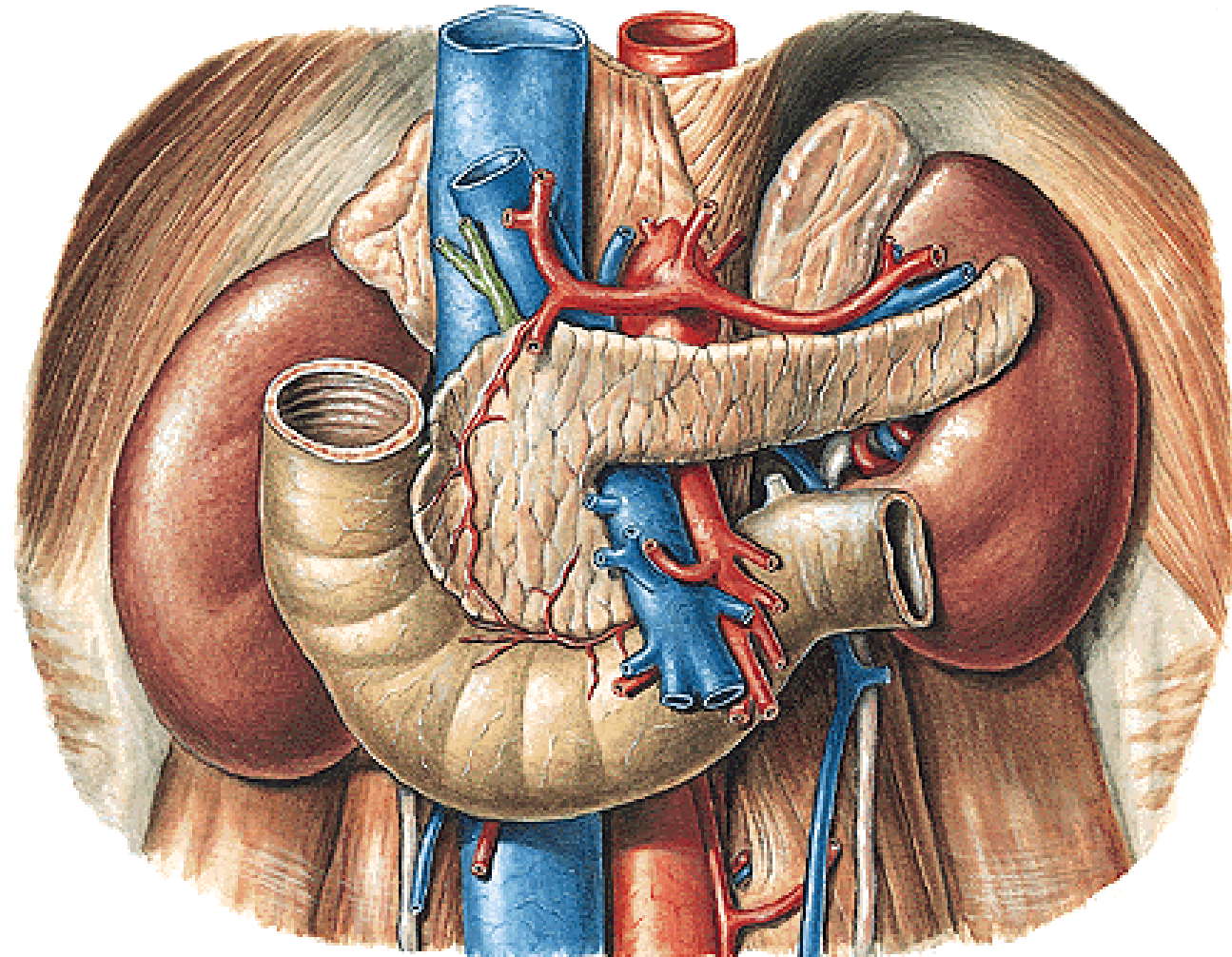
**Impressio renalis. suprarenalis, duodeni, colica**  
**Impressio oesophagea, gastrica**



# PANCREAS

caput, corpus, cauda  
incisura pancreatis  
processus uncinatus  
facies anterior  
facies posterior  
margo superior  
margo inferior

membrana retropancreatica (Treitz)  
tuber omentale



**Exocrine pancreas:**

**capsula pancreatis**

**succus pancreaticus**

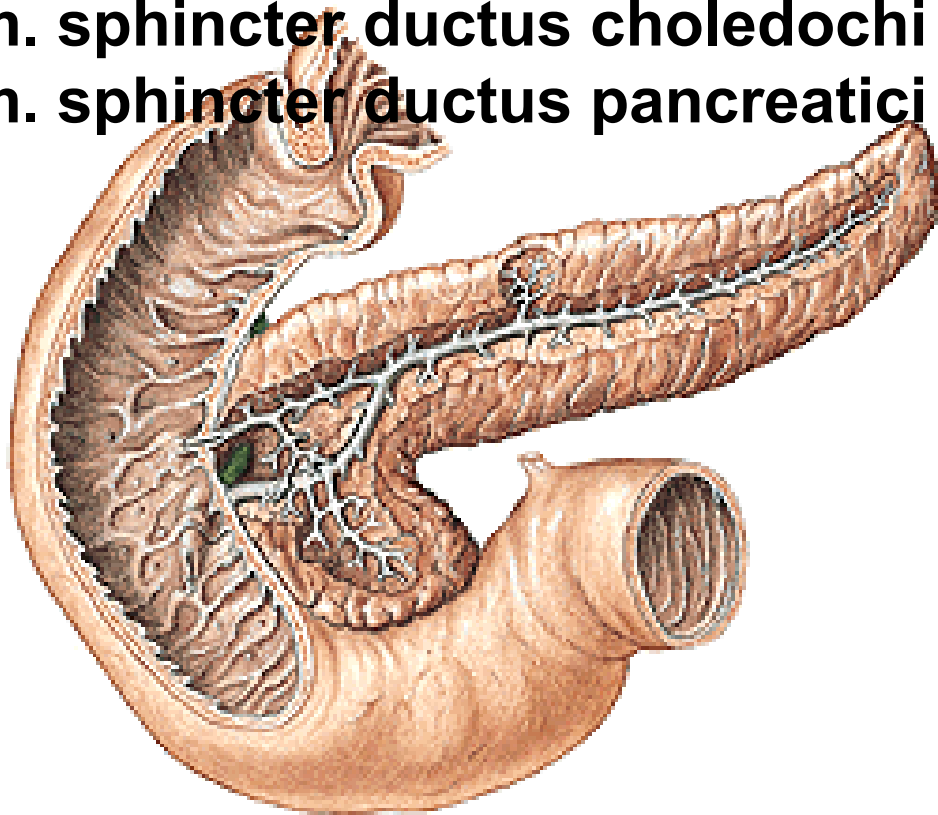
**ductus pancreaticus**

**ductus pancreaticus accessorius**

**m. sphincter ampullae hepatopancreatice**

**m. sphincter ductus choledochi**

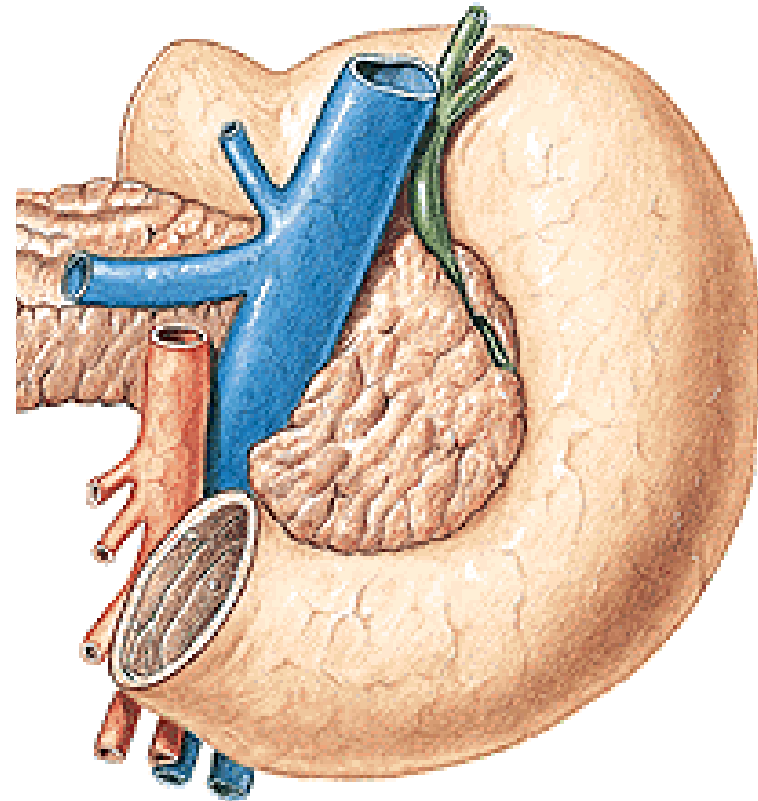
**m. sphincter ductus pancreatici**



**Endocrine pancreas:**

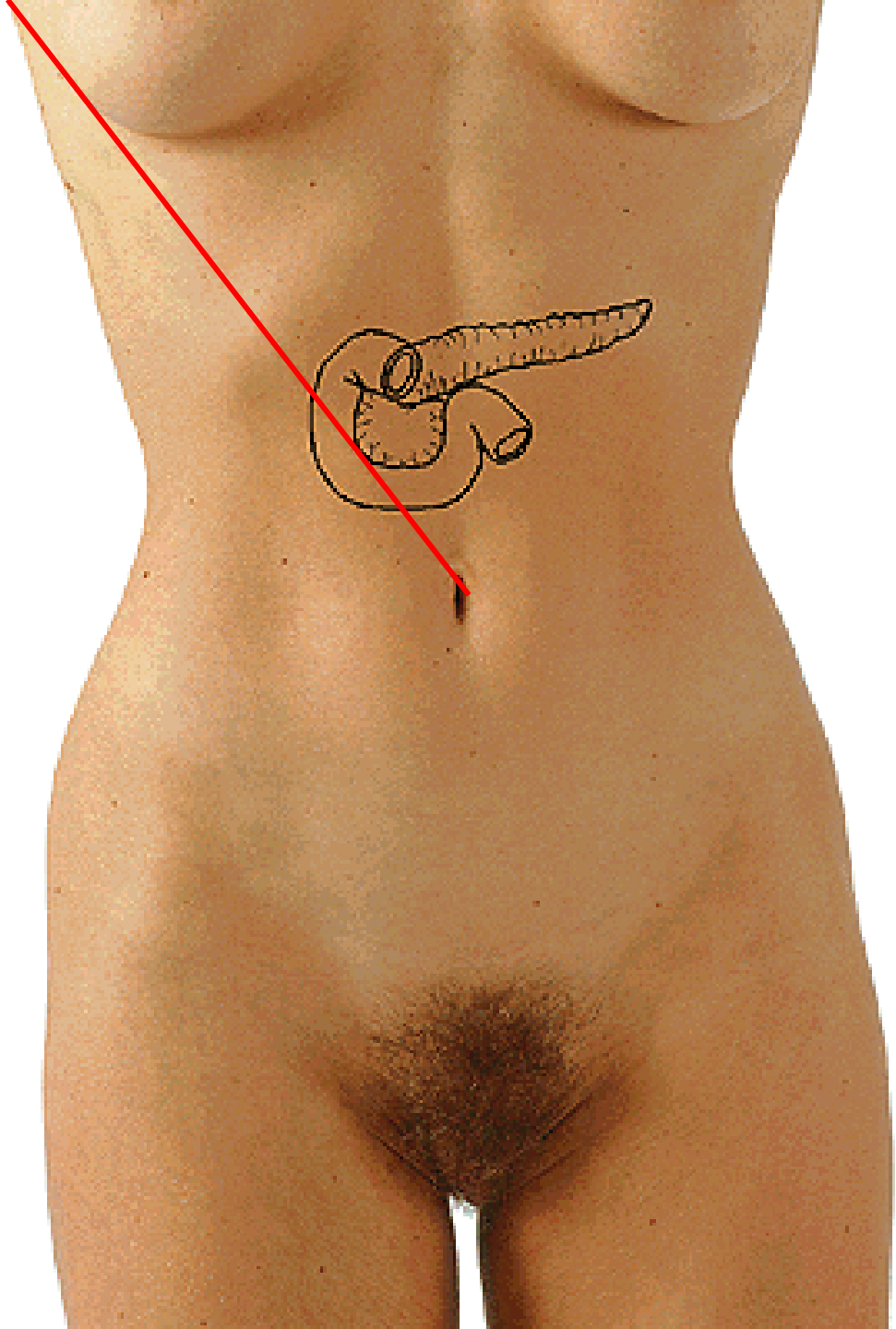
**islets of Langerhans**

**insulin, glucagon**

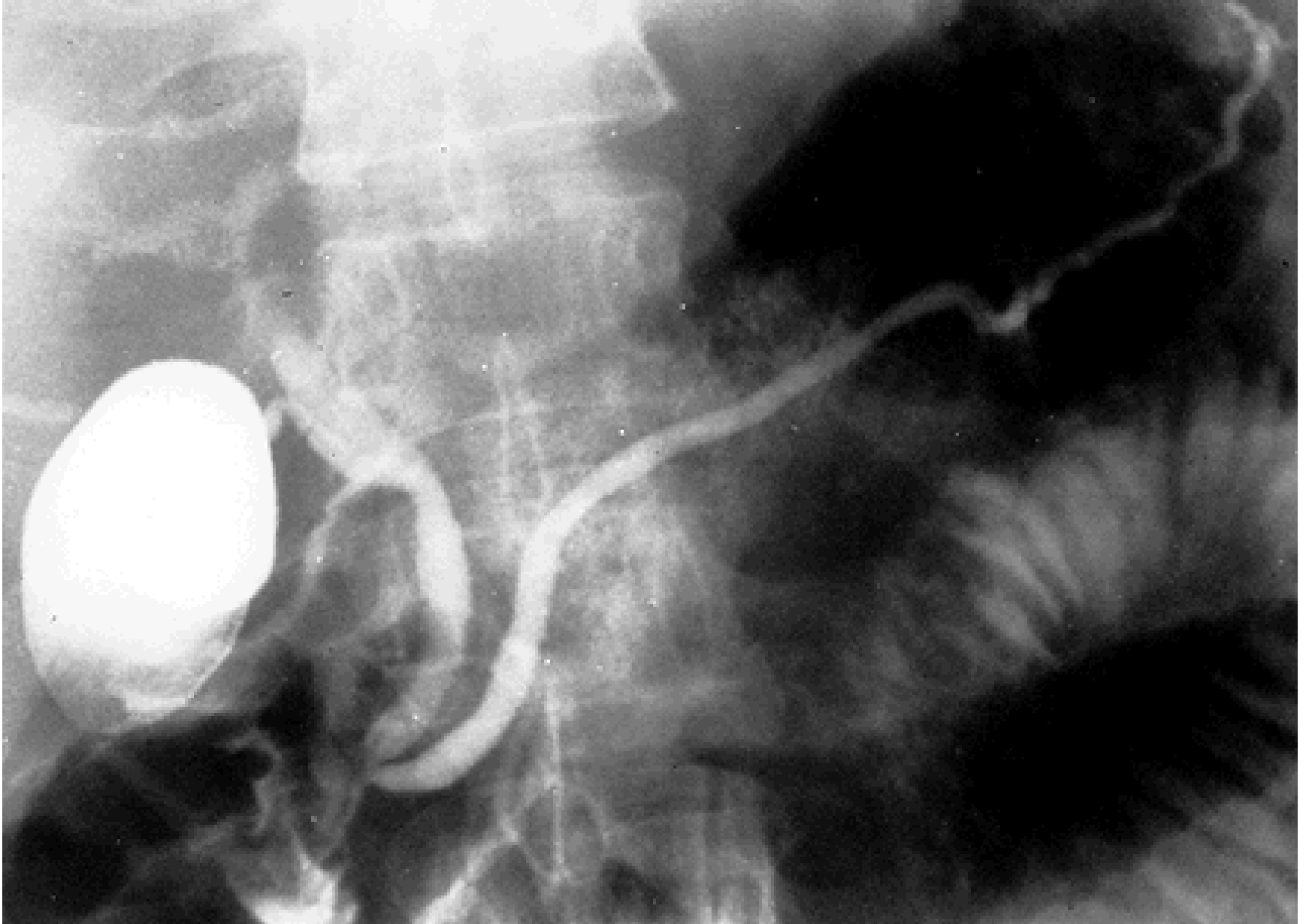




**Umbilico-axillary line**  
**- point of Desjardin**

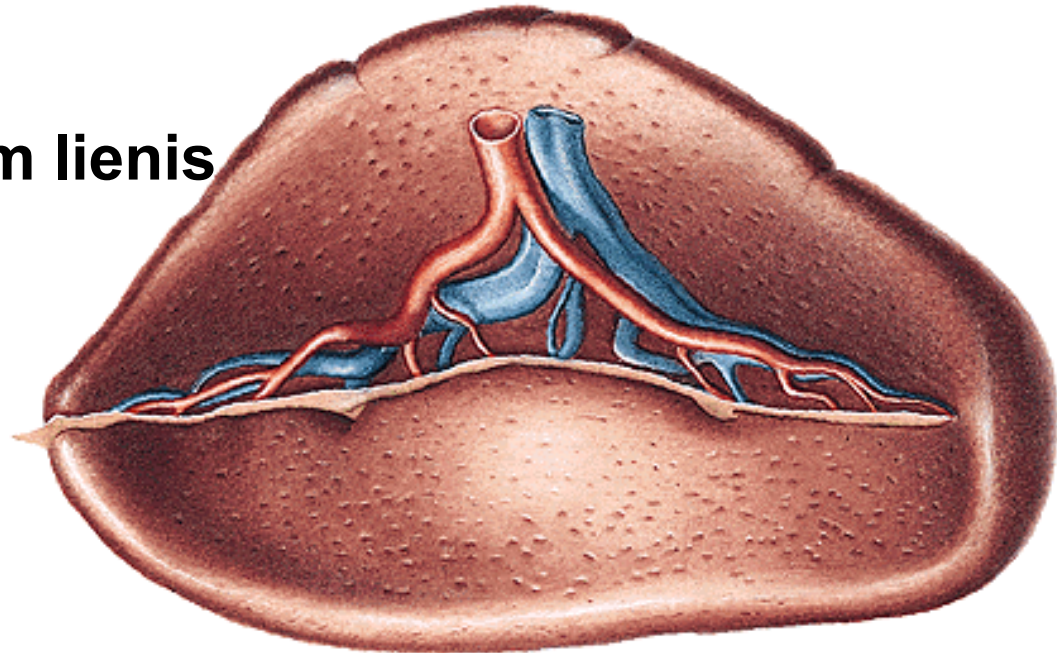


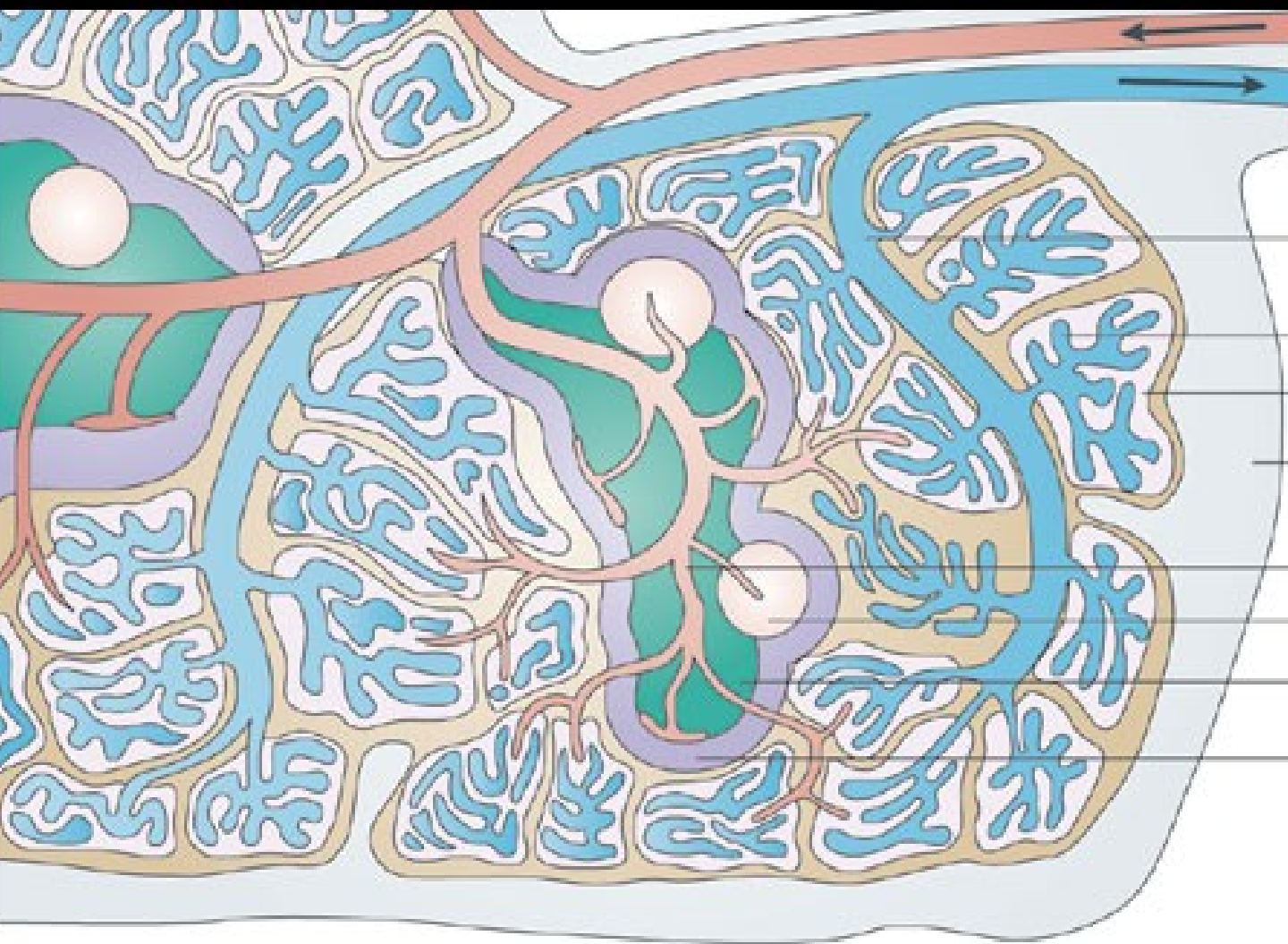
# ERCP – endoscopic retrograde cholangiopancreatography



## **LIEN, SPLEN**

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





Afferent splenic artery

Collecting vein

Venous sinus

Cords

Outer capsule with trabeculae

Central arteriole

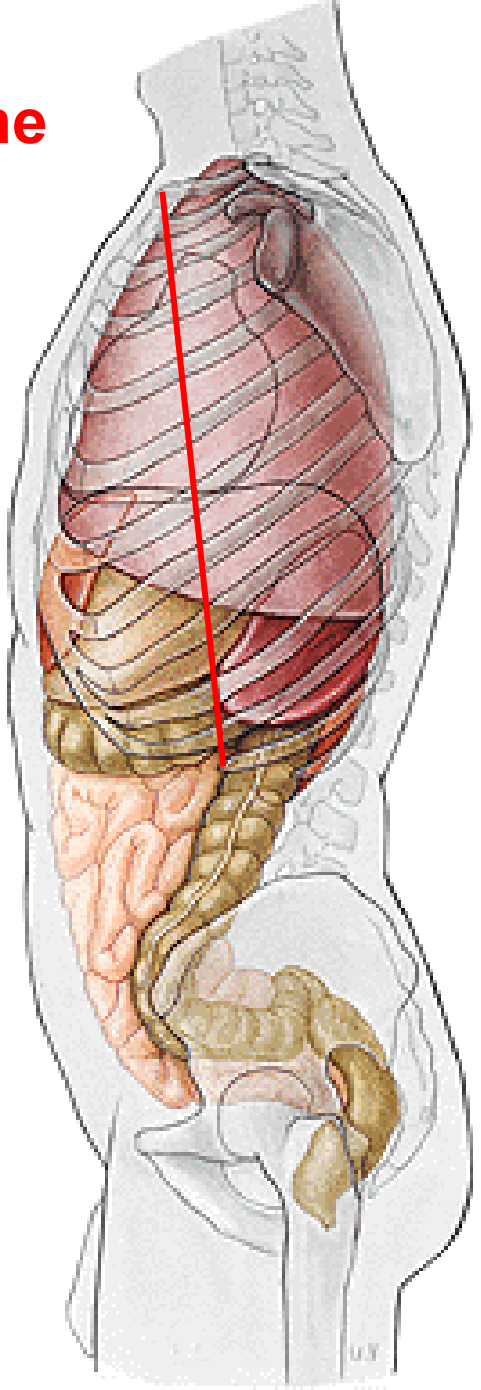
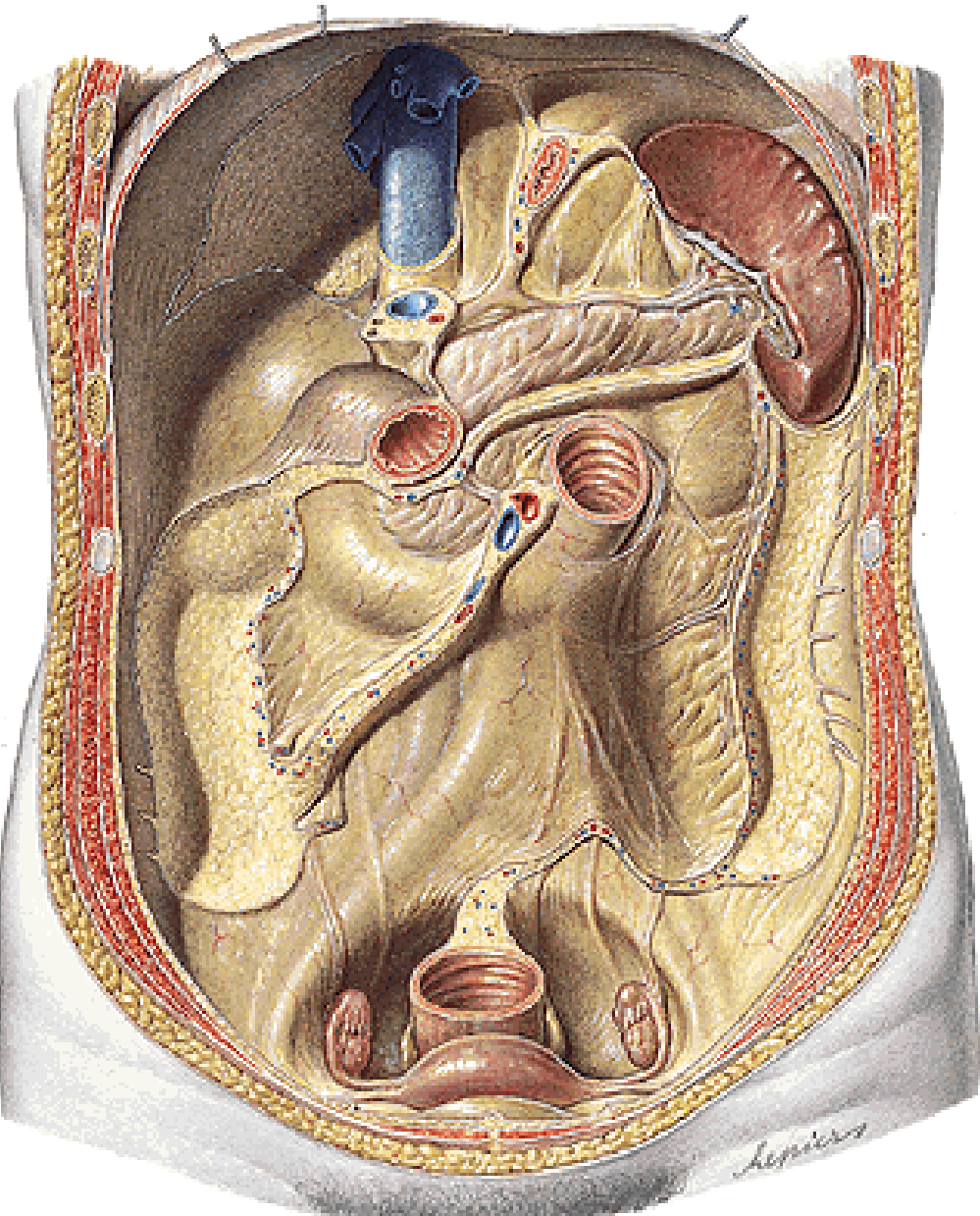
Follicle

T-cell zone

Marginal zone

**White pulp, red pulp**

**Costoarticular line**





# CAVITAS ABDOMINALIS

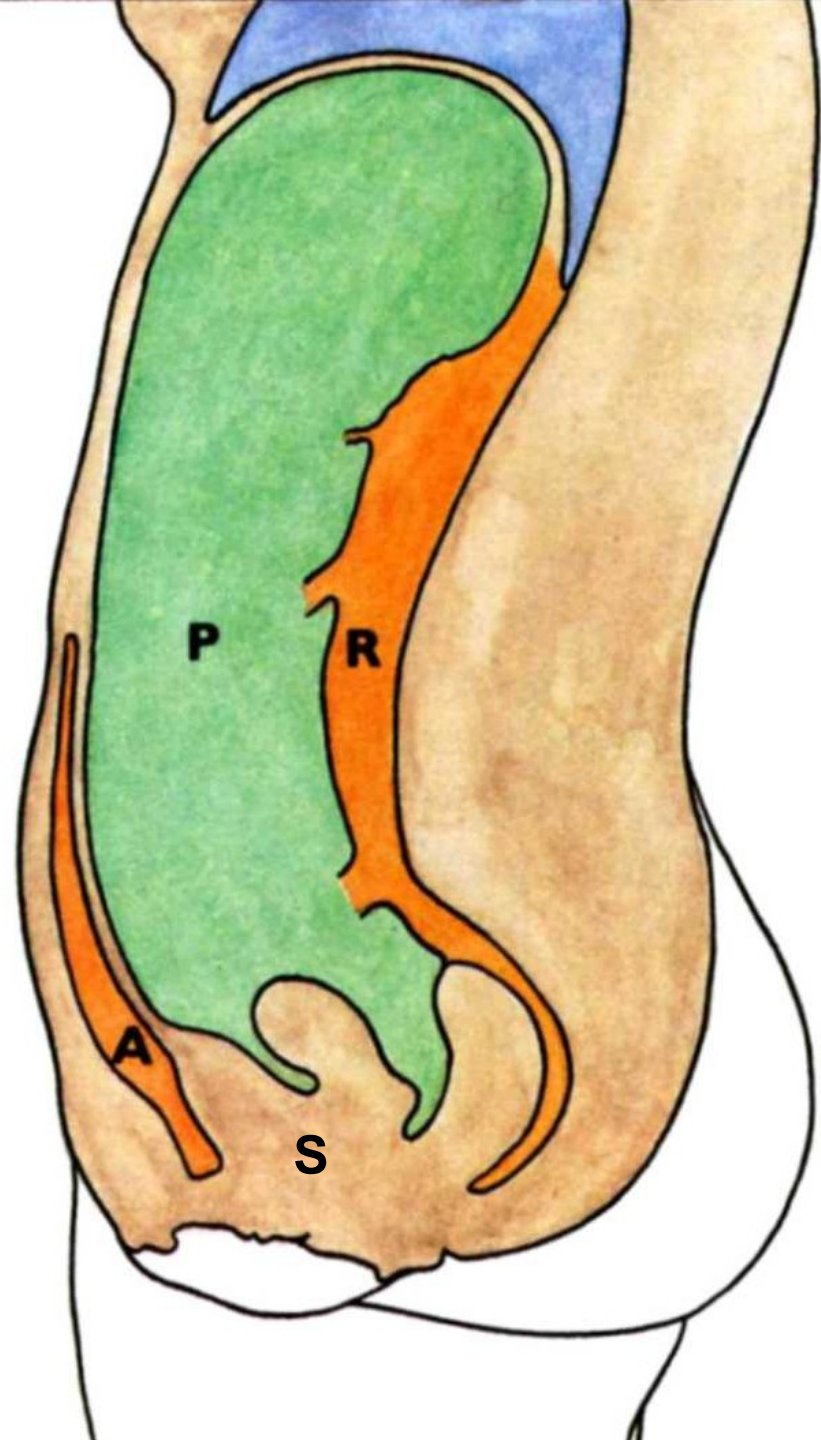
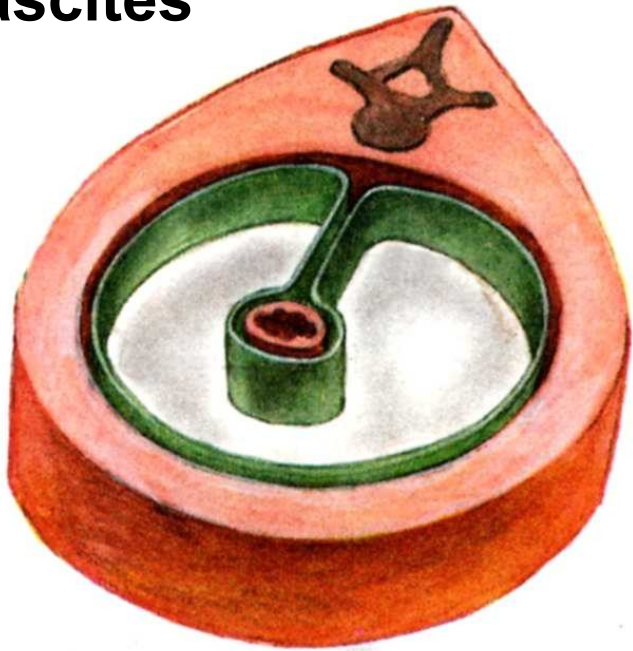
**P – cavitas peritonealis**

**A – spatium preperitoneale**

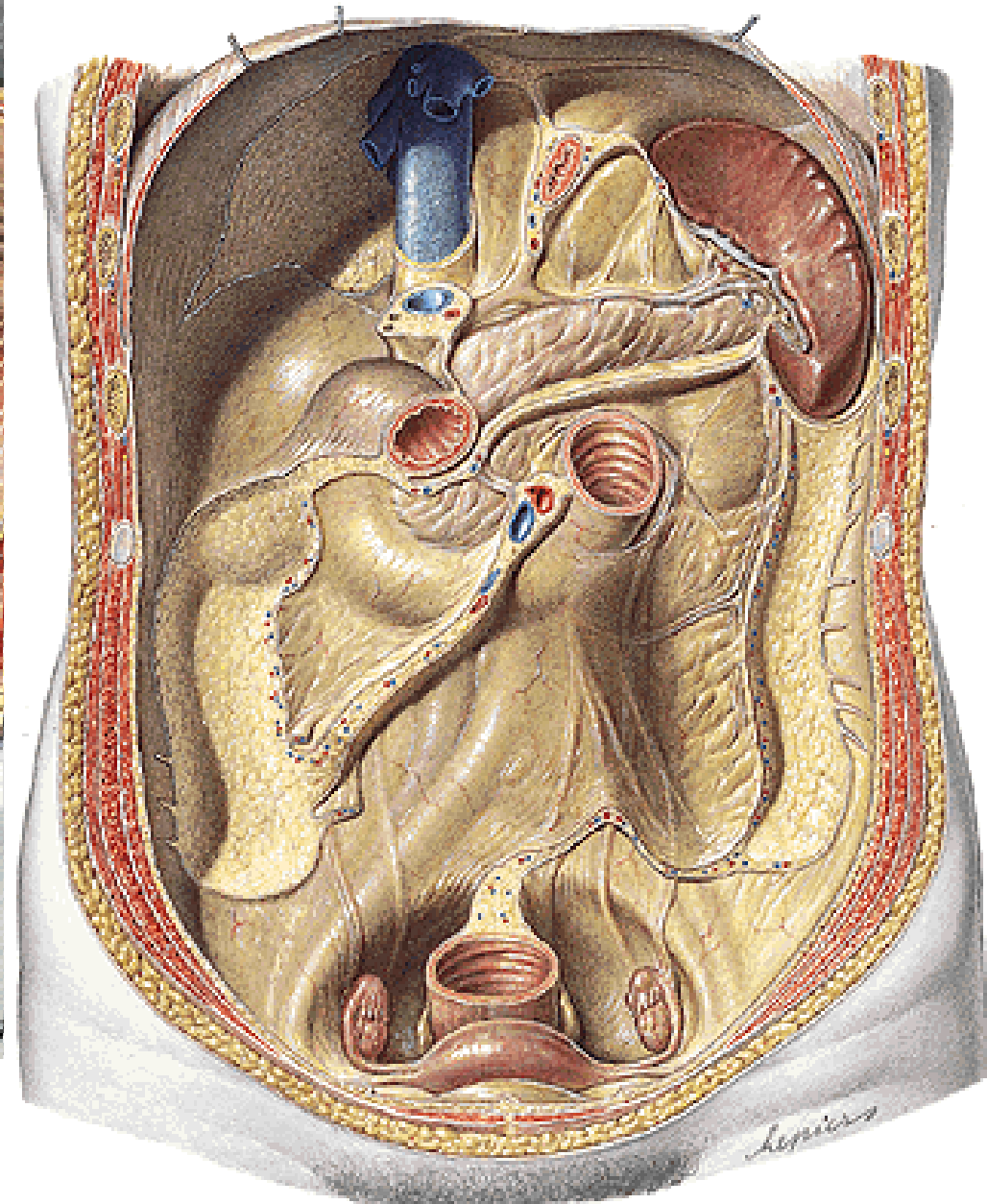
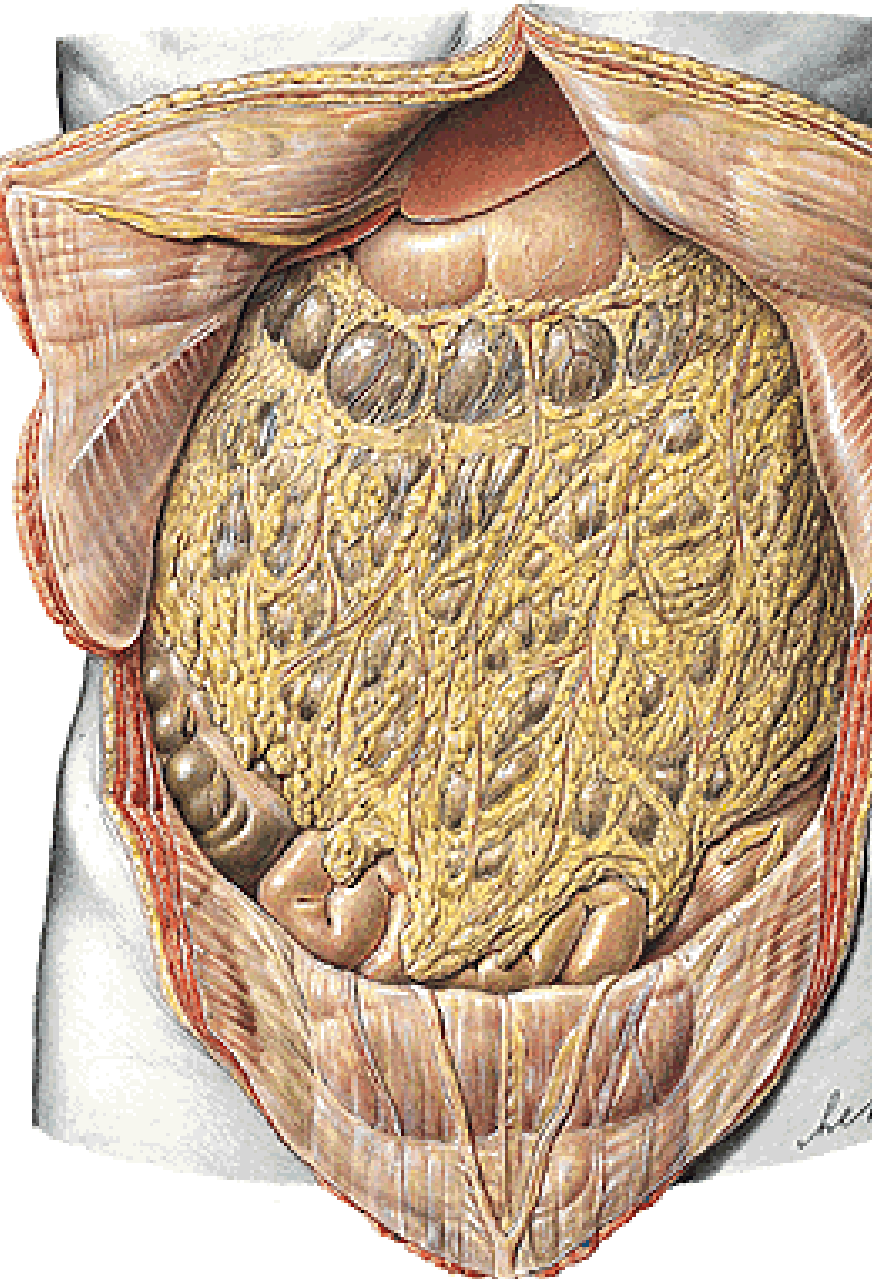
**R – spatium retroperitoneale**

**S – spatium subperitoneale  
(infraperitoneale)**

**ascites**

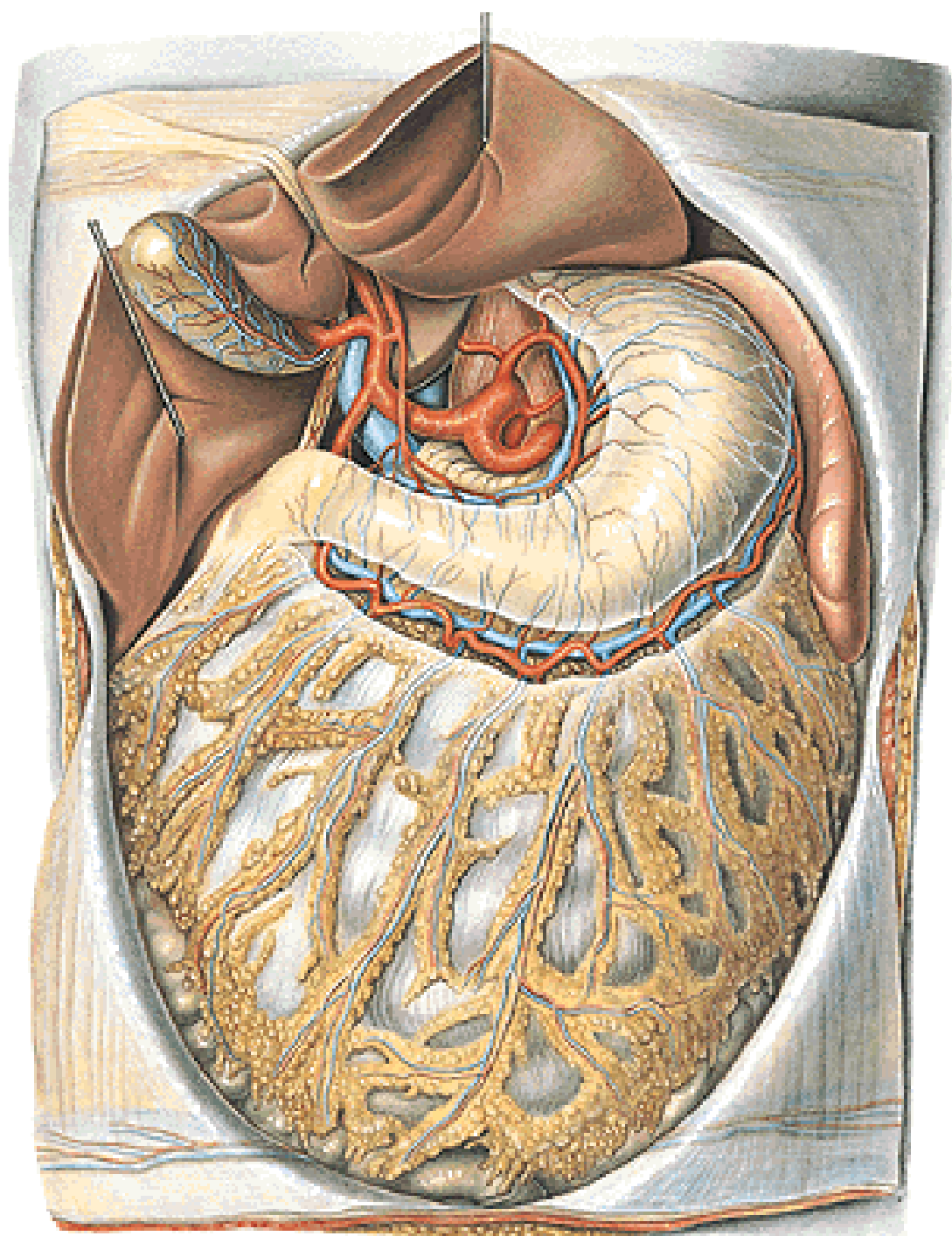


# Cavitas peritonealis - pars supramesocolica, inframesocolica



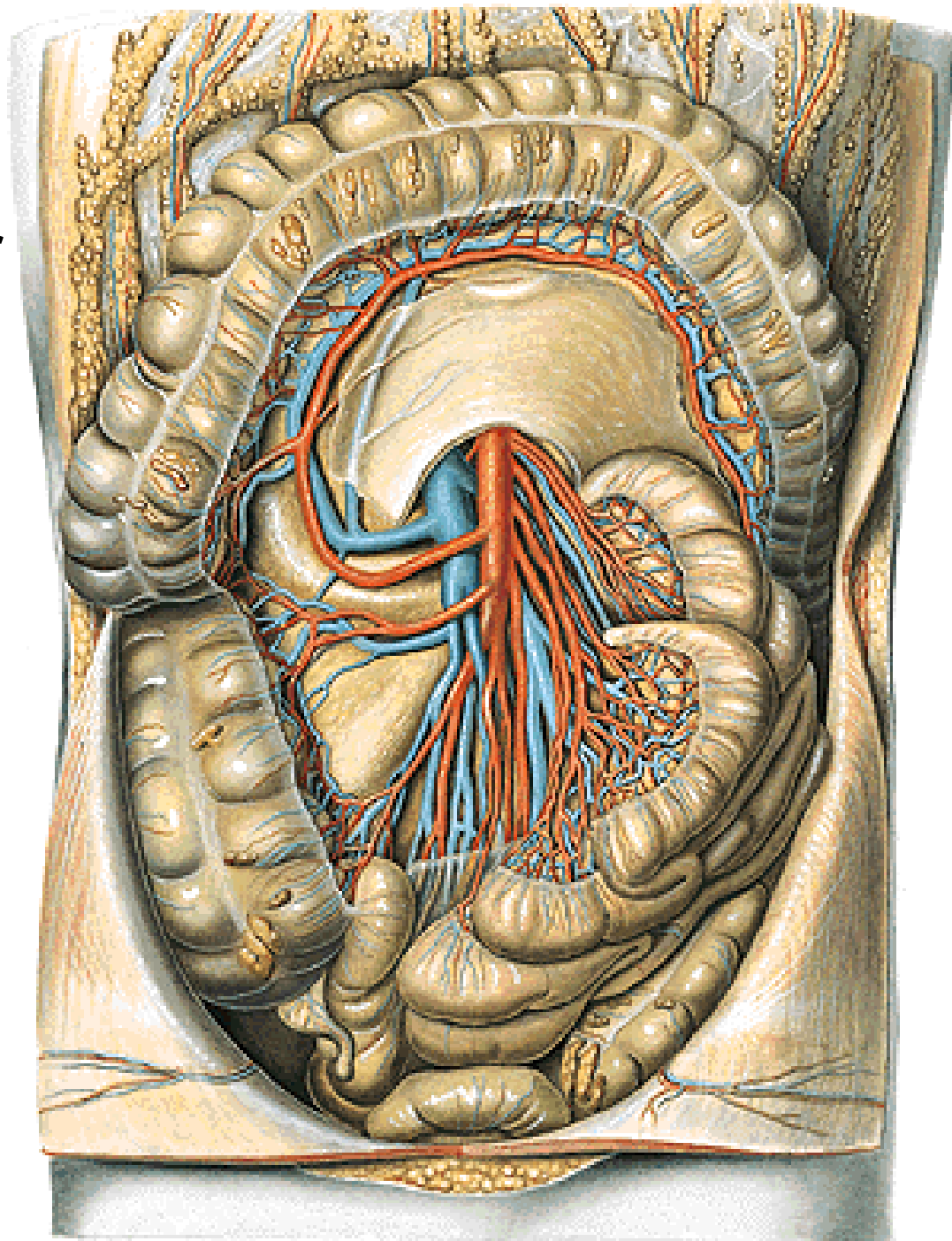
**Pars supramesocolica**

**Truncus coeliacus**



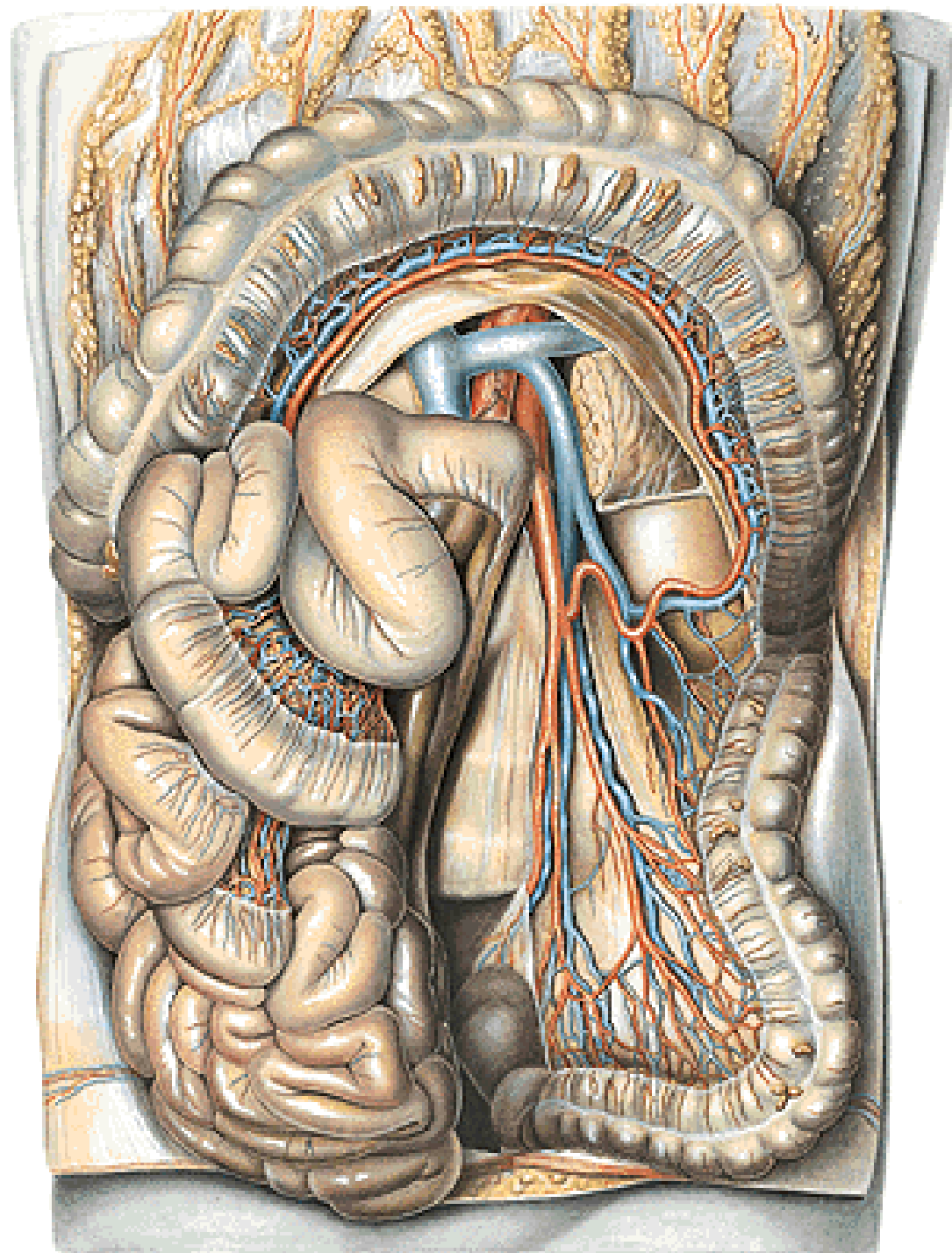
**Pars inframesocolica**

**A. mesenterica superior**



**Pars inframesocolica**

**A. mesenterica inferior**





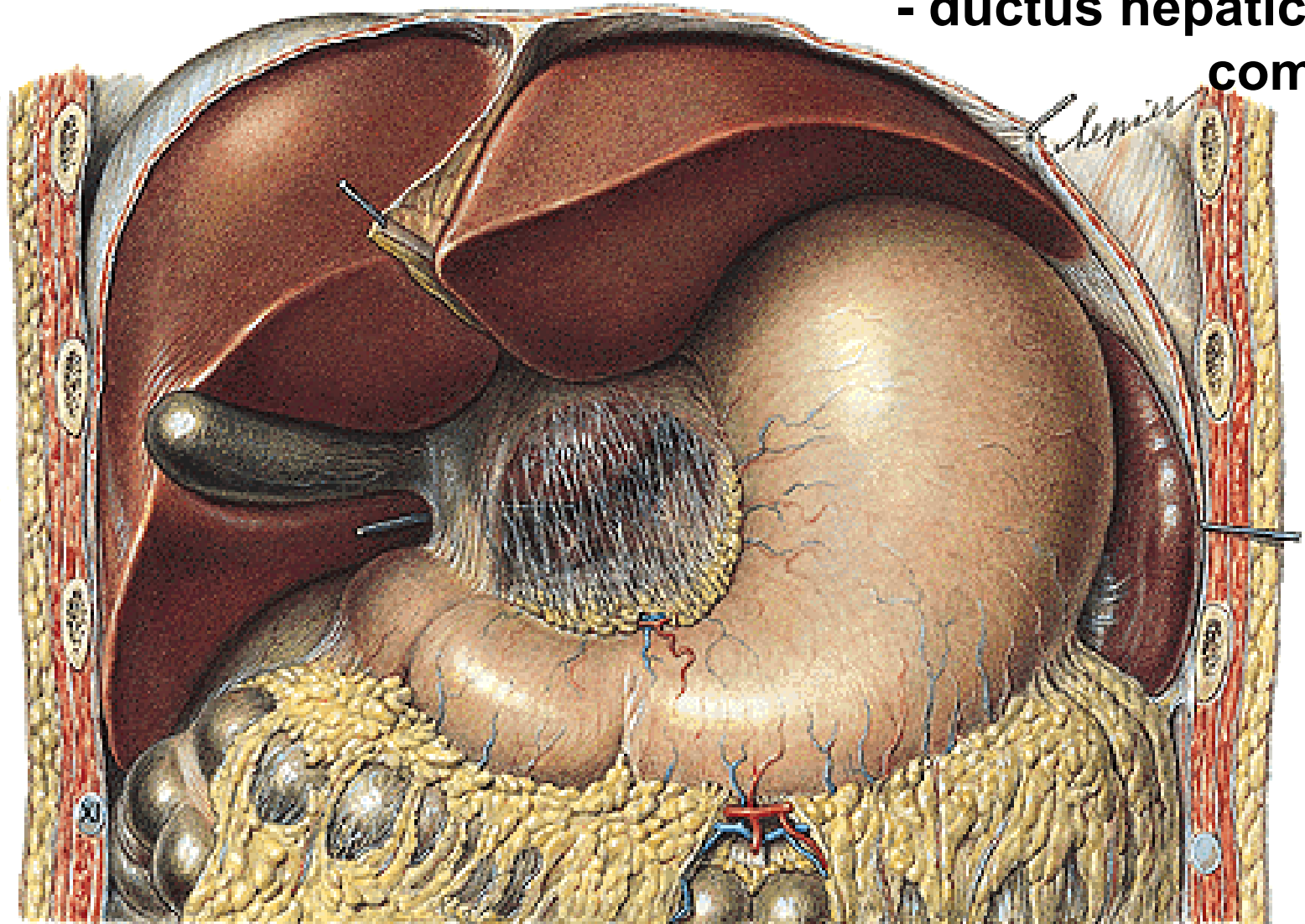
# Omentum minus - lig. hepatogastricum

- lig. hepatoduodenale - a. hepatica propria

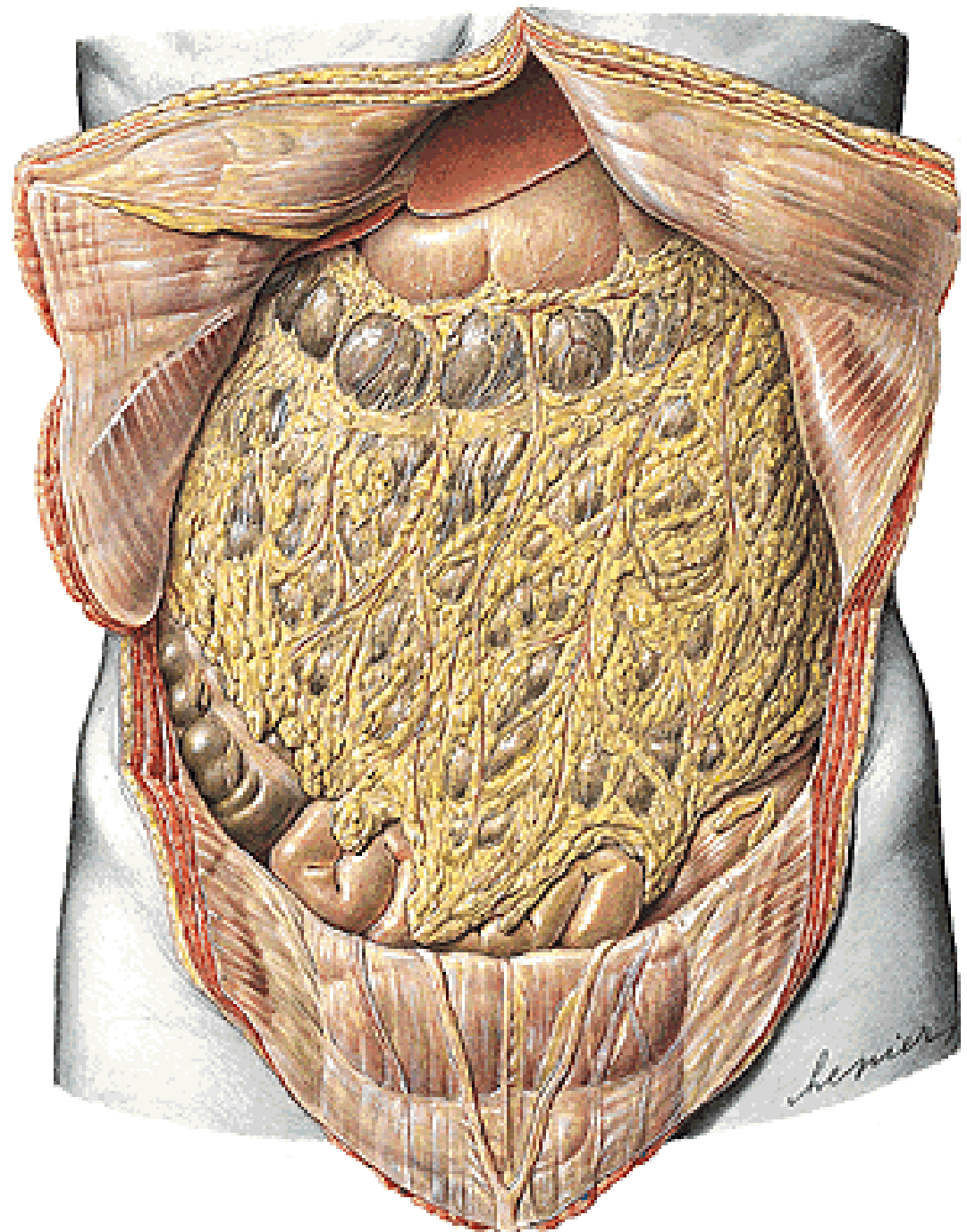
- v. portae

- ductus hepaticus

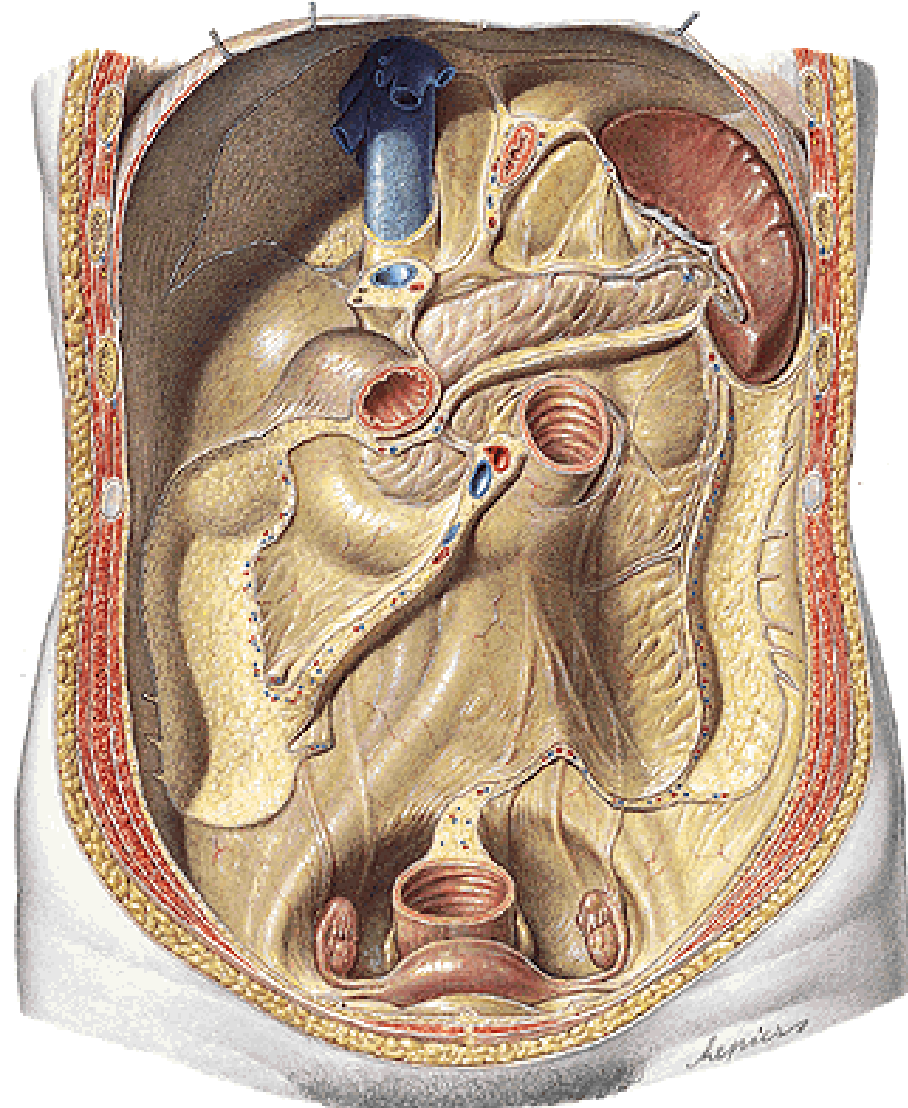
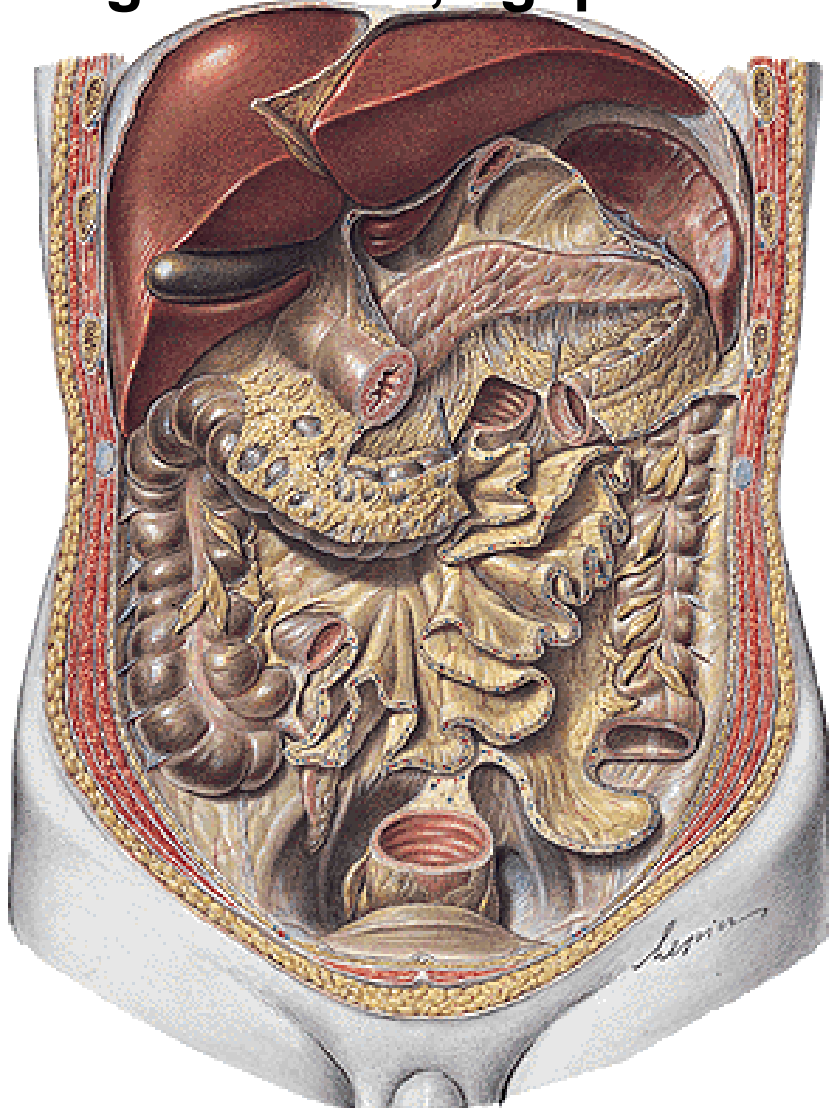
comm.



**Omentum majus**  
**- lig. gastrocolicum**

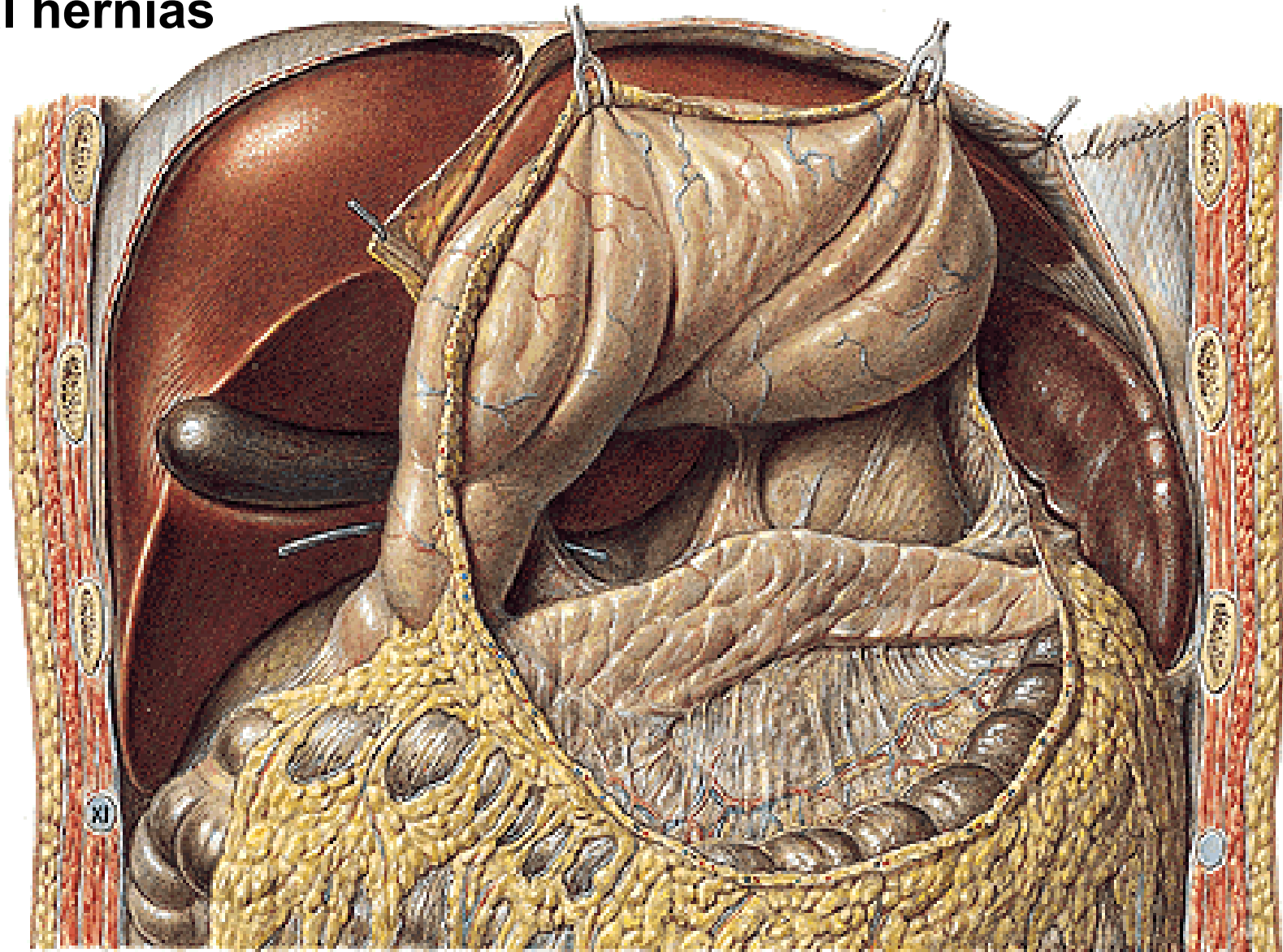


**Lig. gastrosplenicum, phrenicosplenicum, splenorenale**  
**Mesenterium – radix mesenterii**  
**Mesocolon transversum, mesoappendix, mesocolon**  
**sigmoideum, lig. phrenicocolicum**

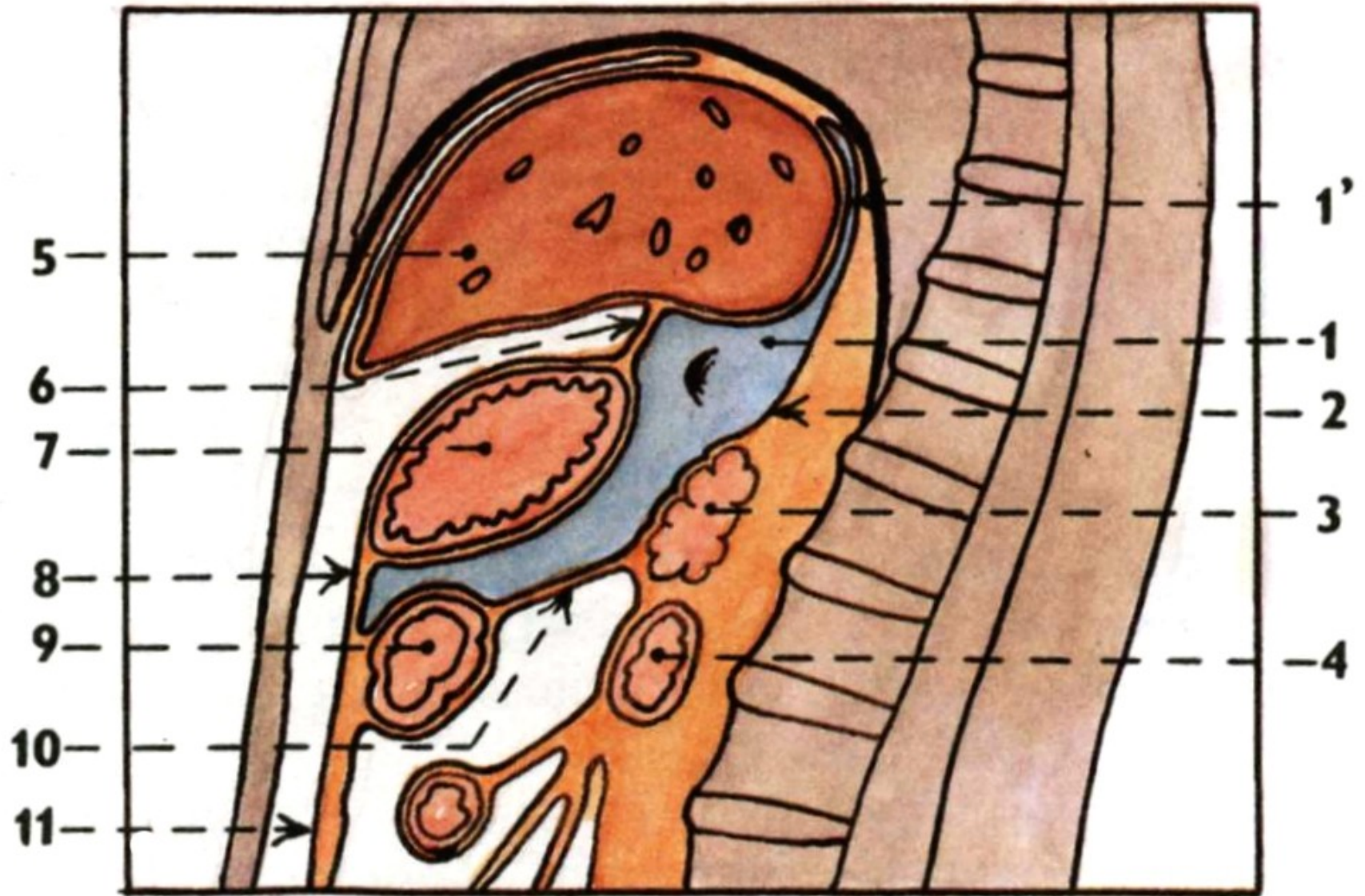


**Bursa omentalis**

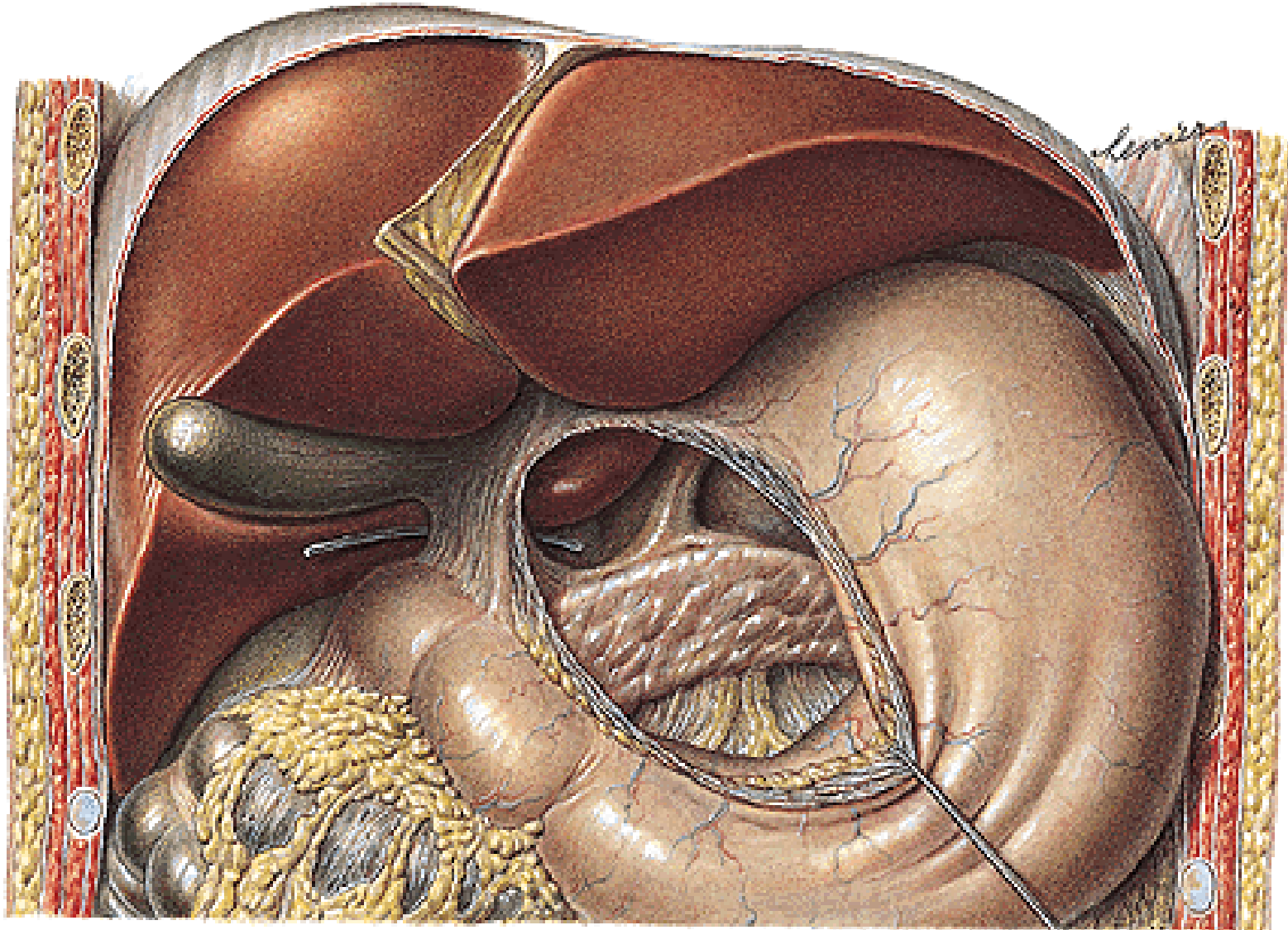
**Internal hernias**



# Bursa omentalis

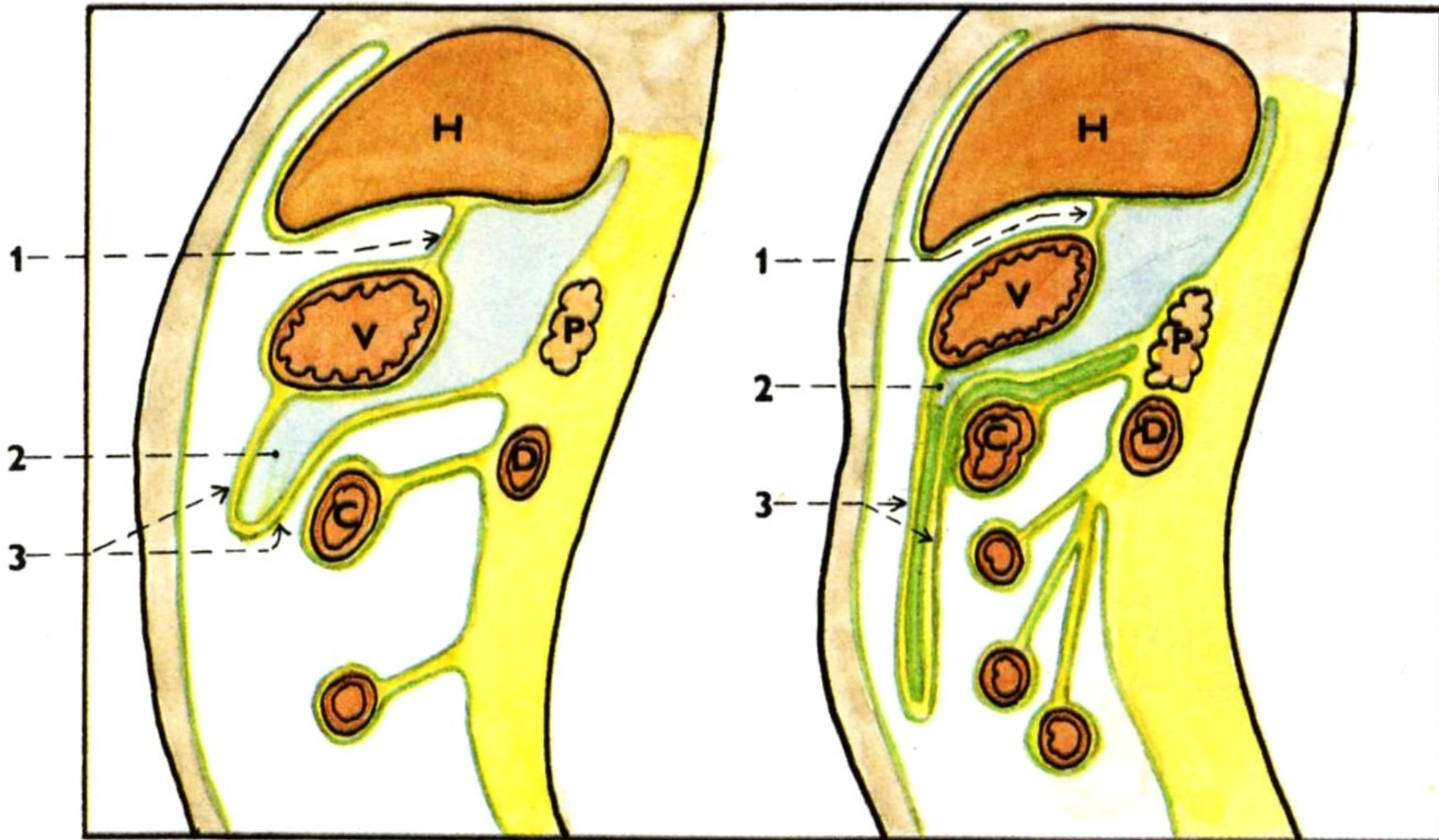


**Foramen epiploicum/omentale (Winslow)  
Recessus sup., splenicus, inf.**



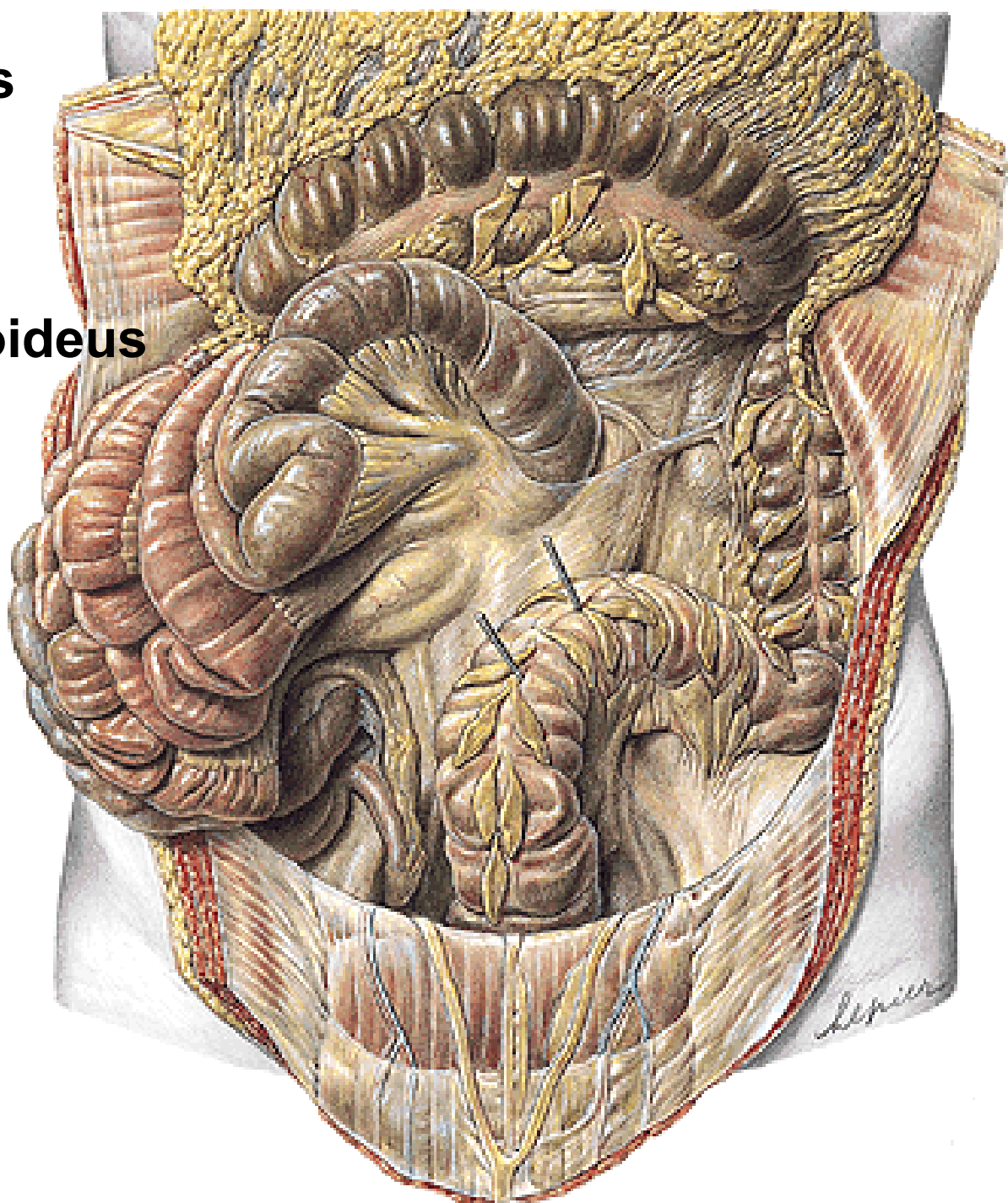


# Recessus inferior bursae omentalis



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

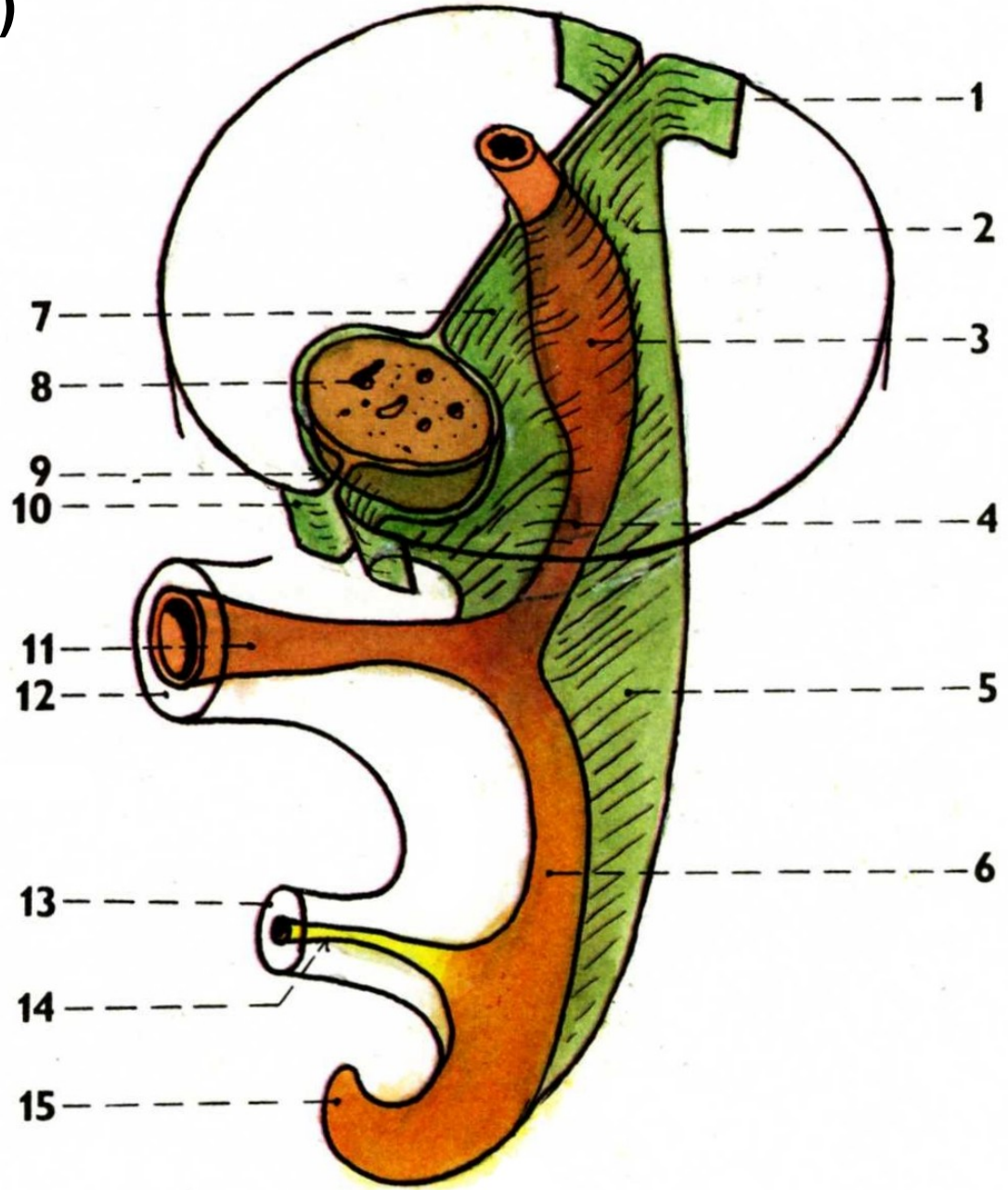
**Recessus intersigmoideus**



**Ductus omphaloentericus**  
**Ileal diverticulum (Meckel)**



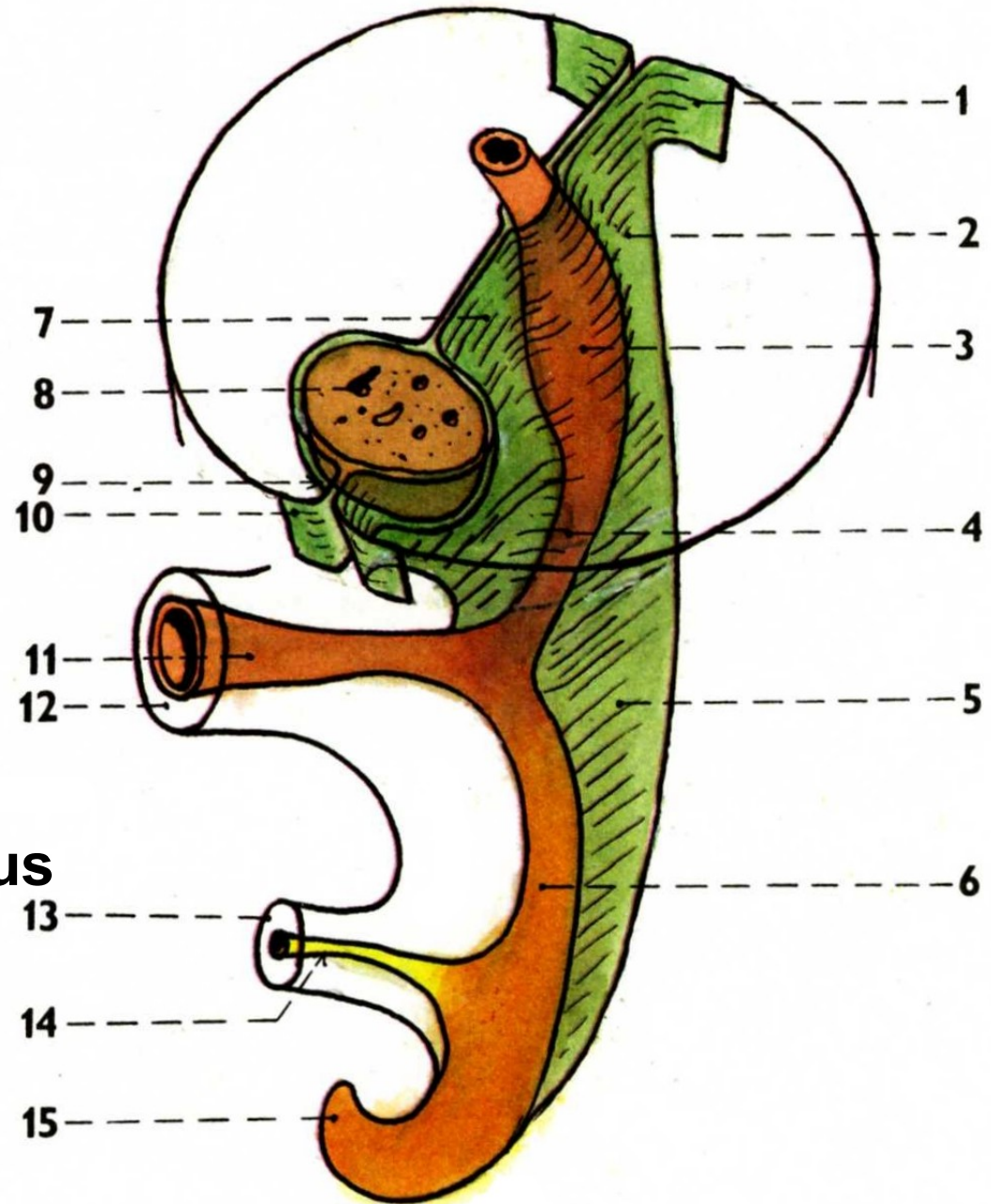
**Mesenterium dorsale**  
**Septum transversum**  
**Mesogastrium ventrale**





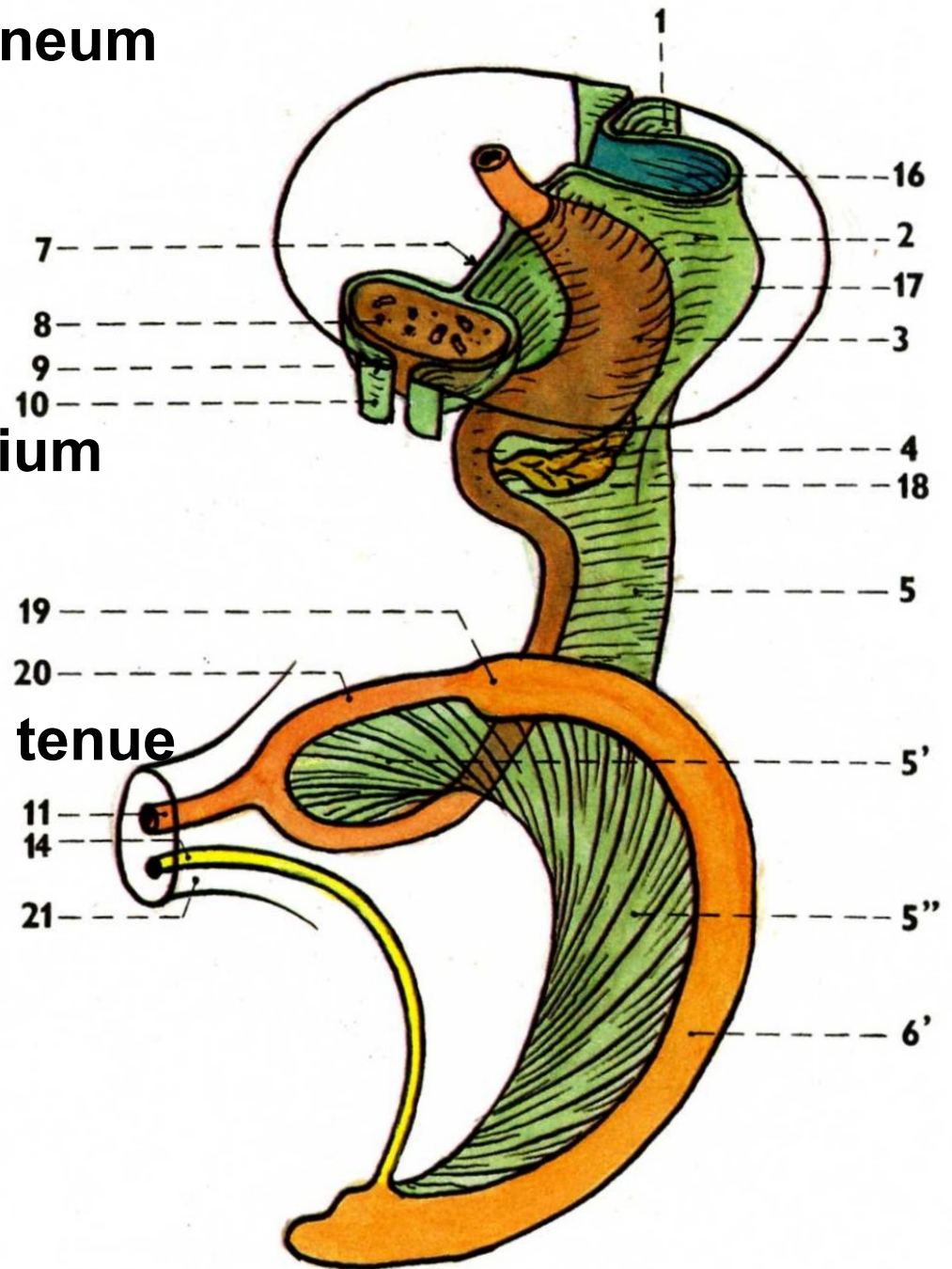
# Development of the peritoneum

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

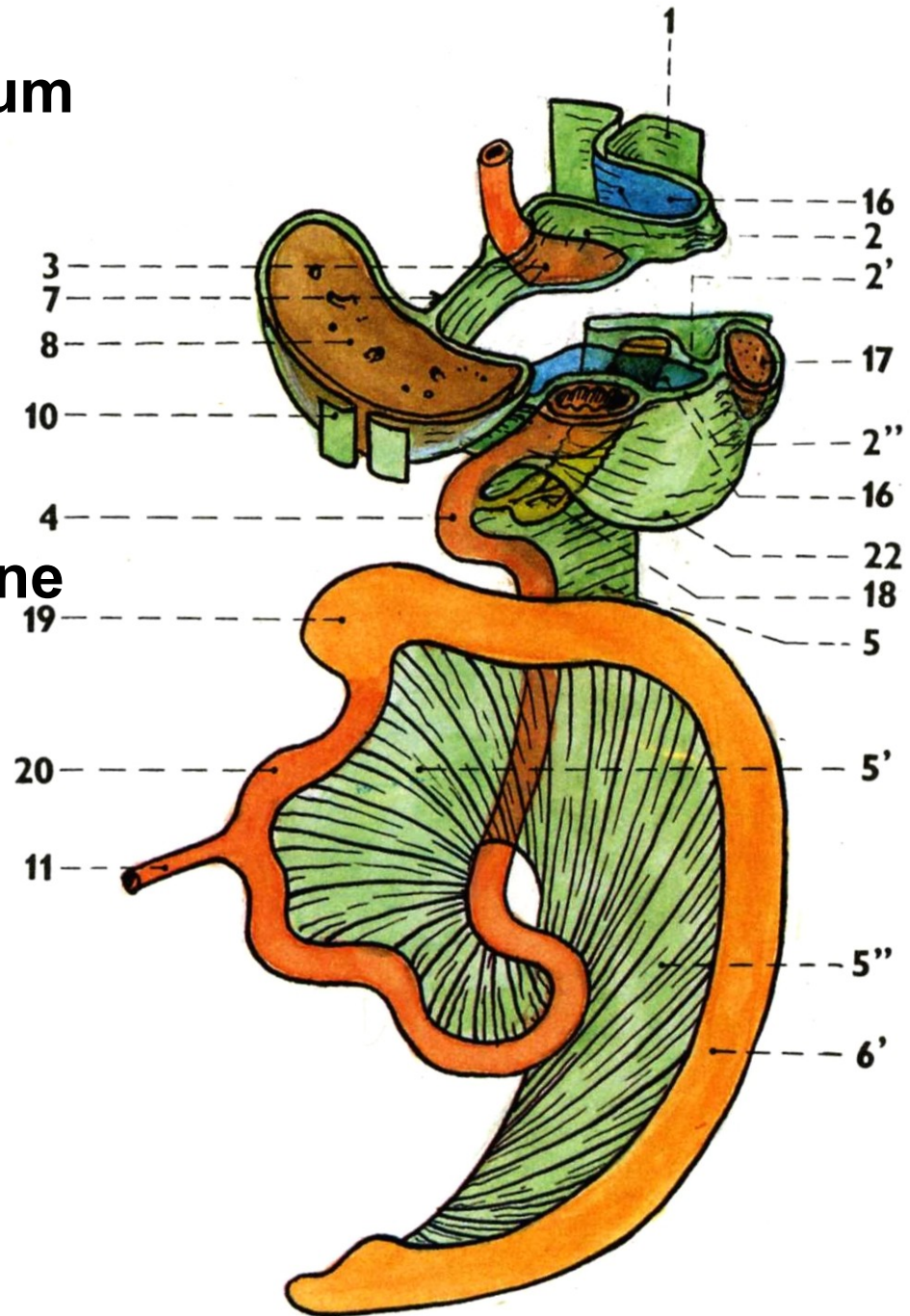
2''. lig. gastrolienale

5'. mesenterium

5''. mesocolon

6'. anlage of the large intestine

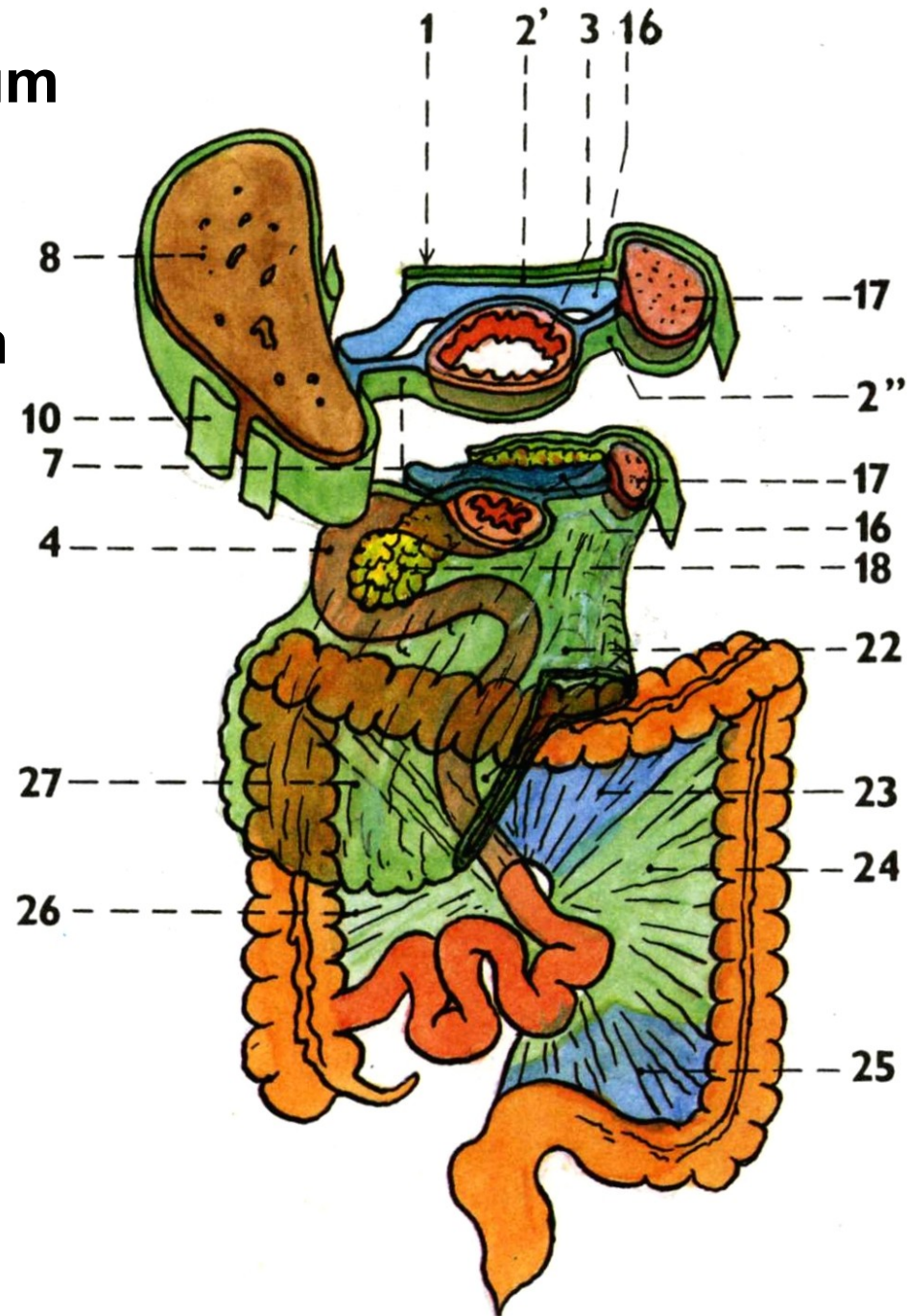
22. omentum majus





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