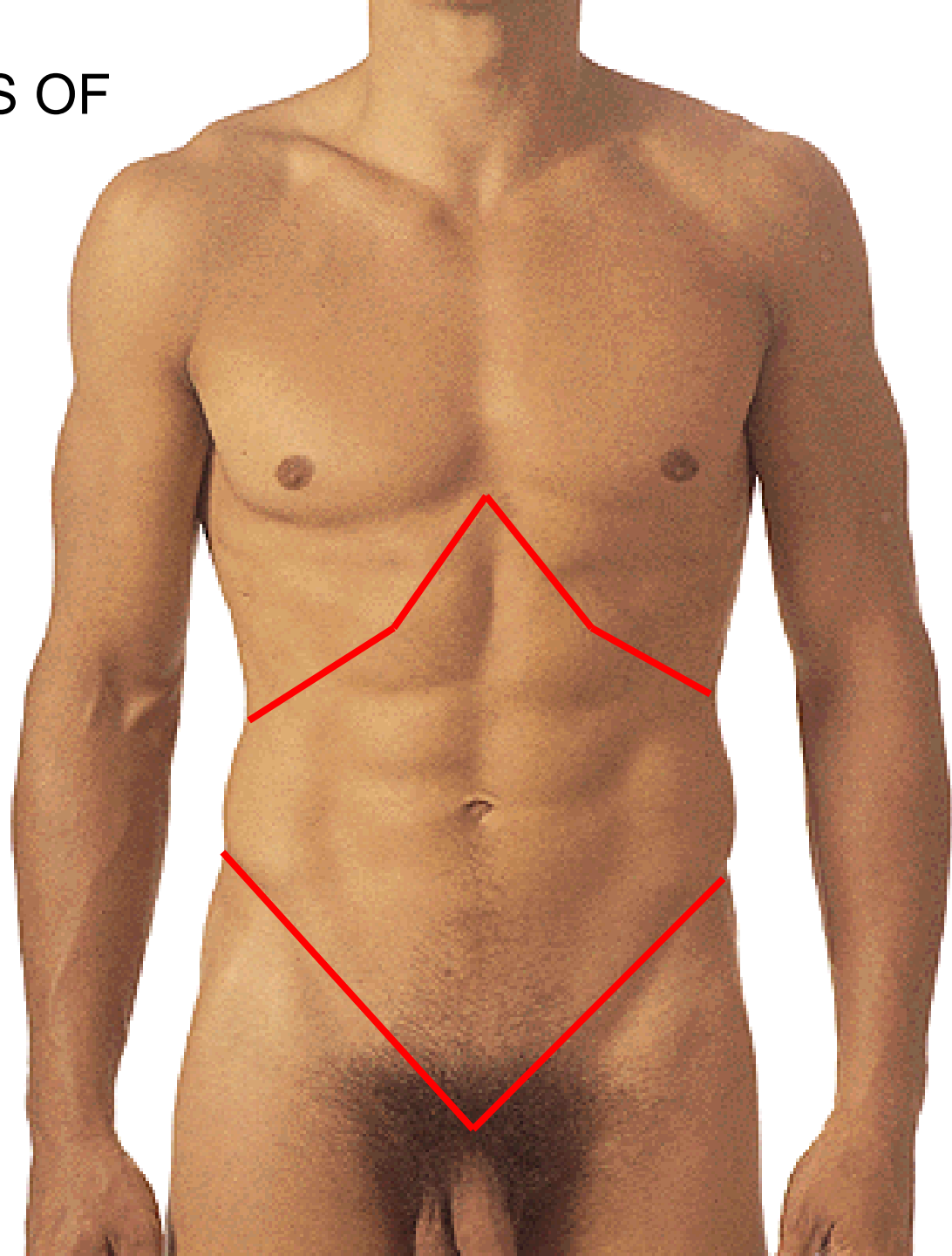


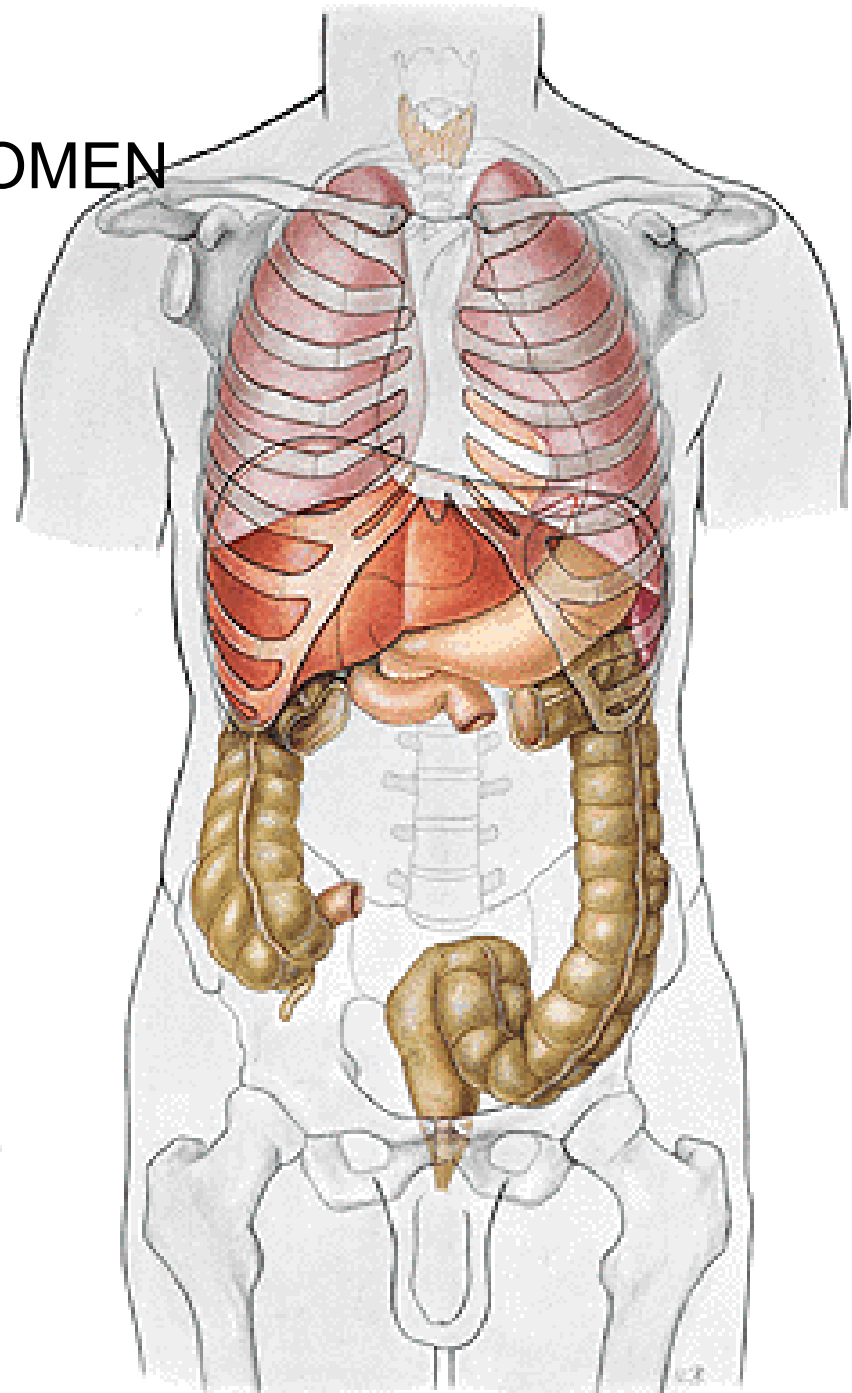
# **PROJECTION OF ORGANS ONTO THE ABDOMINAL WALL**

# SUPERFICIAL BORDERS OF THE ABDOMEN

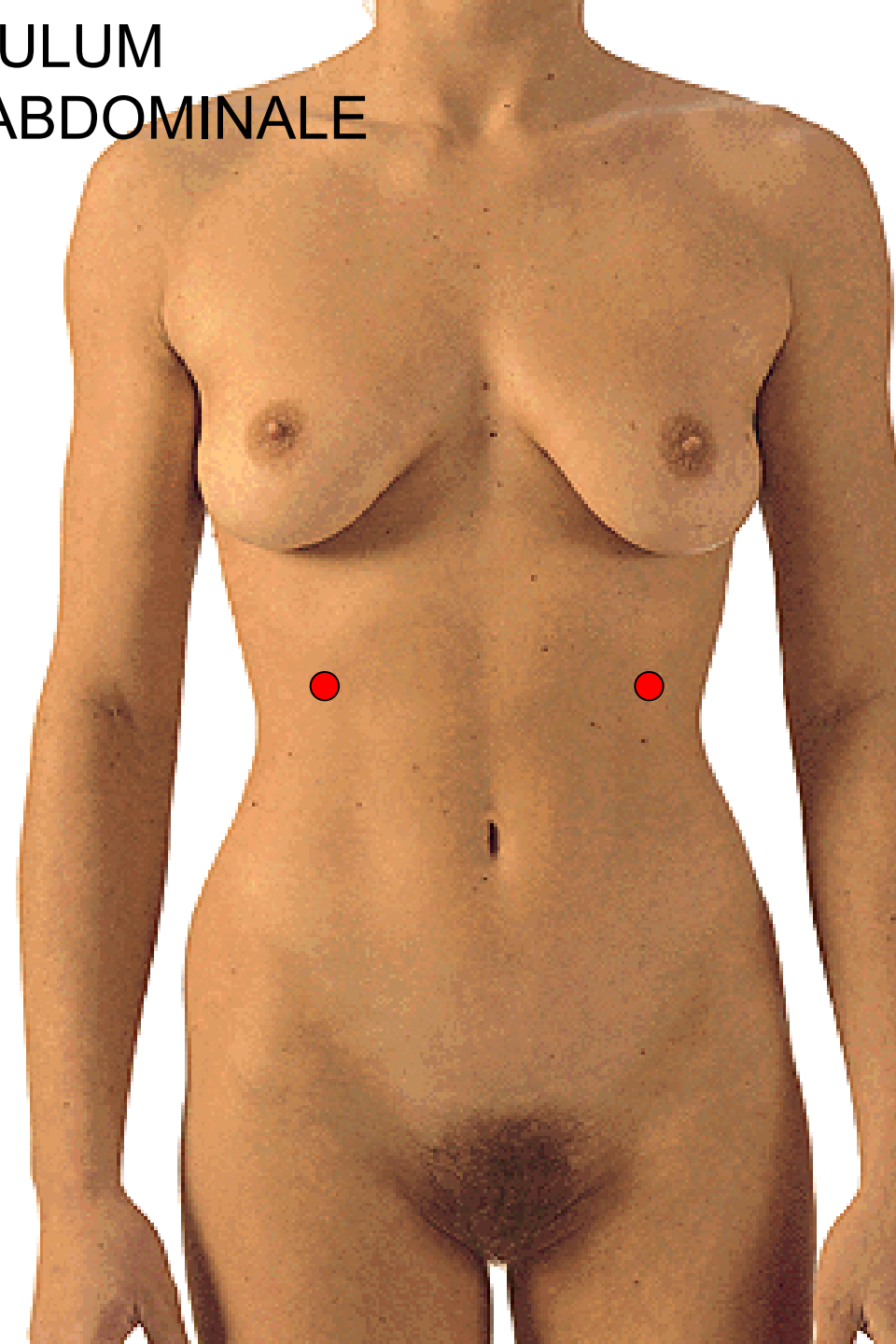
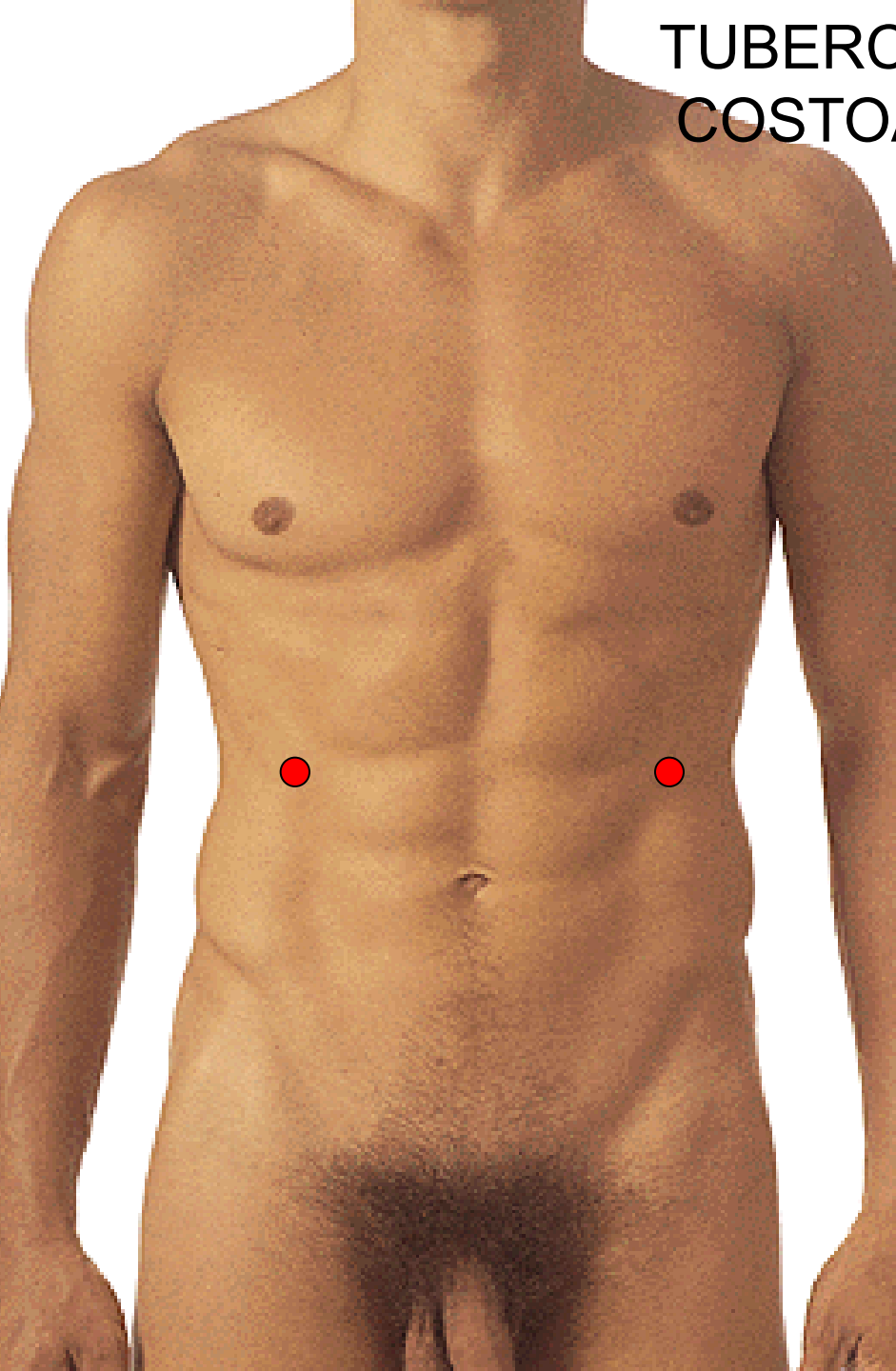


## DEEP BORDERS OF THE ABDOMEN

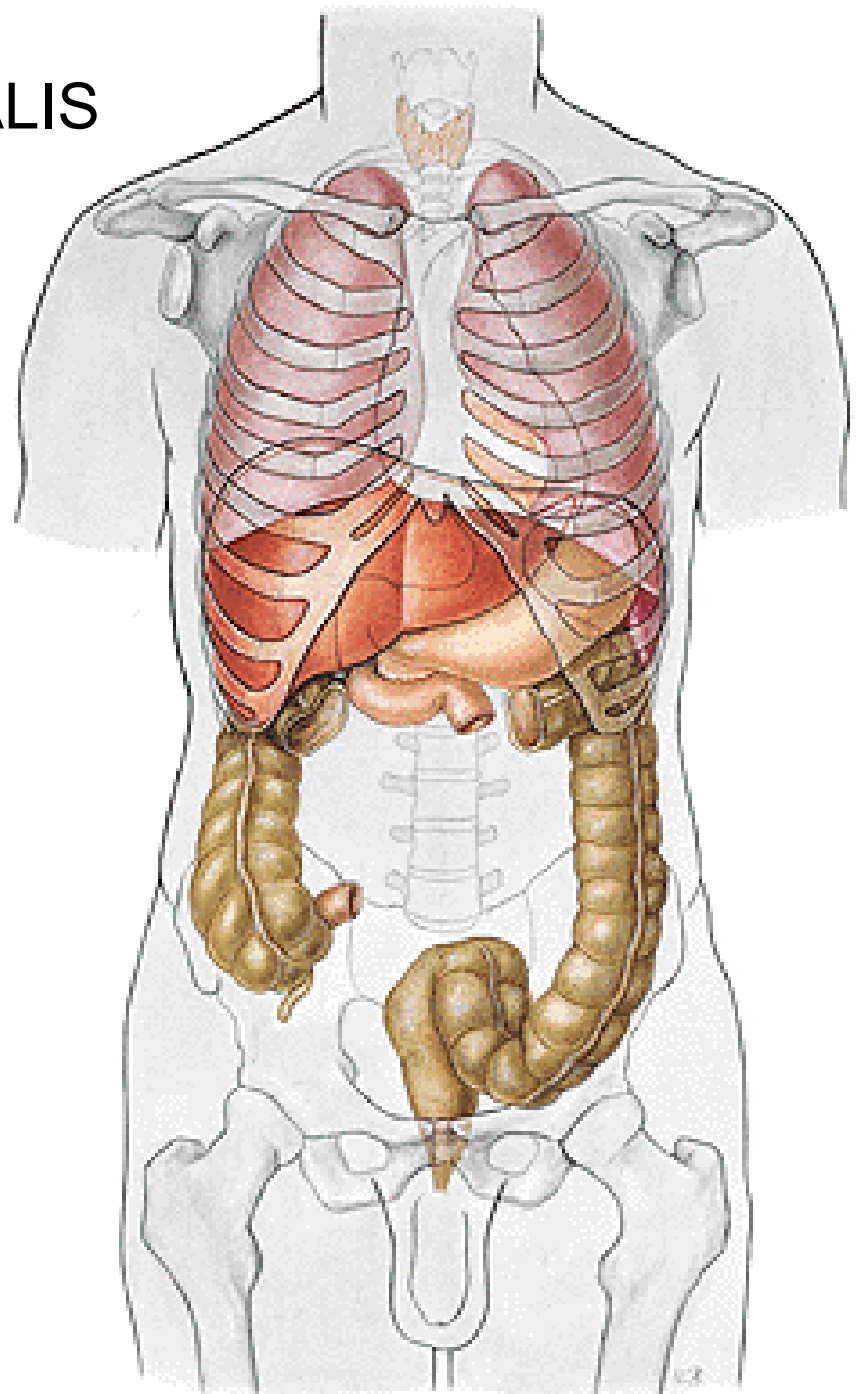
- DIAPHRAGMA
- LINEA TERMINALIS



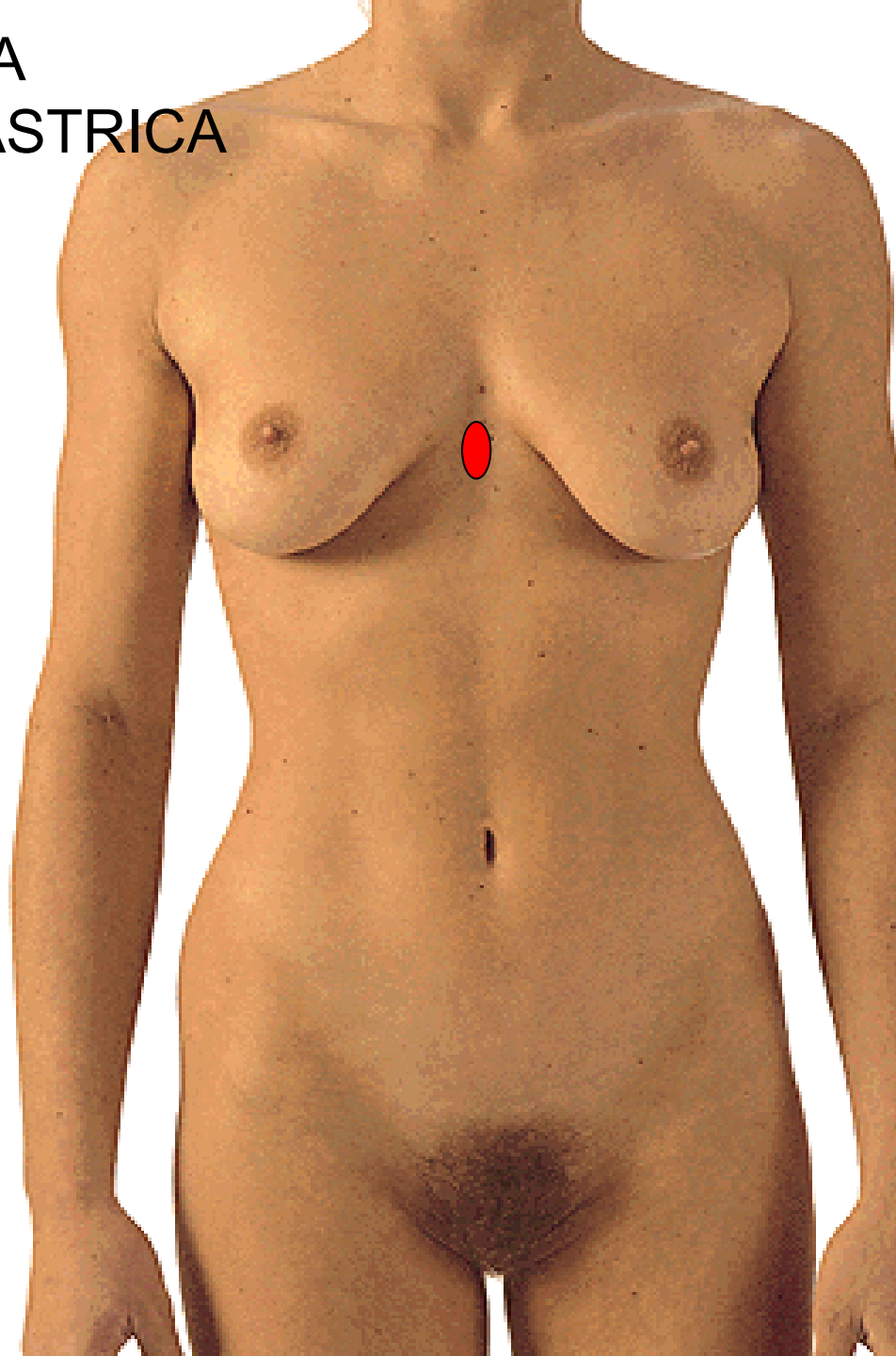
TUBERCULUM  
COSTOABDOMINALE



# ANGULUS INFRASTERNALIS



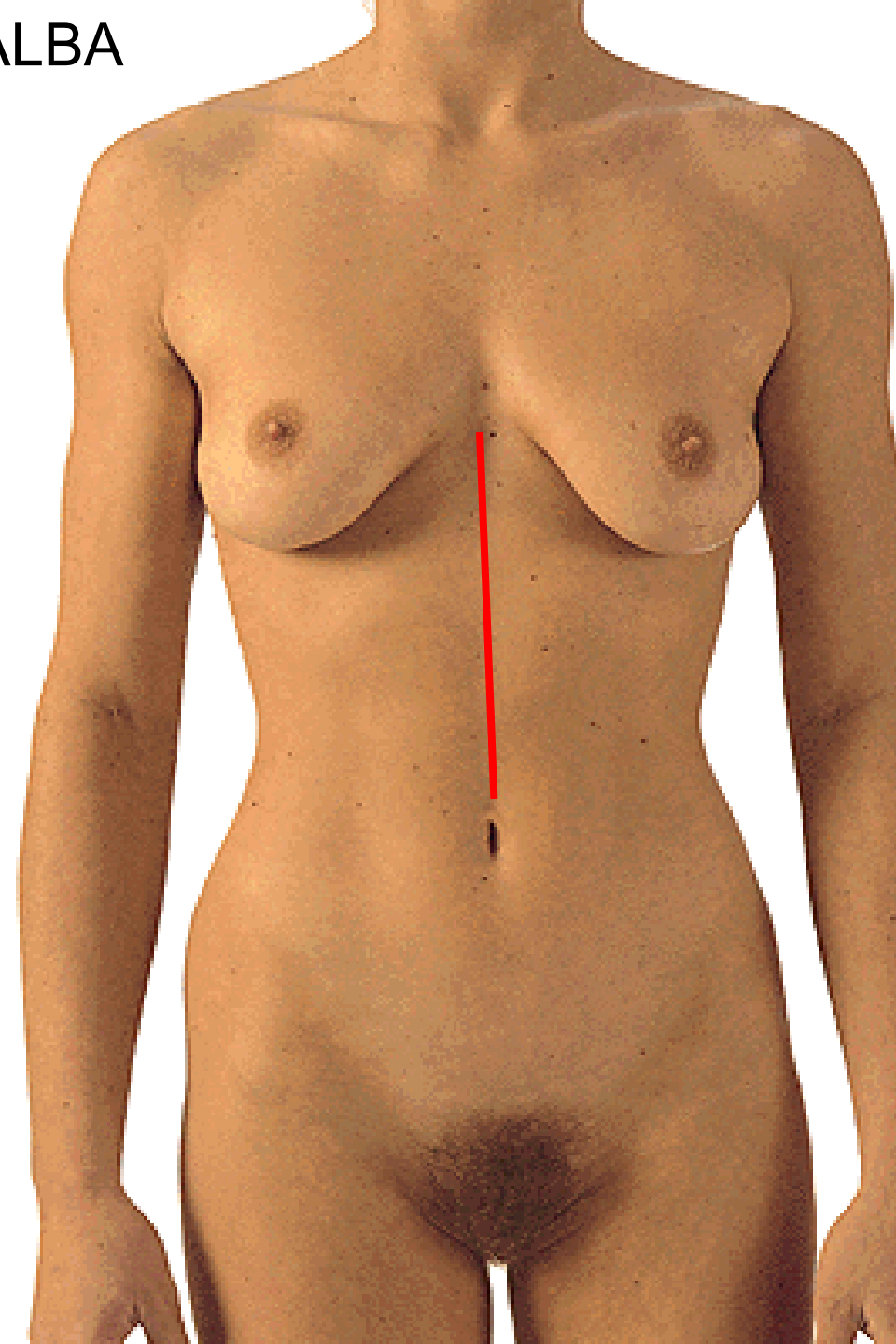
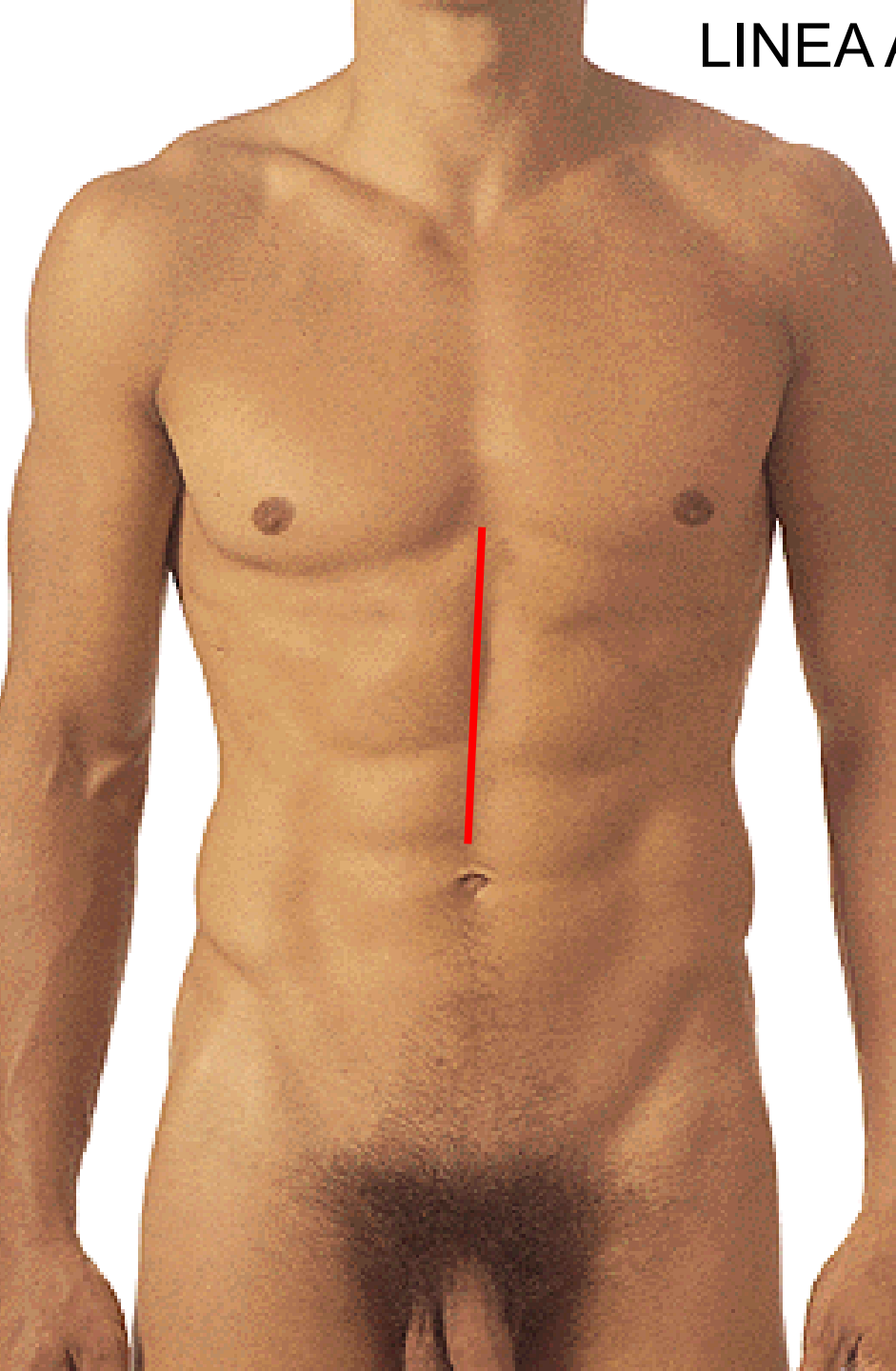
FOSSA  
EPIGASTRICA



UMBILICUS – L3/L4

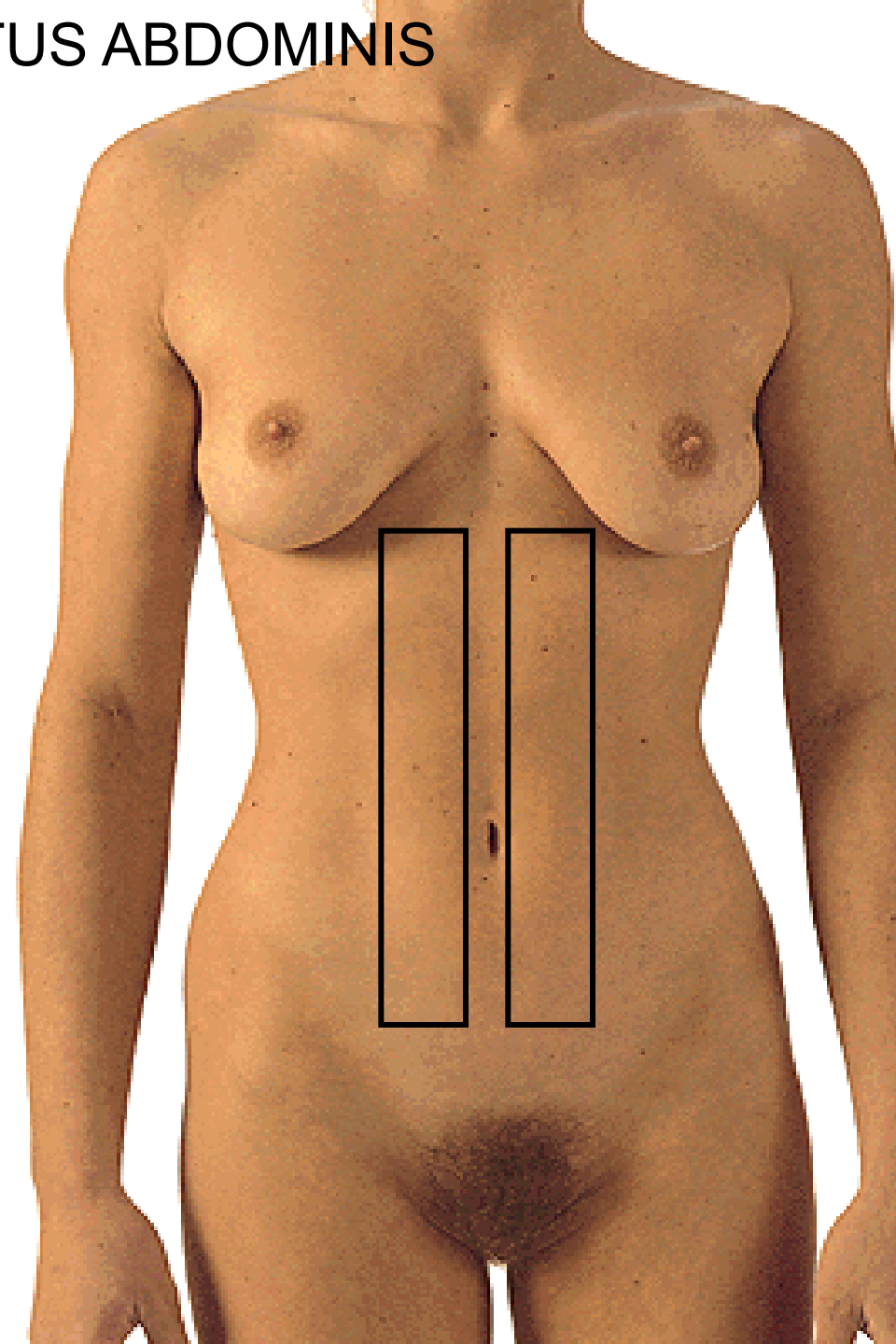
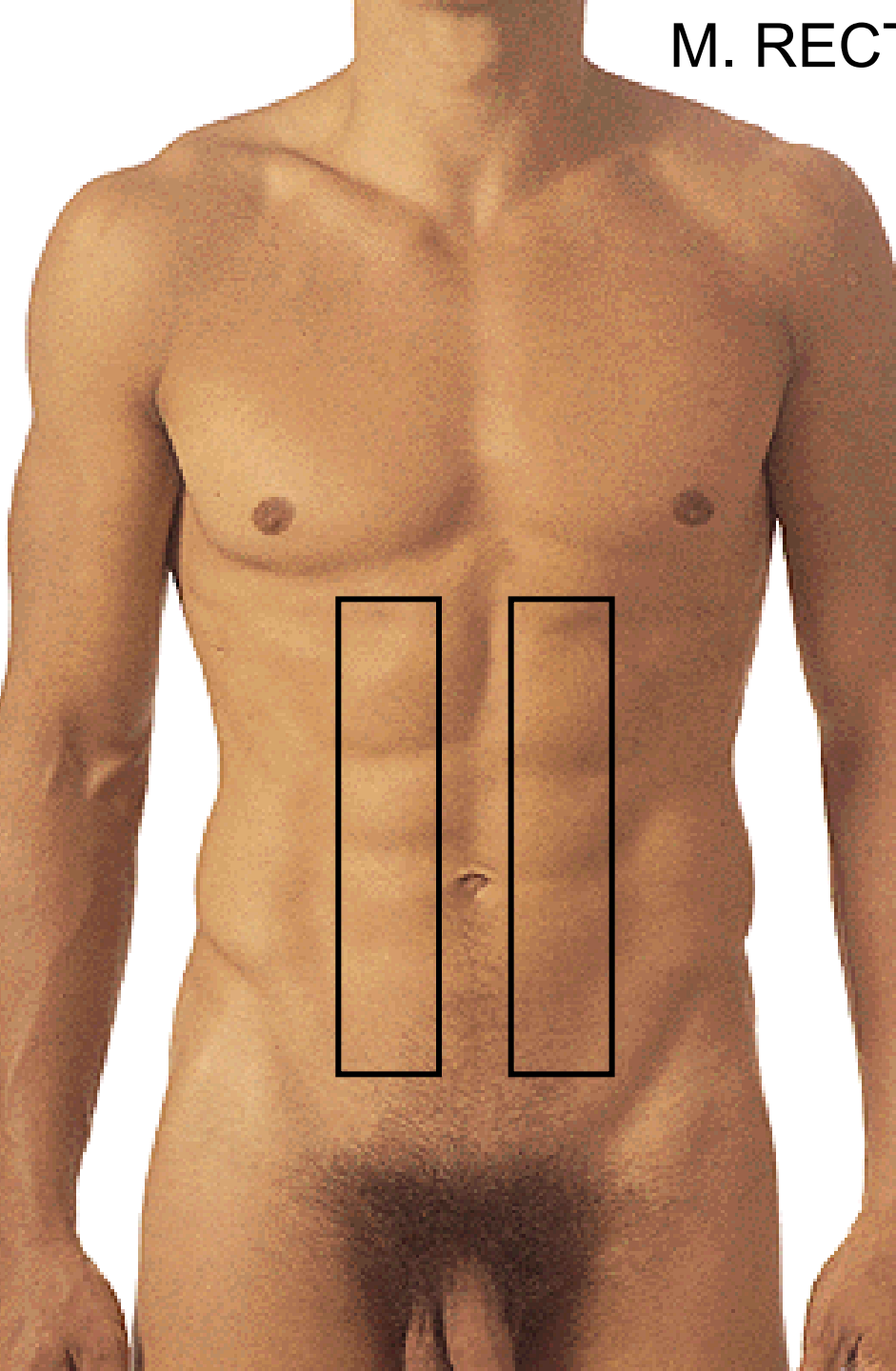


# LINEA ALBA

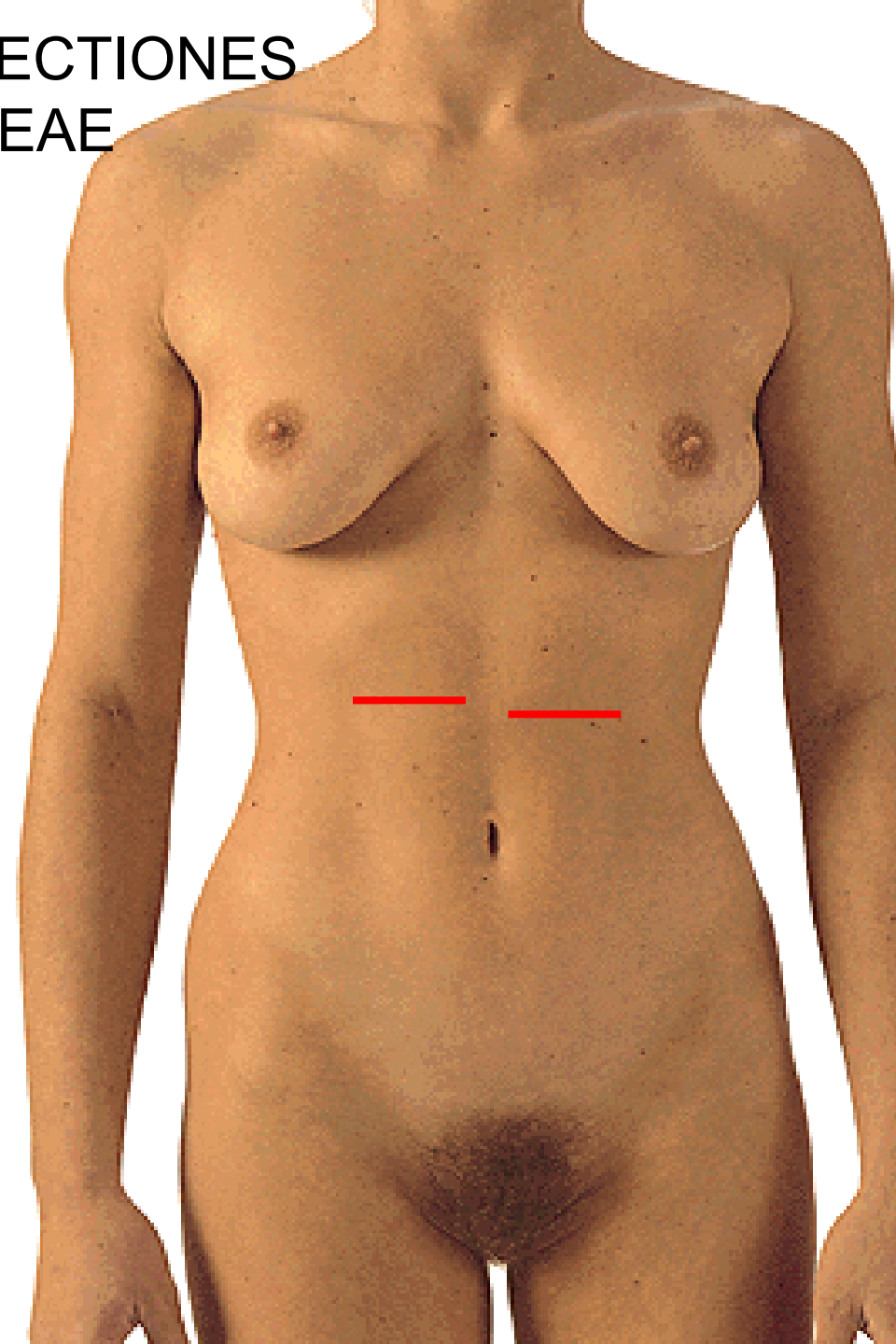
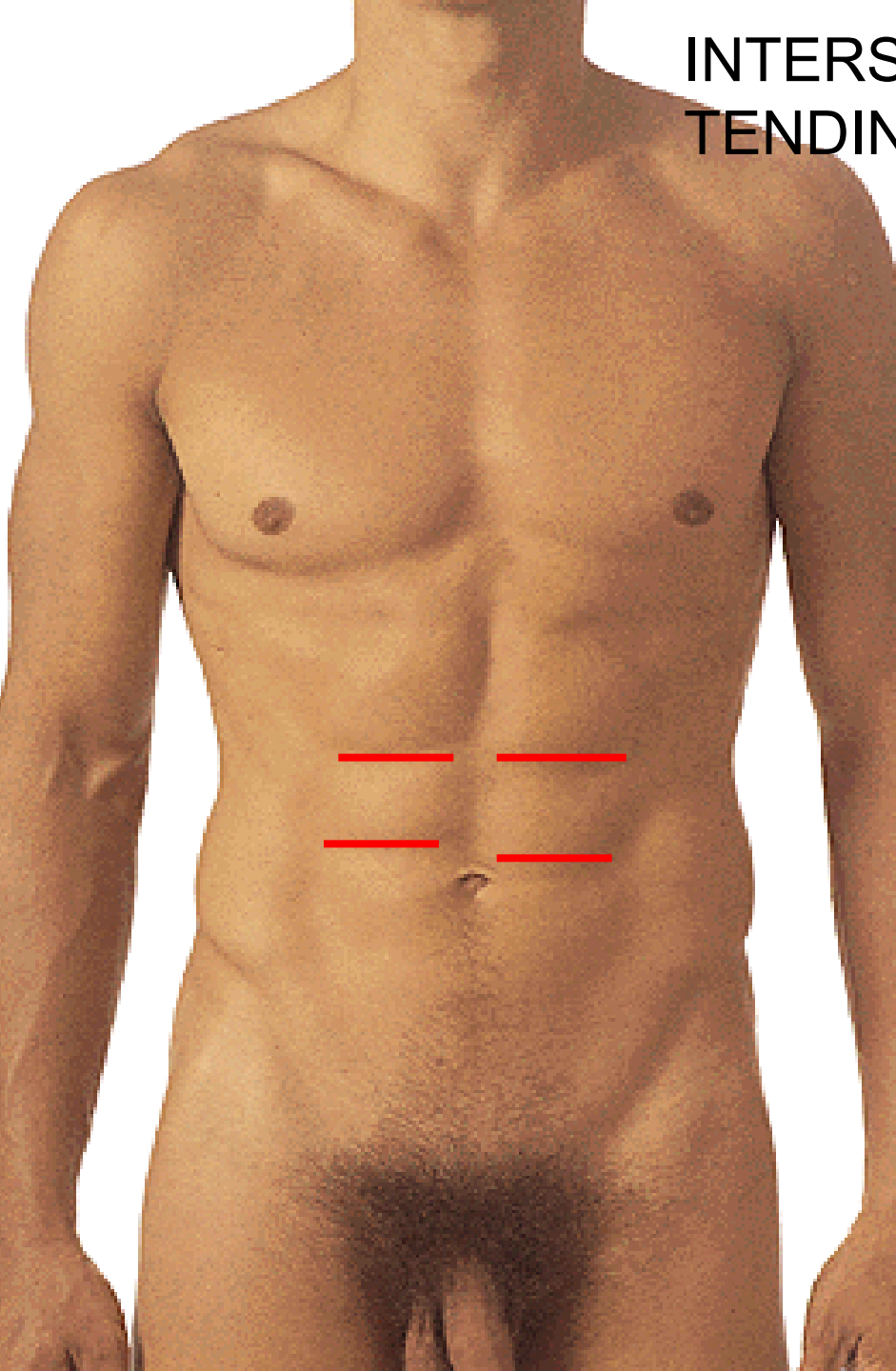




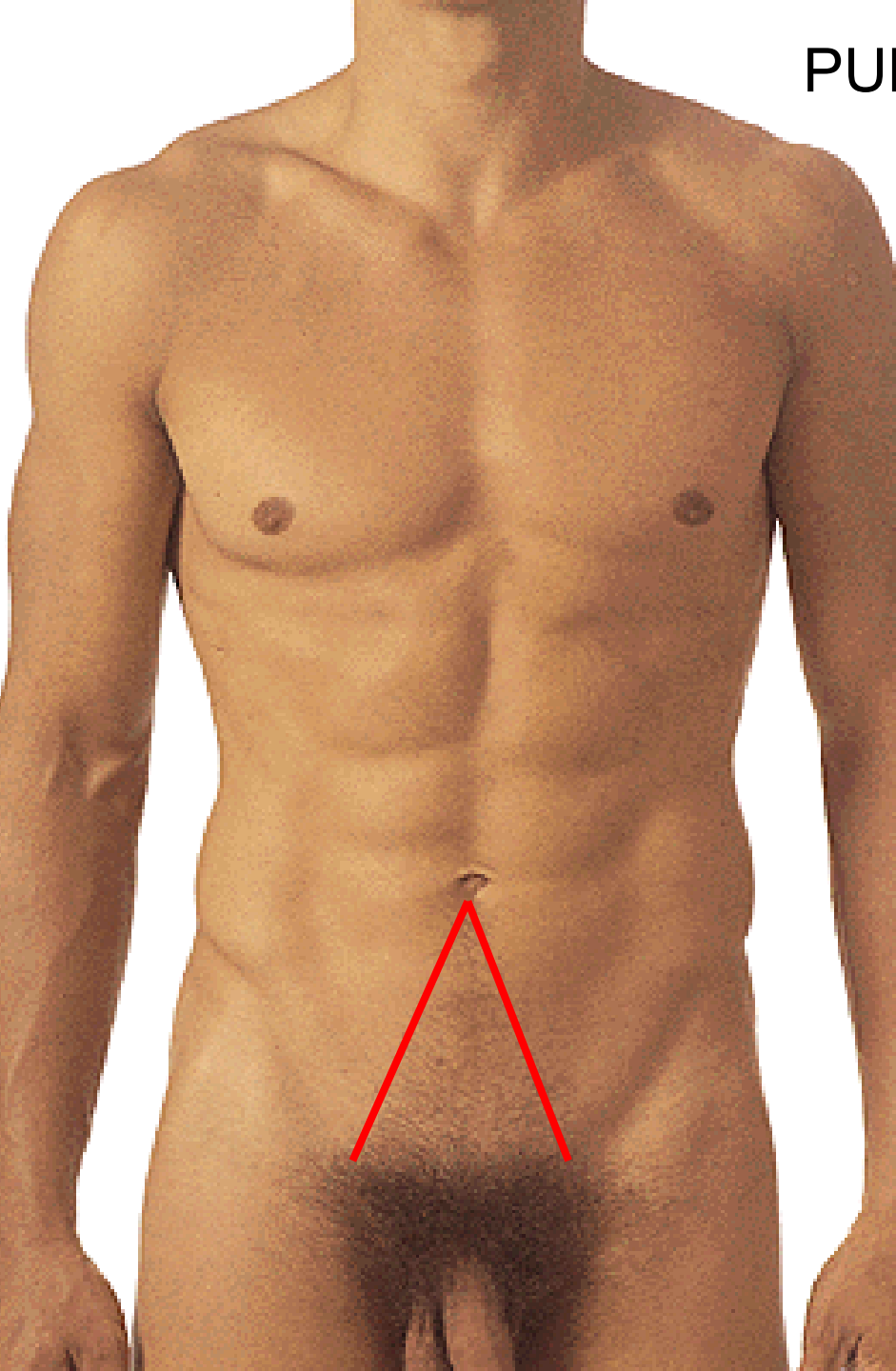
# M. RECTUS ABDOMINIS



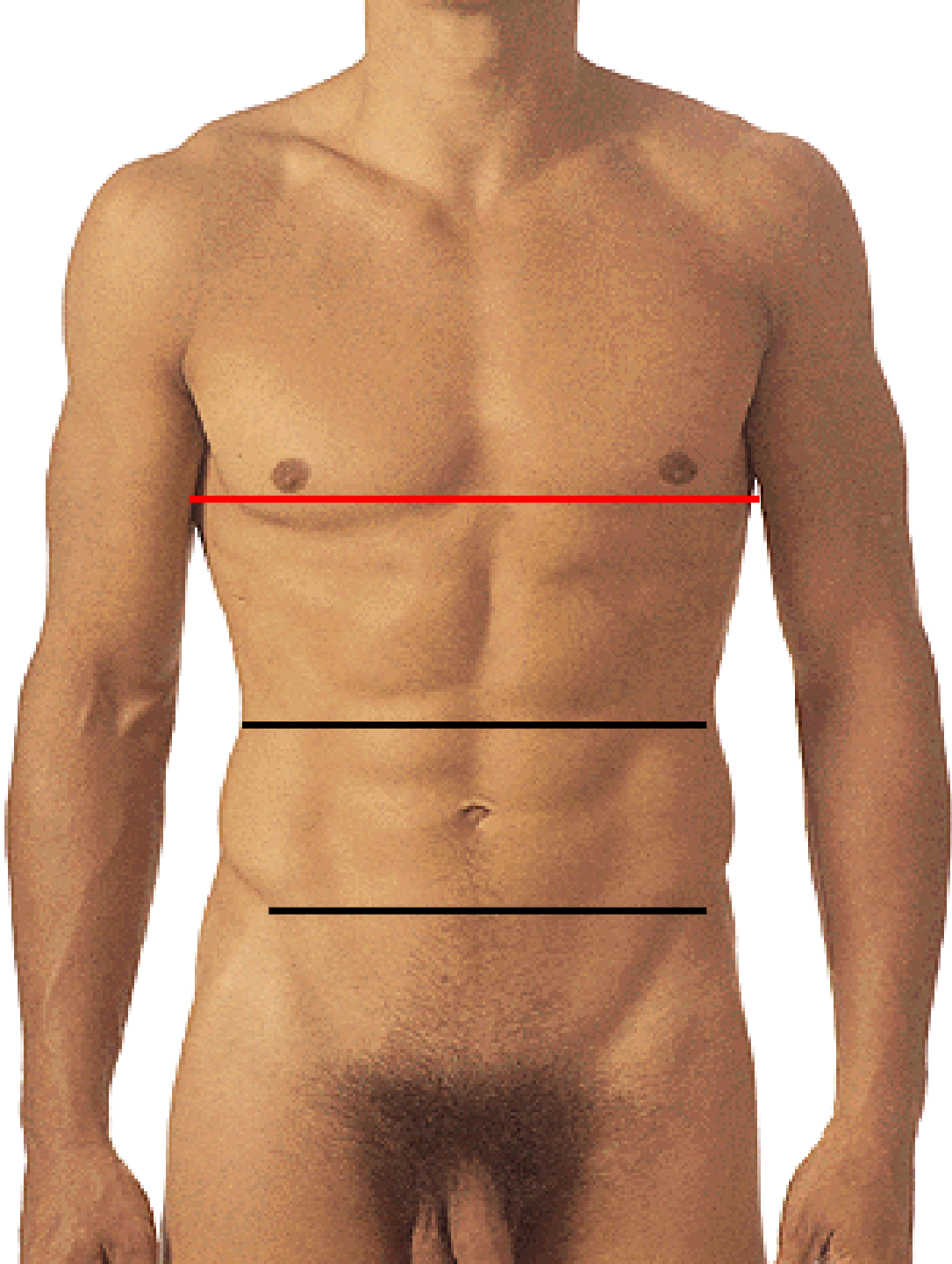
# INTERSECTIONS TENDINEAE



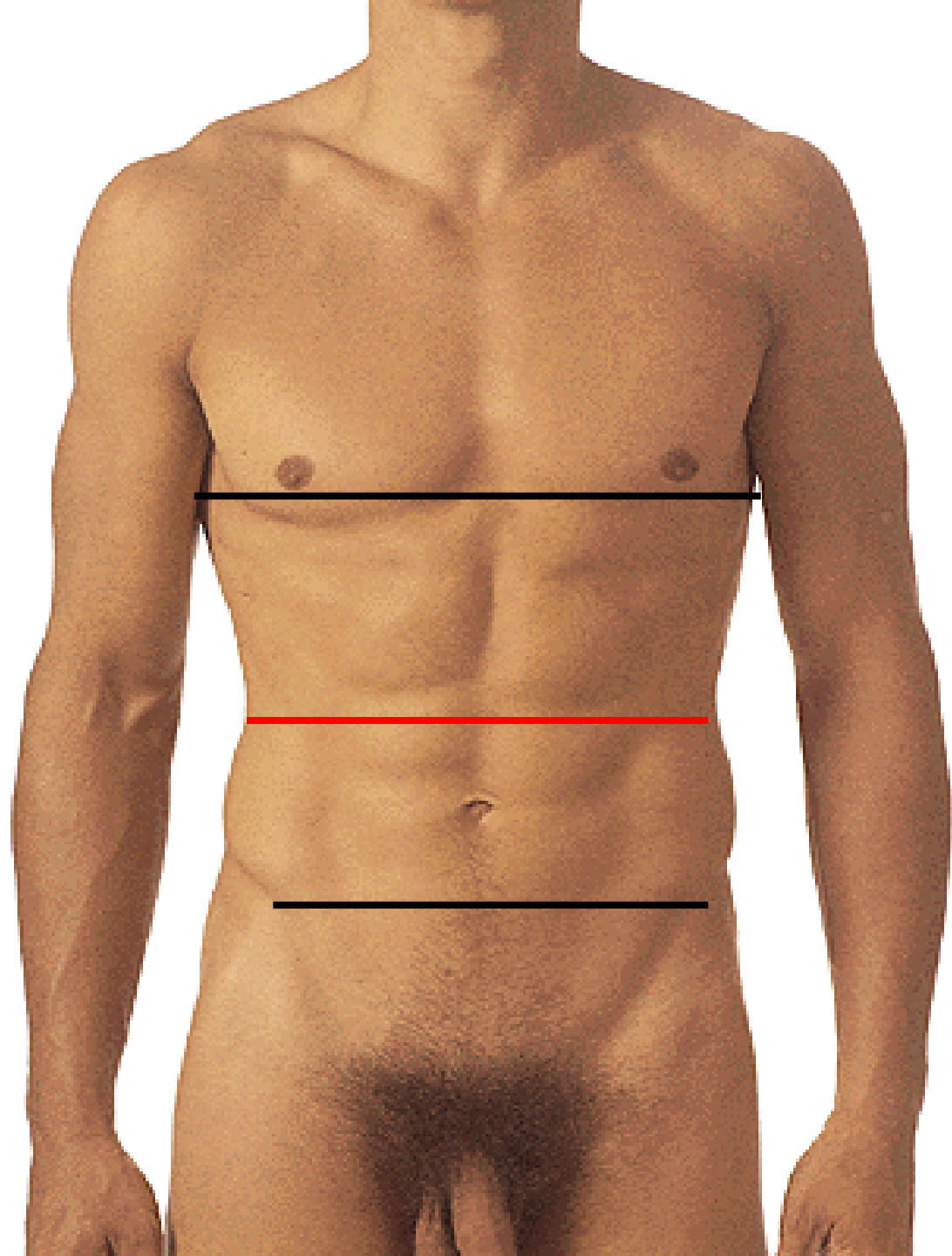
PUBES



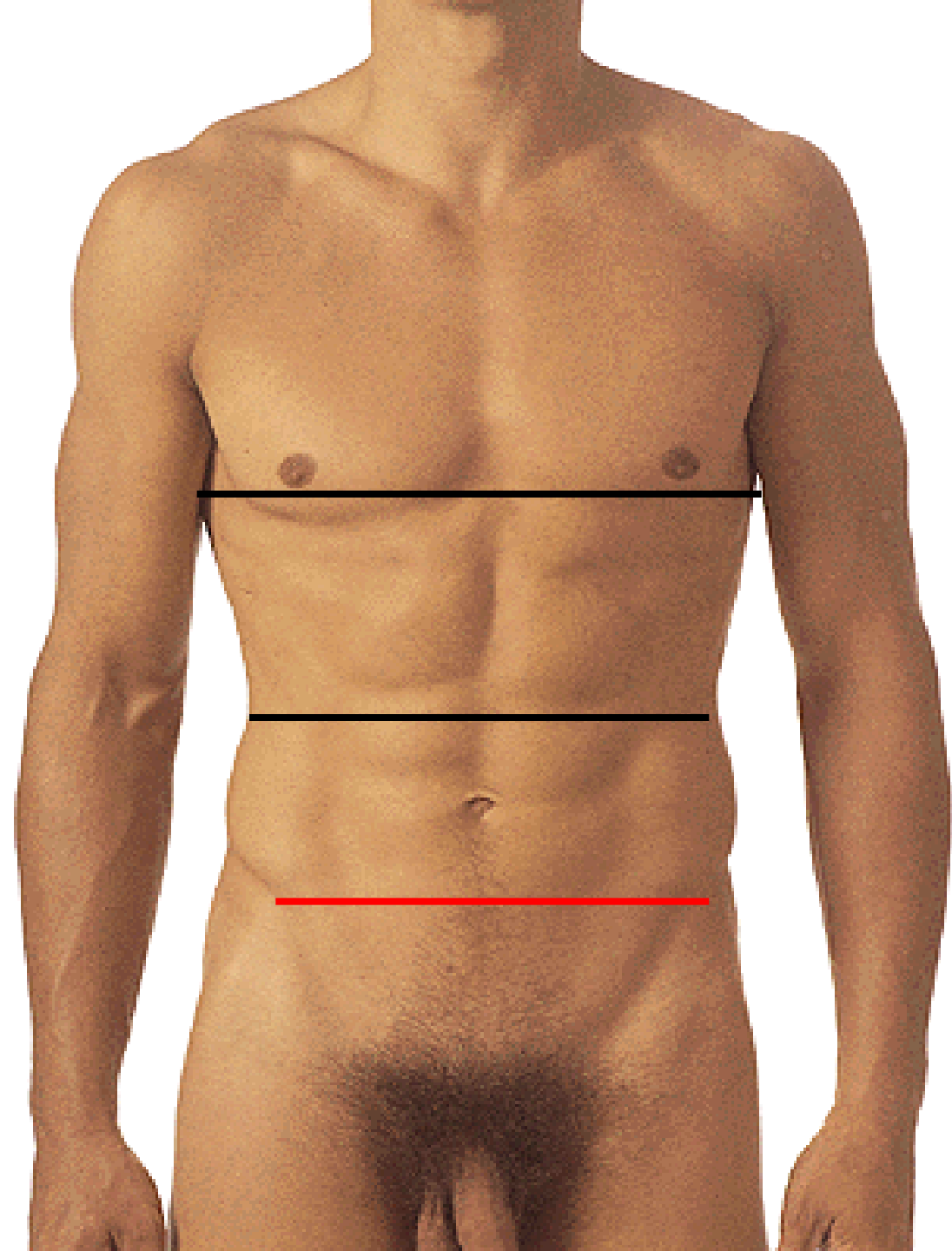
**LINEA XIPHISTERNALIS**



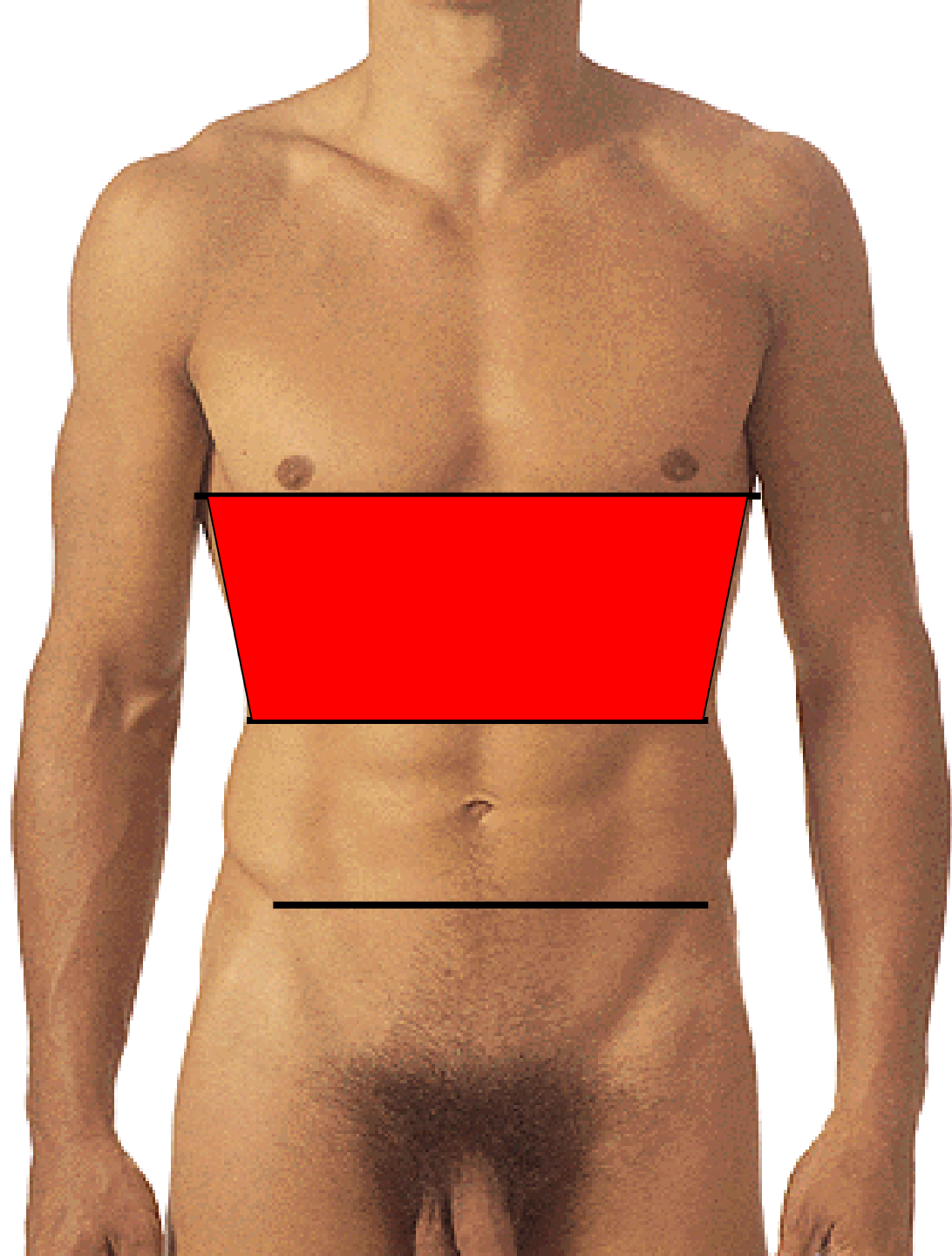
# LINEA SUBCOSTALIS



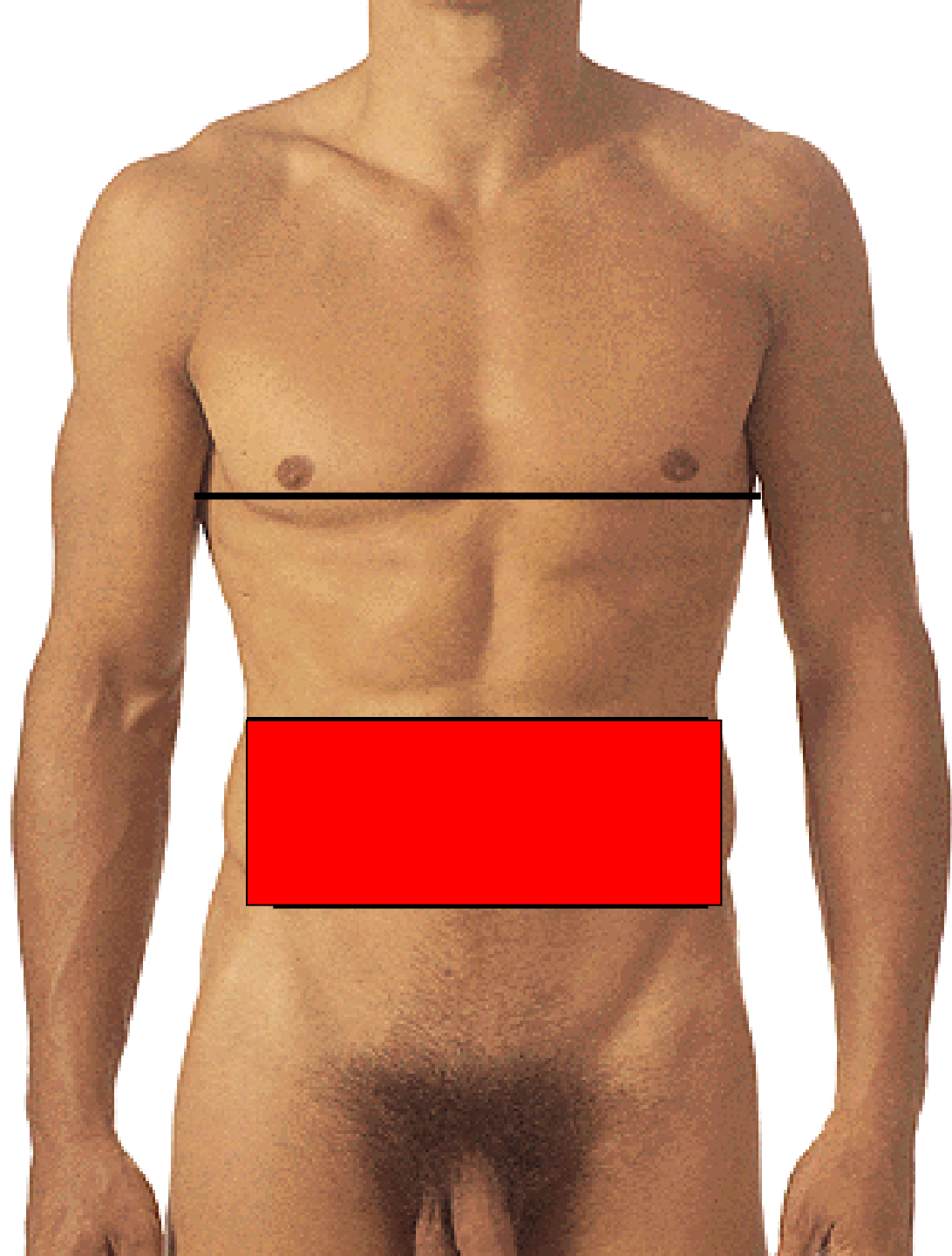
# LINEA INTERSPINALIS



# EPIGASTRIUM

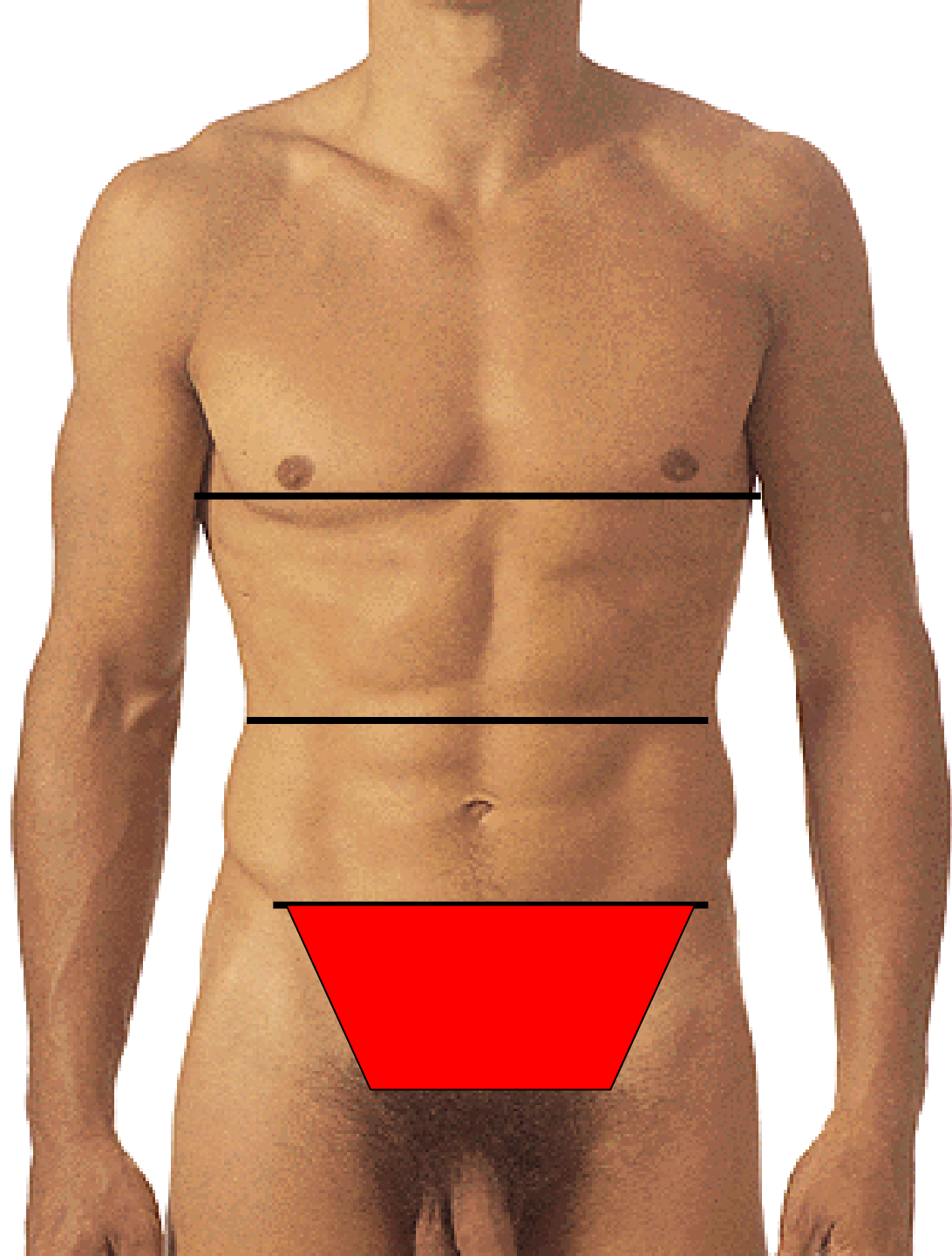


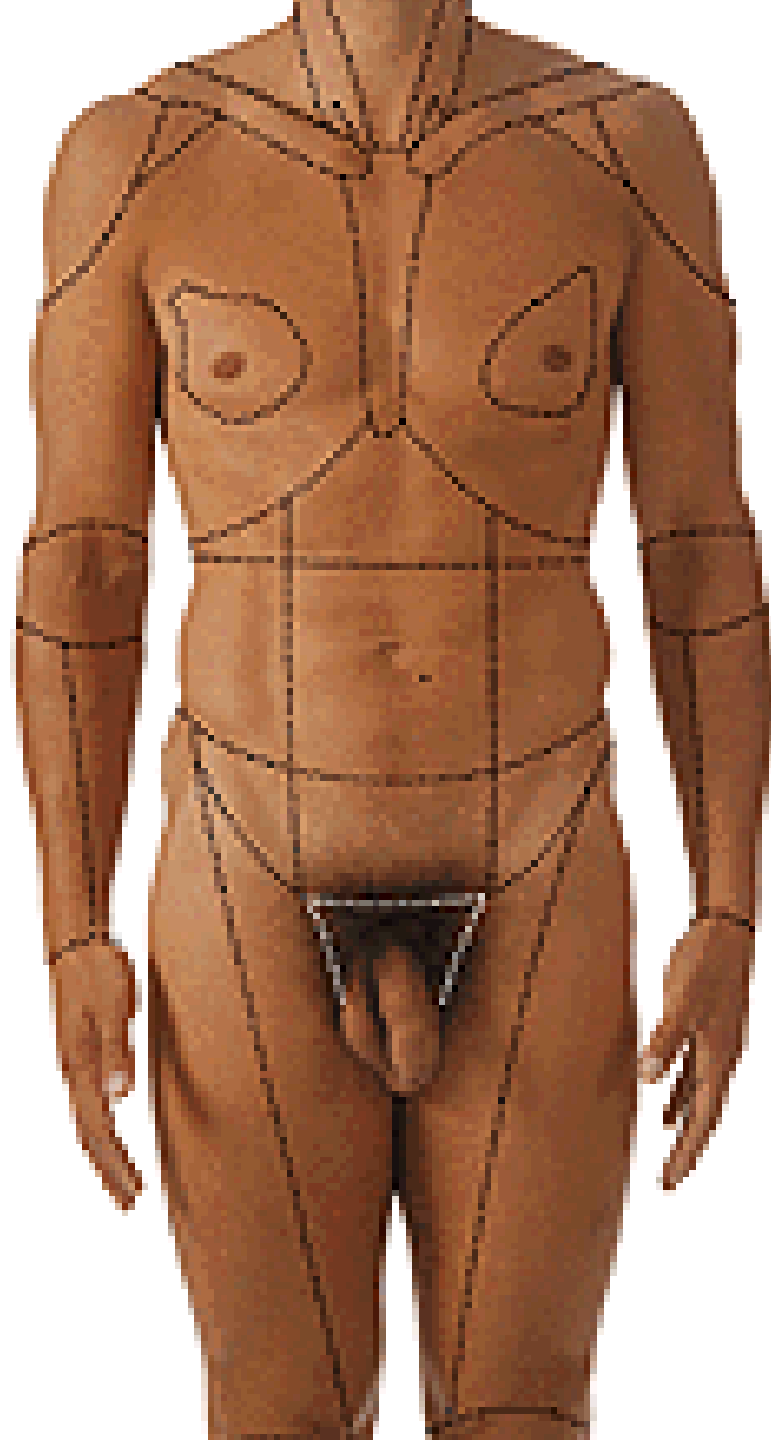
# MESOGASTRIUM



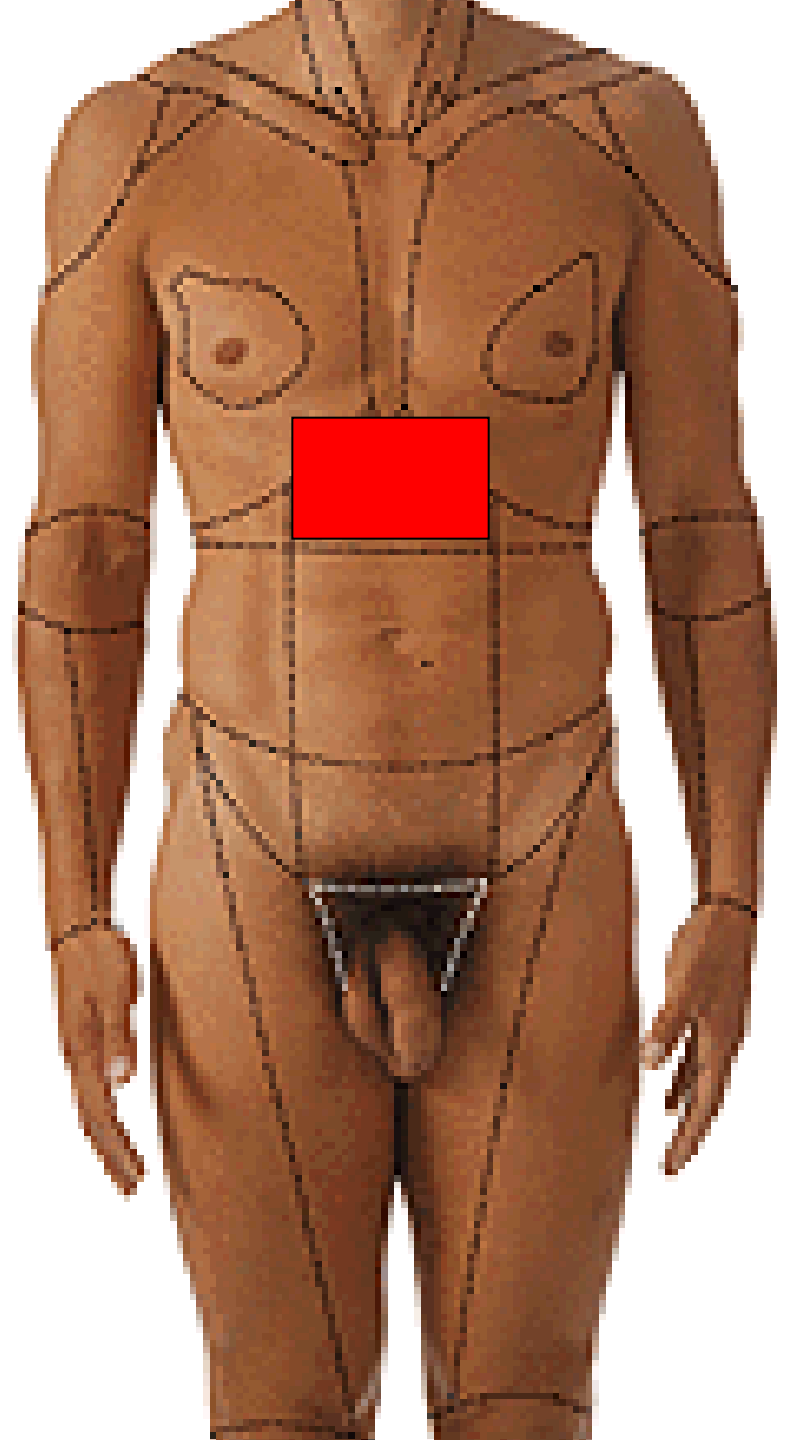


# HYPOGASTRIUM

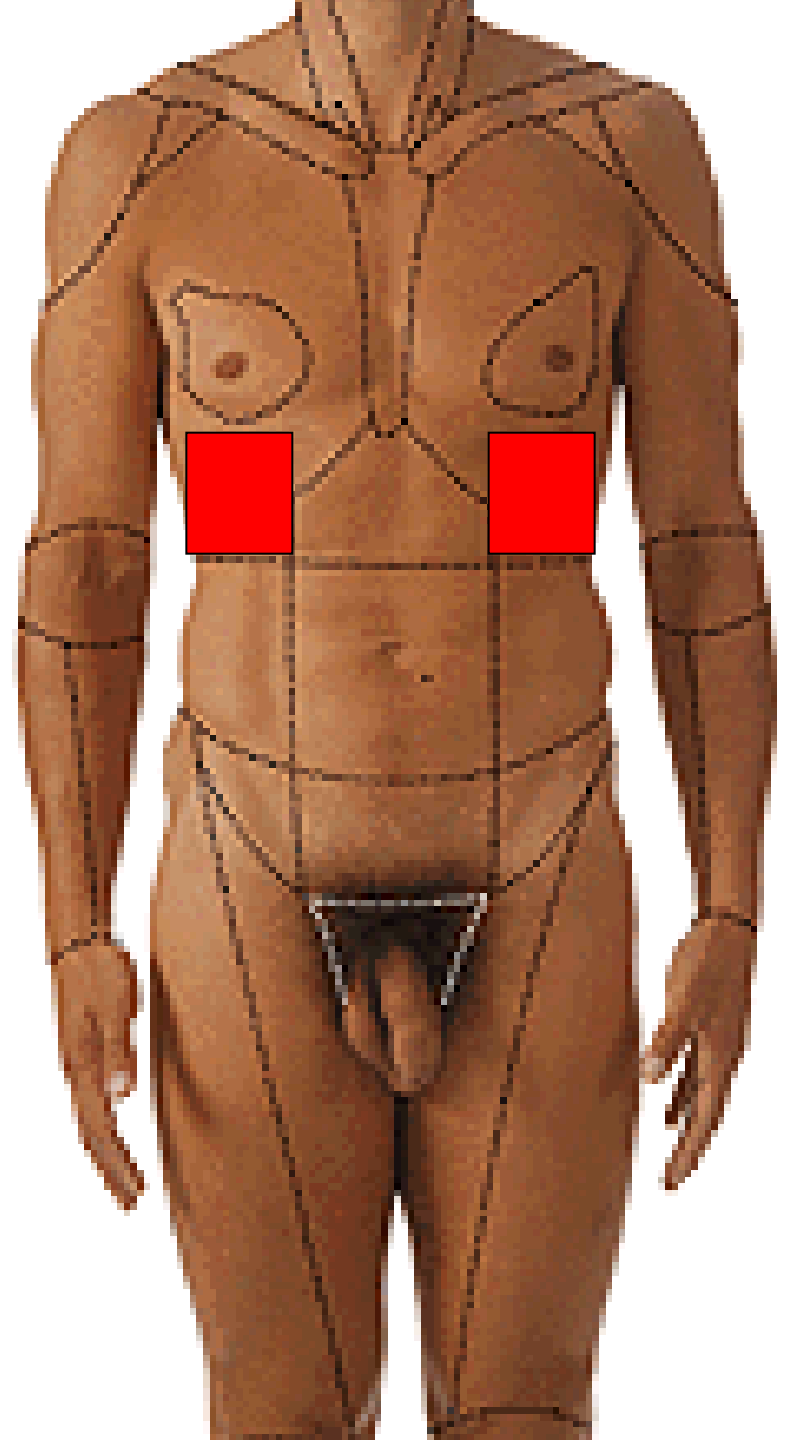




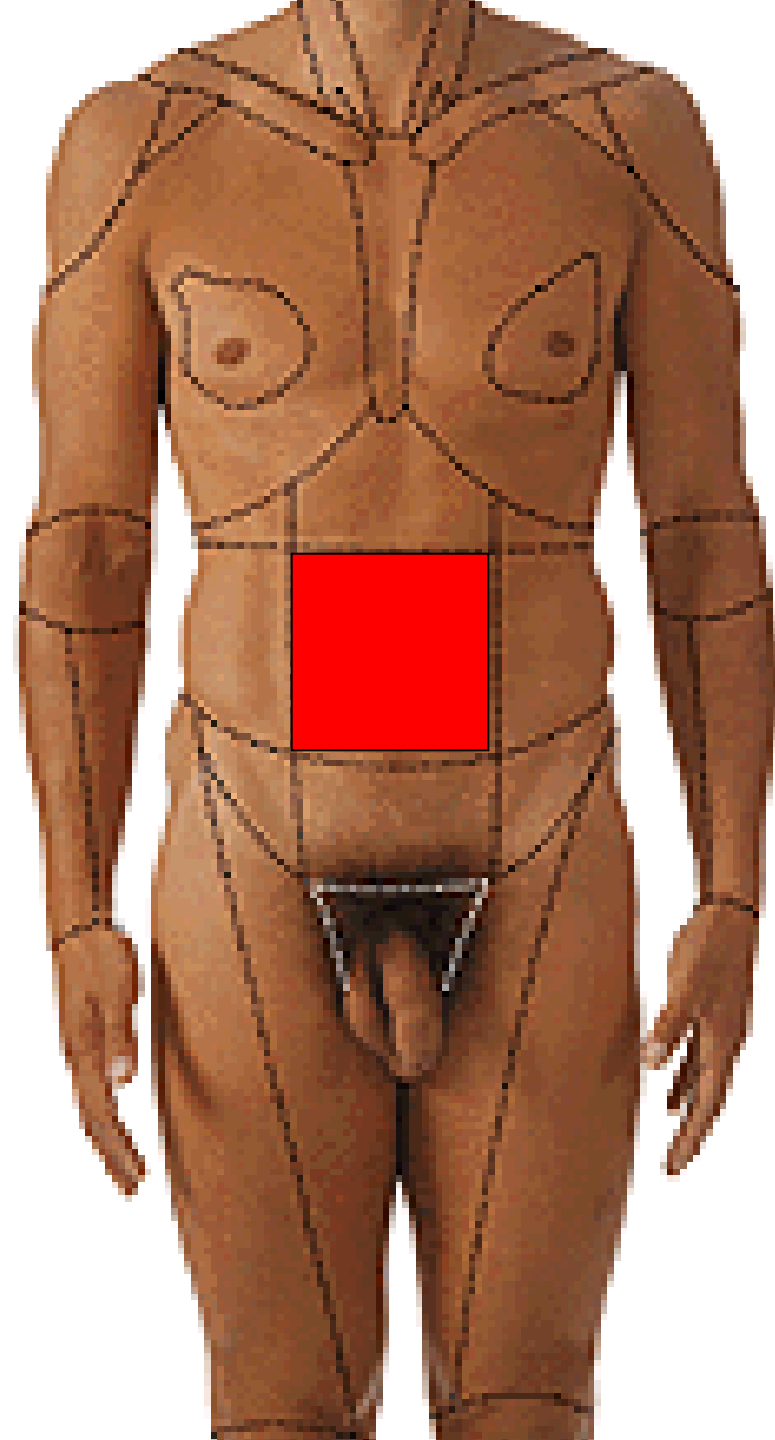
# REGIO EPIGASTRICA



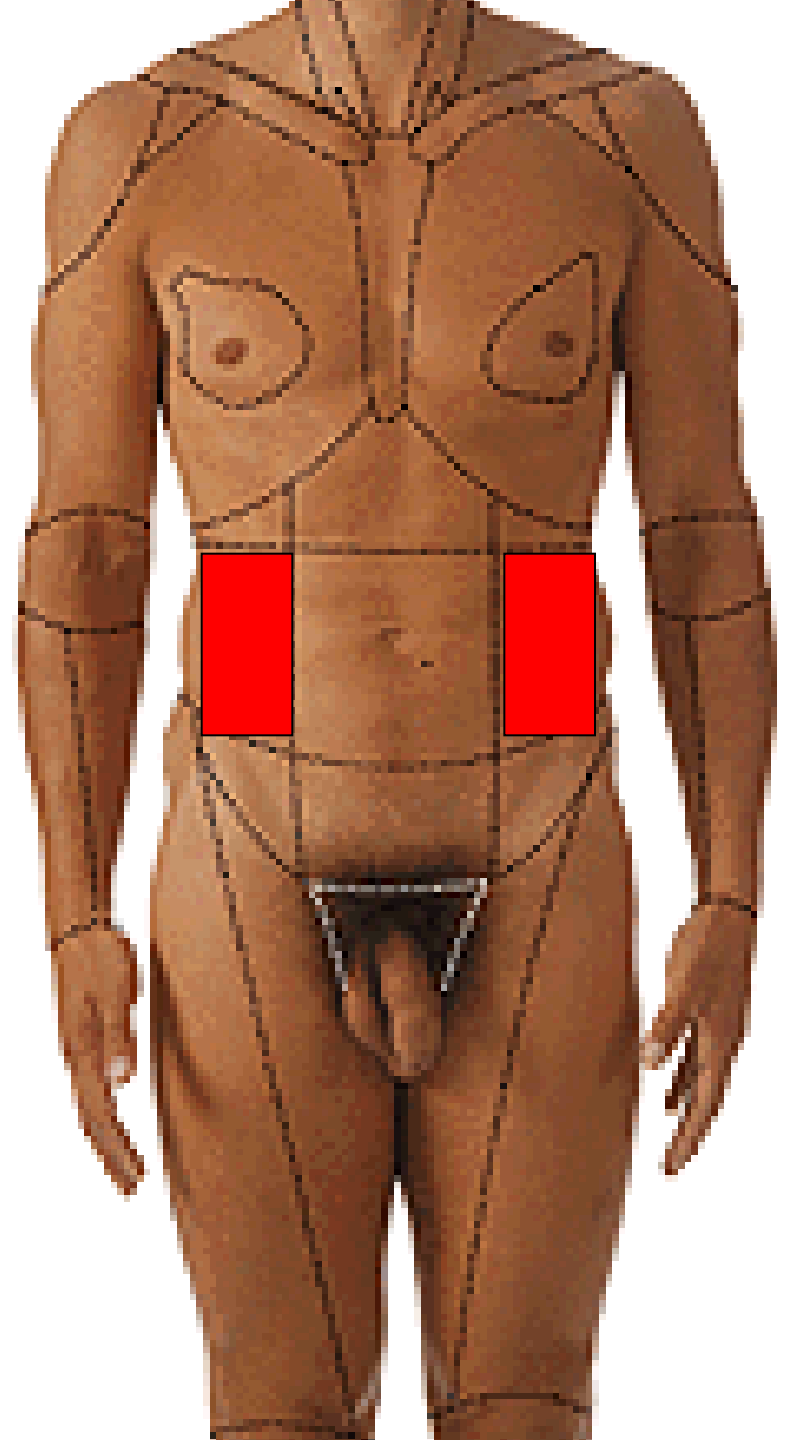
**REGIO HYPOCHONDRIACA  
DEXTRA ET SINISTRA**



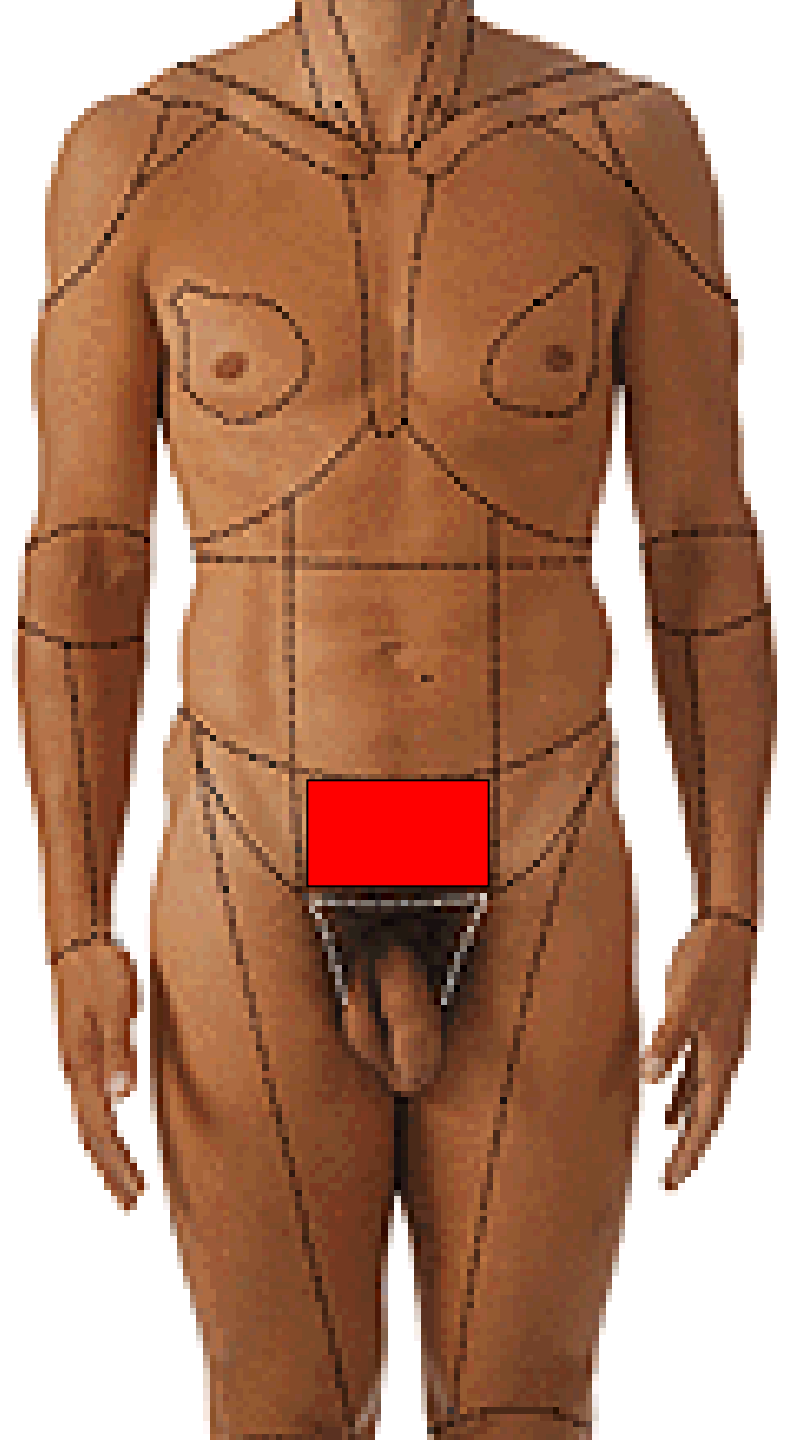
# REGIO UMBILICALIS



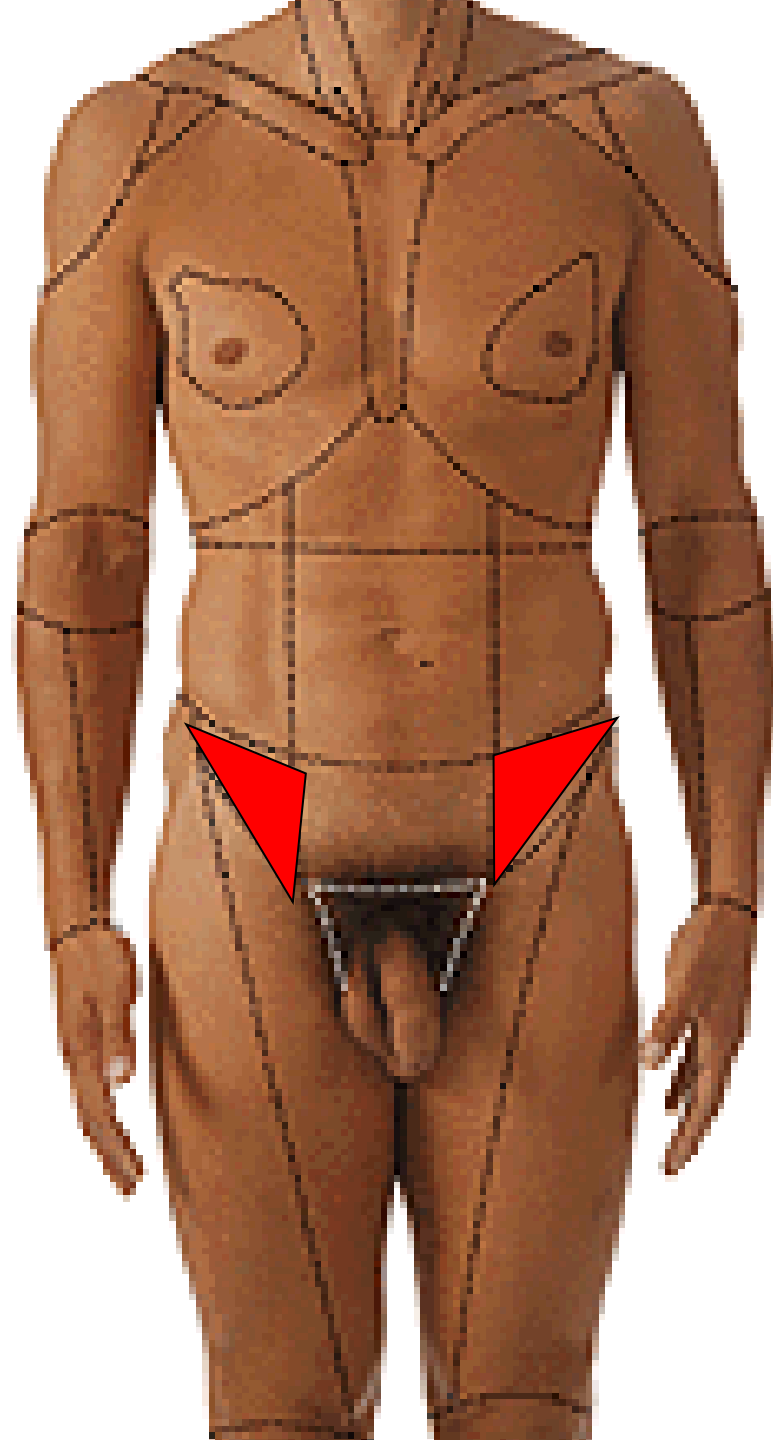
**REGIO LATERALIS  
DEXTRA ET SINISTRA**



# REGIO PUBICA

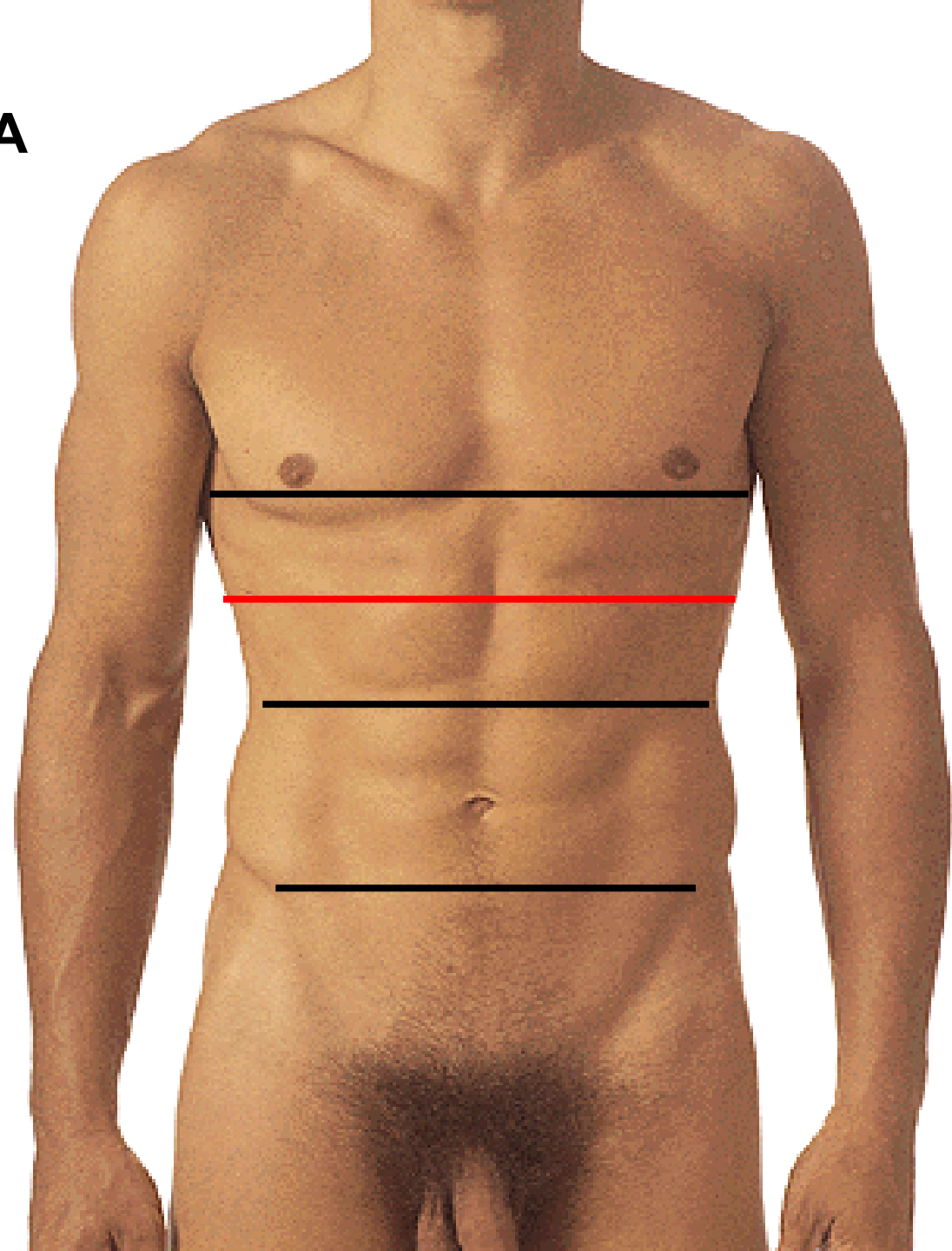


**REGIO INGUINALIS  
DEXTRA ET SINISTRA**

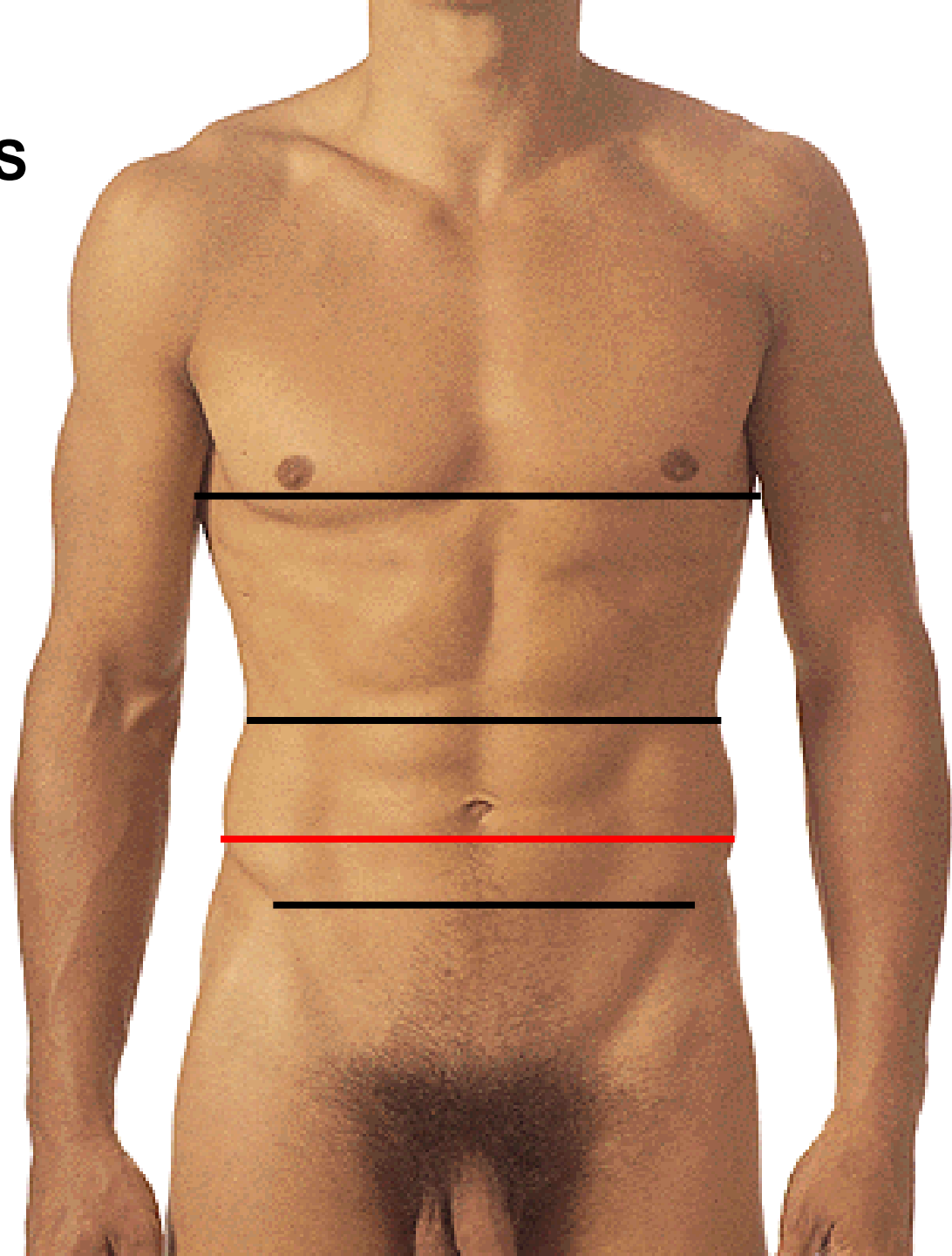




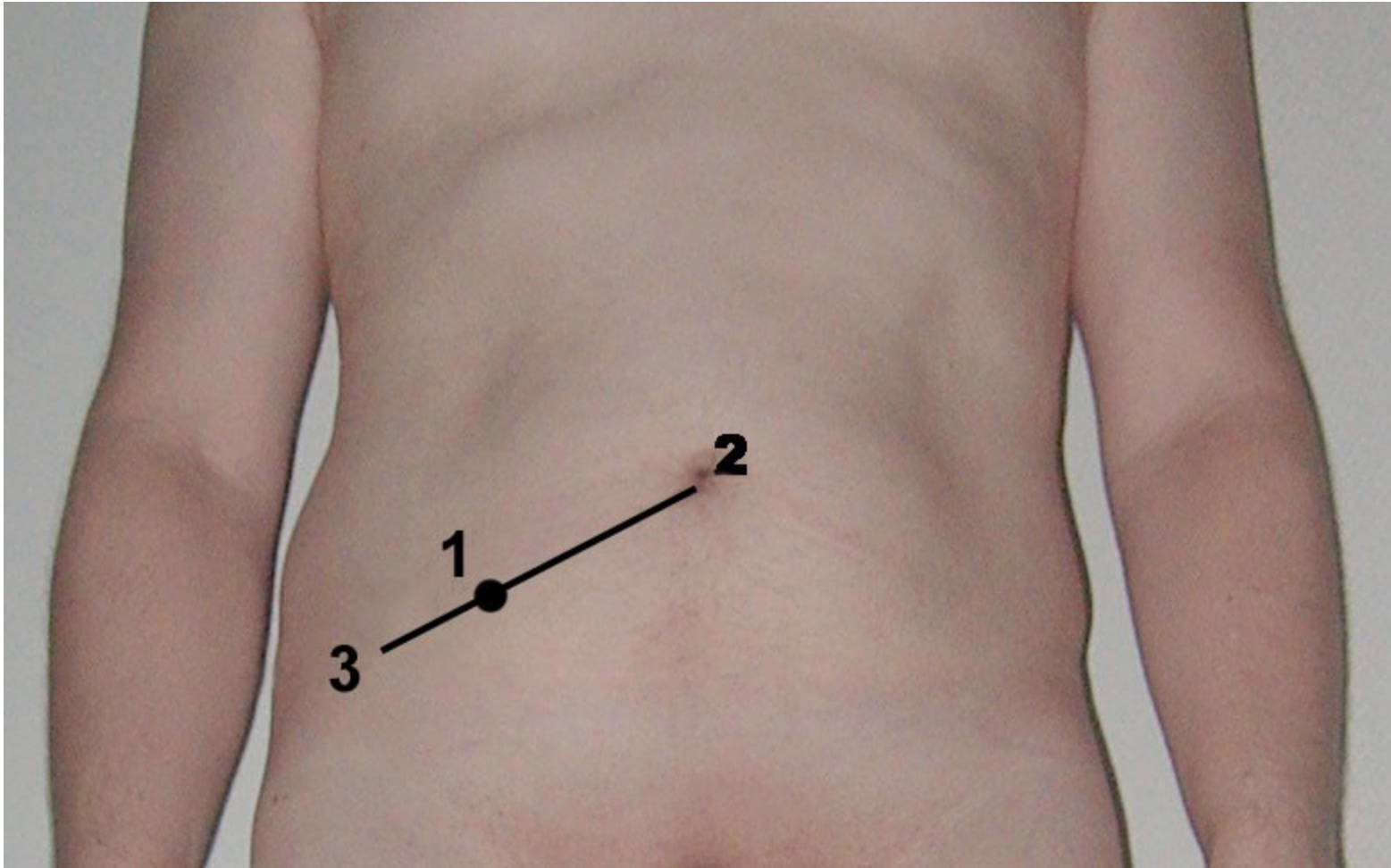
# LINEA TRANSPYLORICA



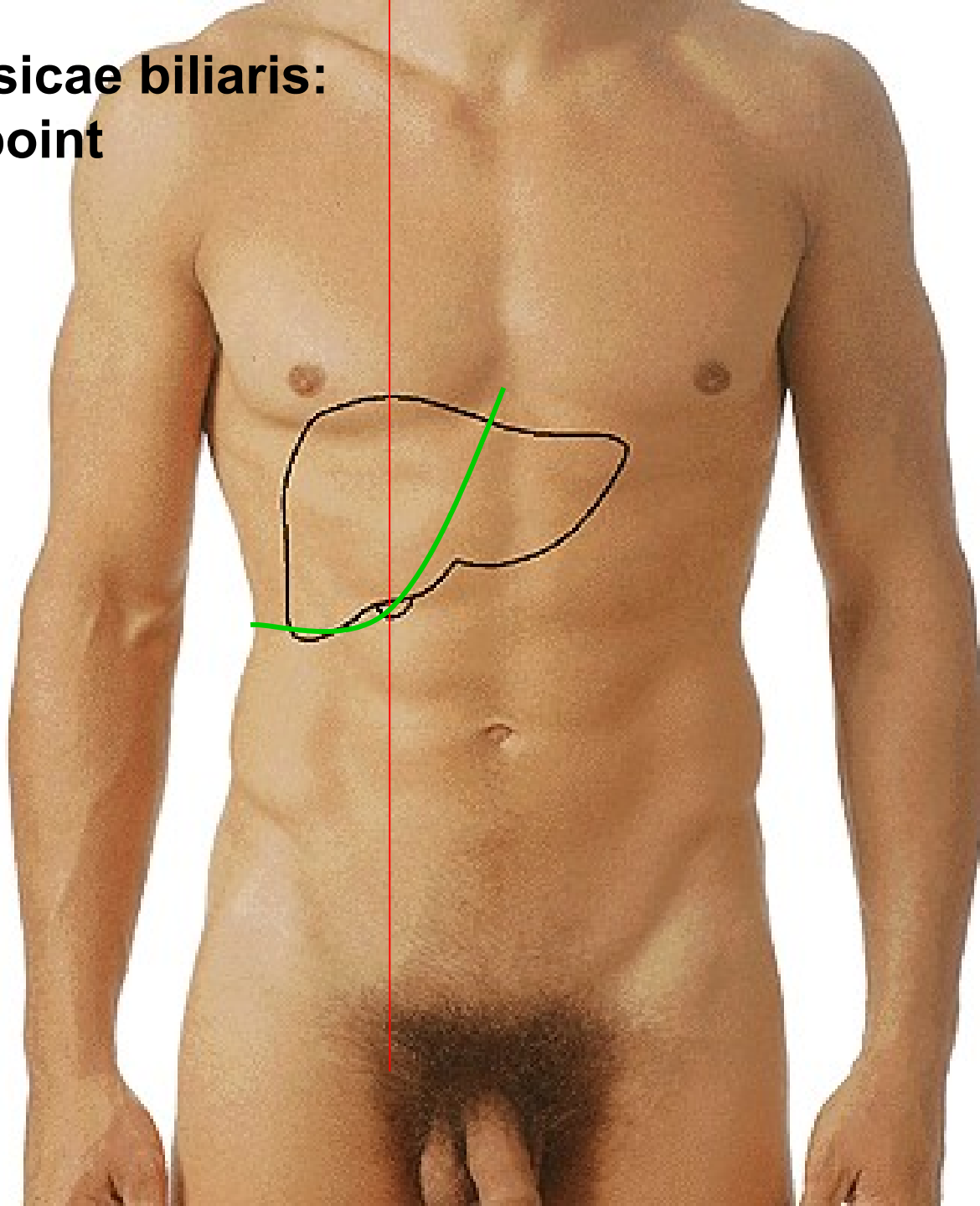
# LINEA INTERCRISTALIS



# Appendix vermiformis: Mac Burney's point (Monro's line)



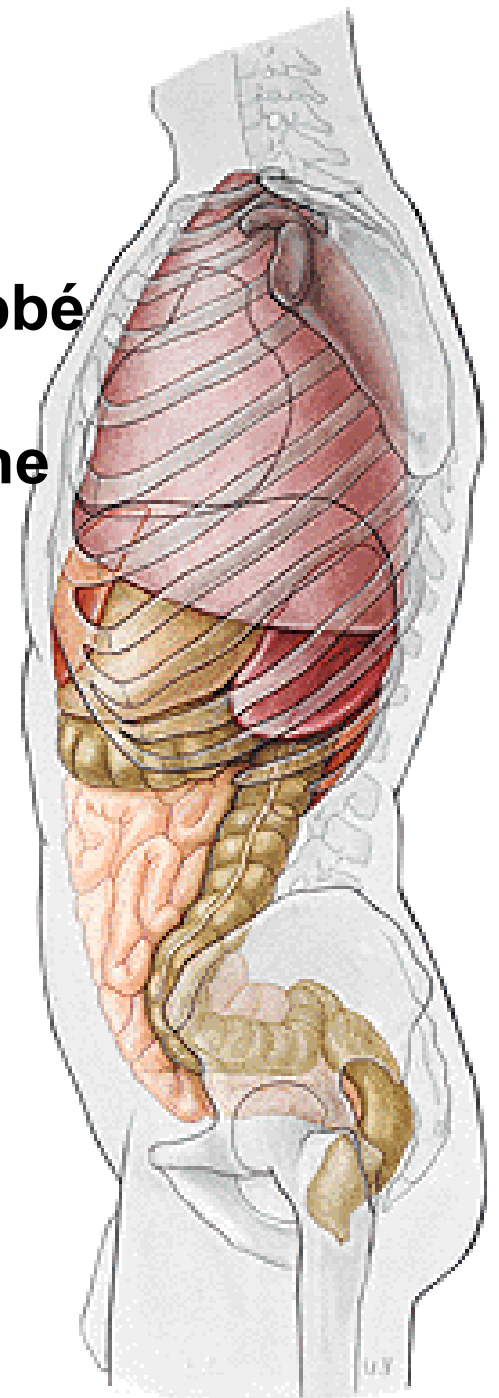
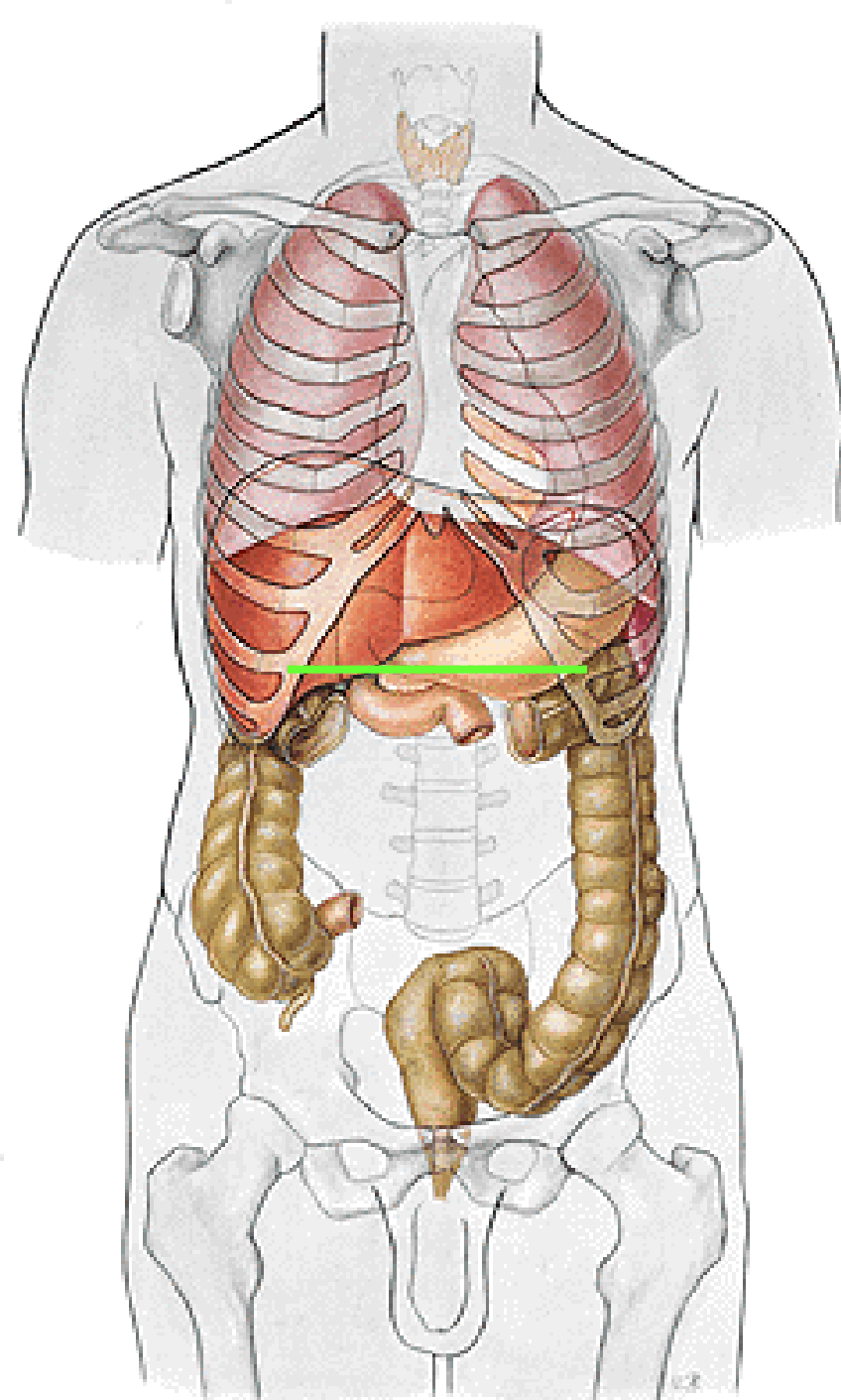
**Fundus vesicae biliaris:  
Murphy's point**



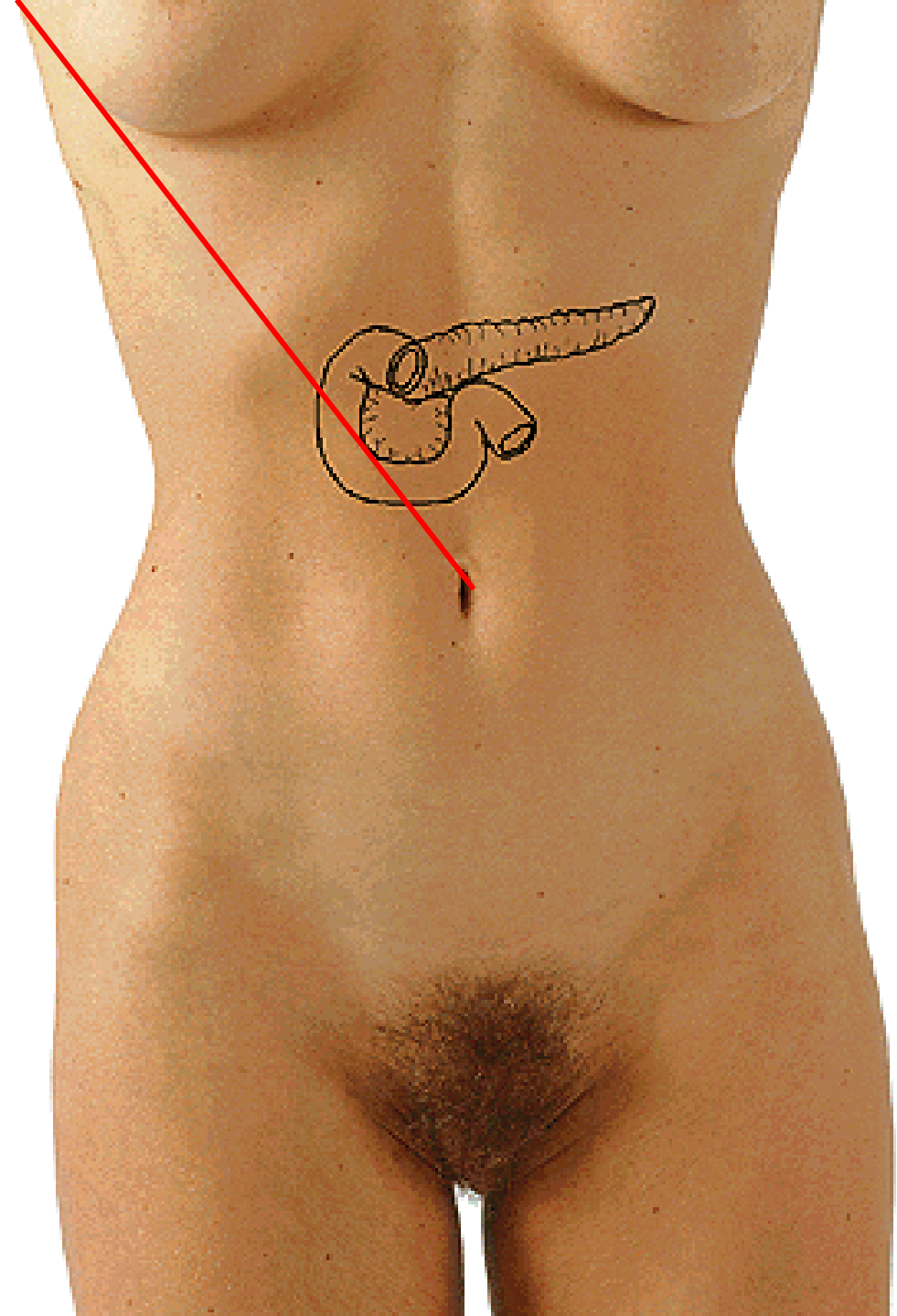
**Ventriculus:**

**Triangle of Labbé**

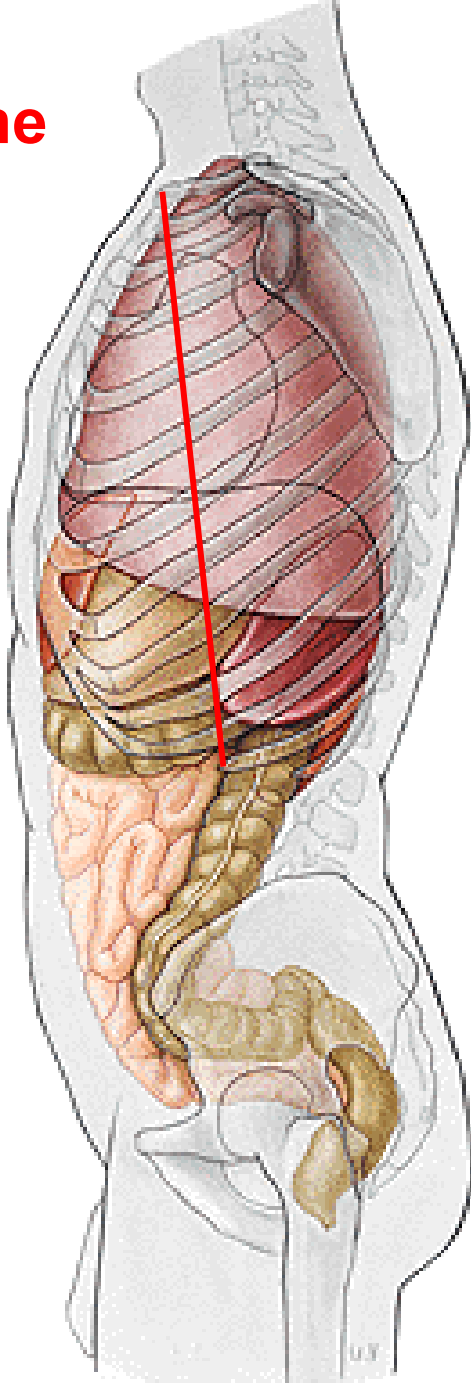
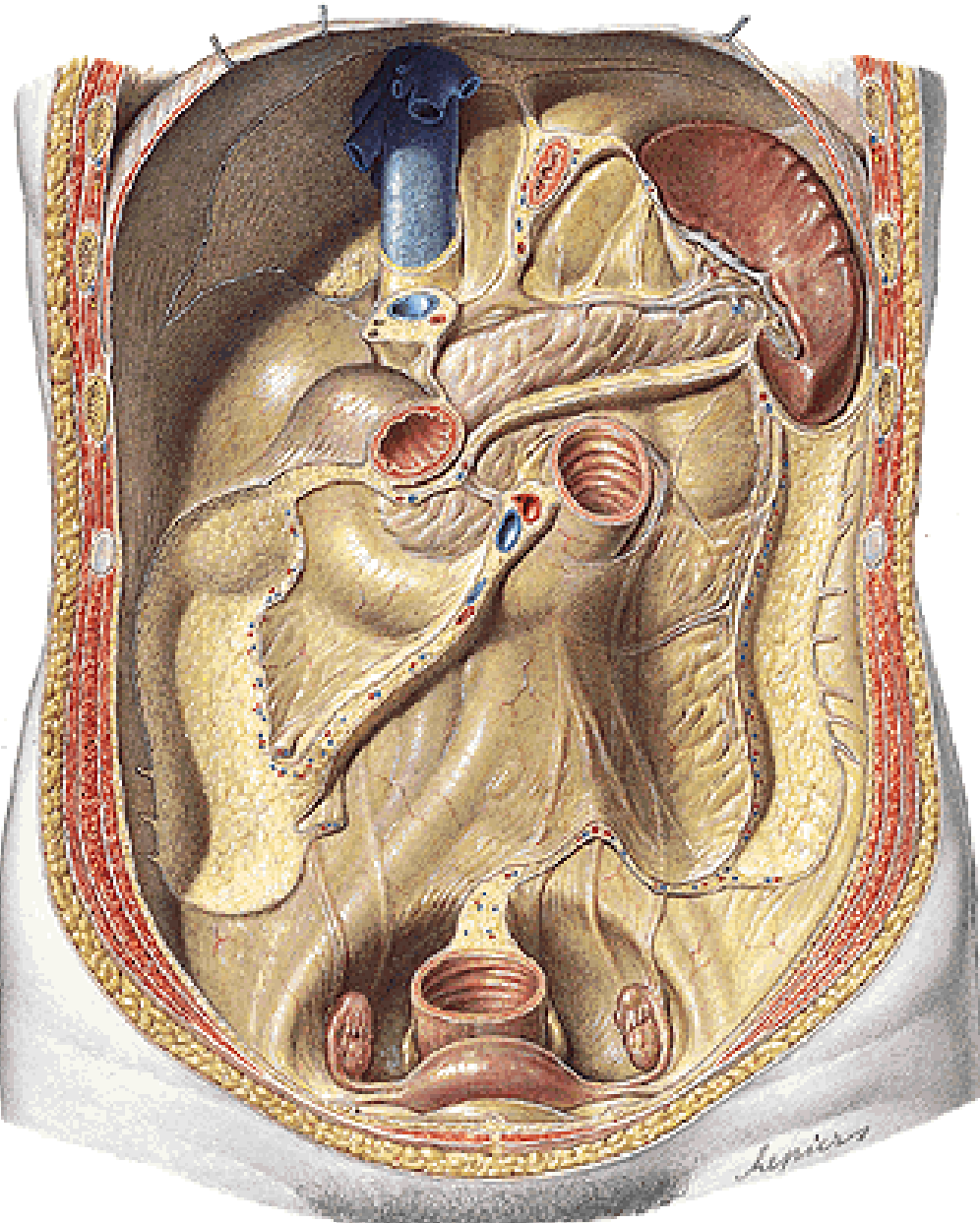
**transpyloric line**



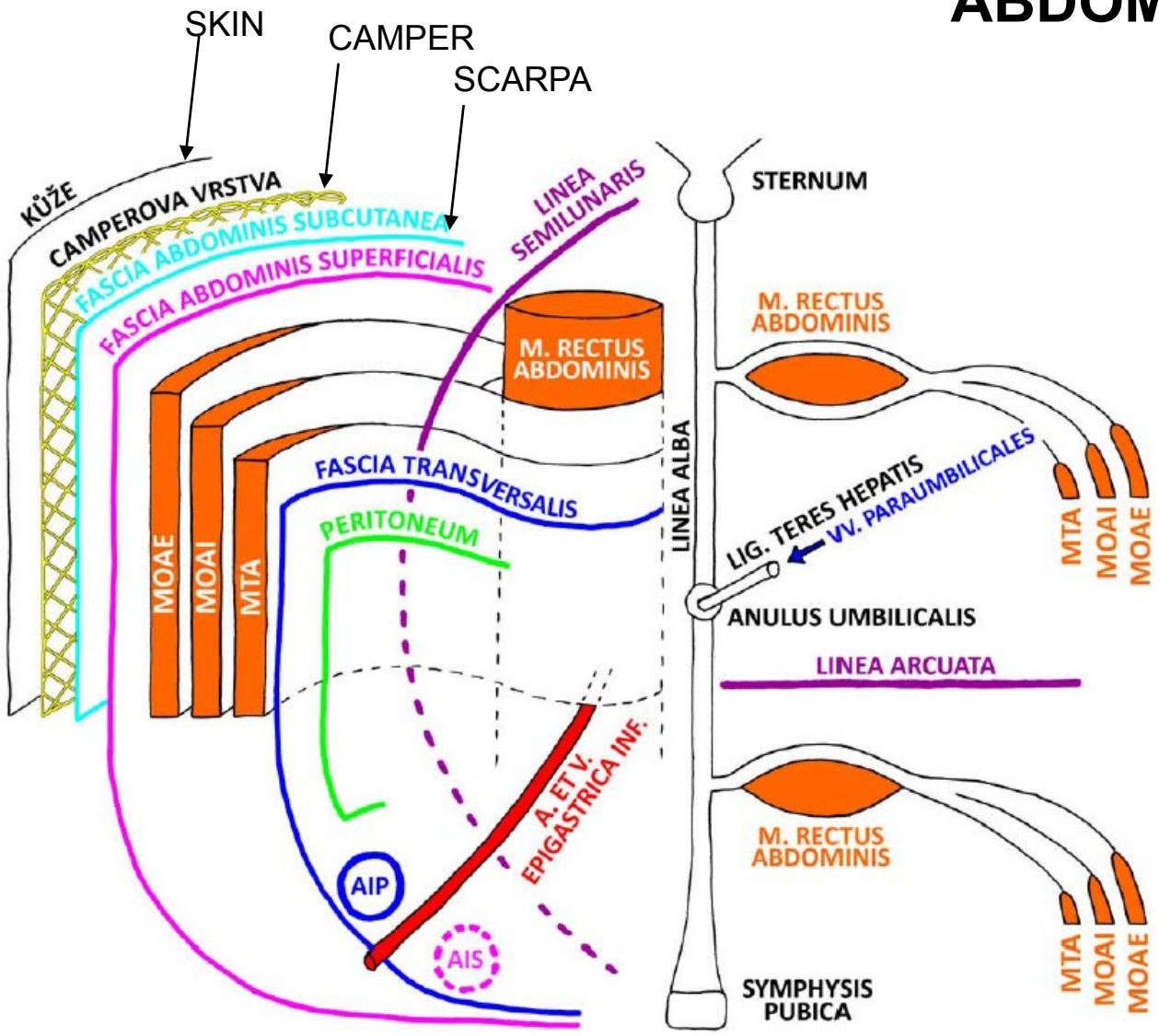
**Papilla Vateri:  
Umbilico-axillary line  
- point of Desjardins**



**Costoarticular line**

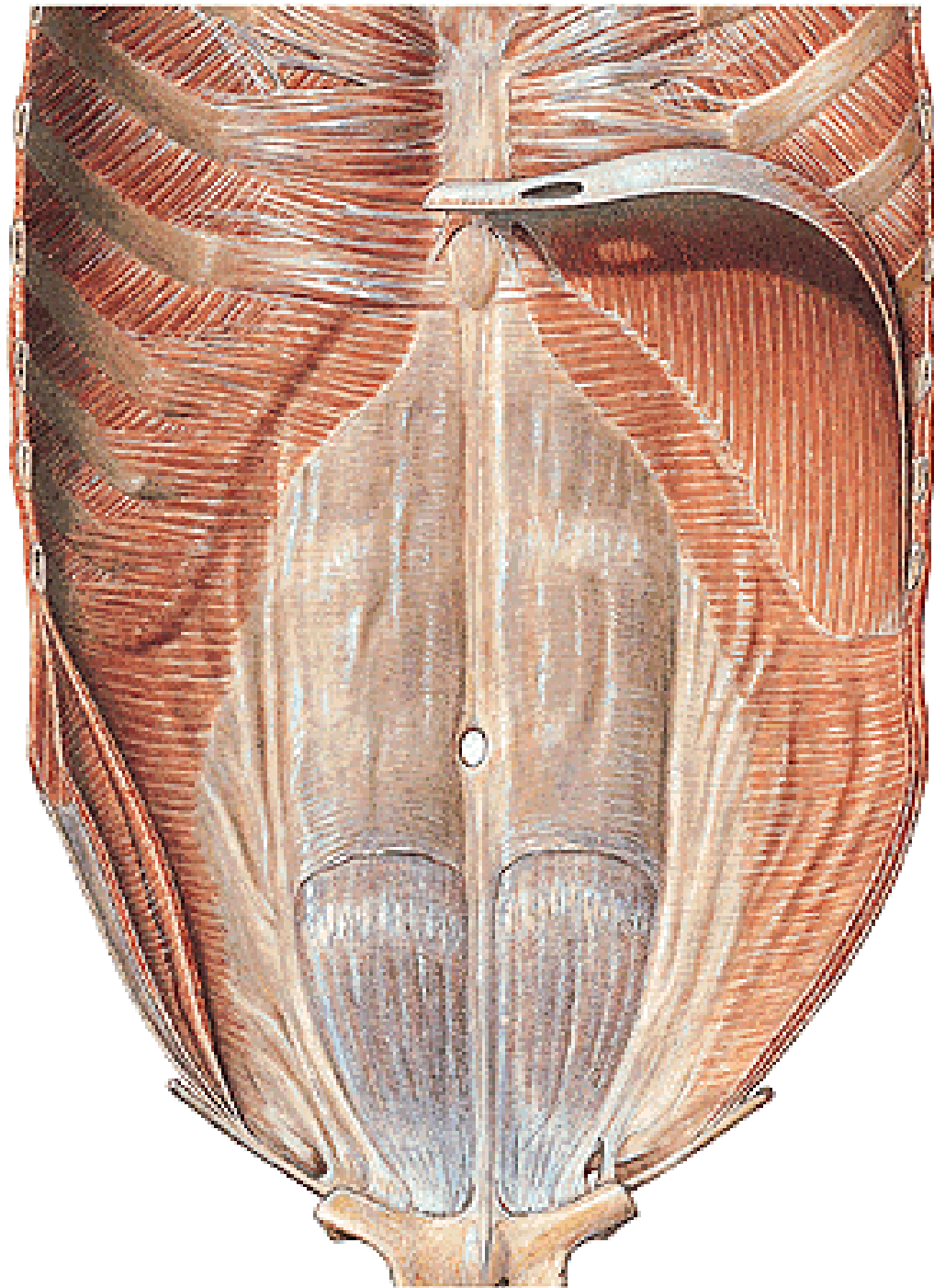


# ABDOMINAL WALL



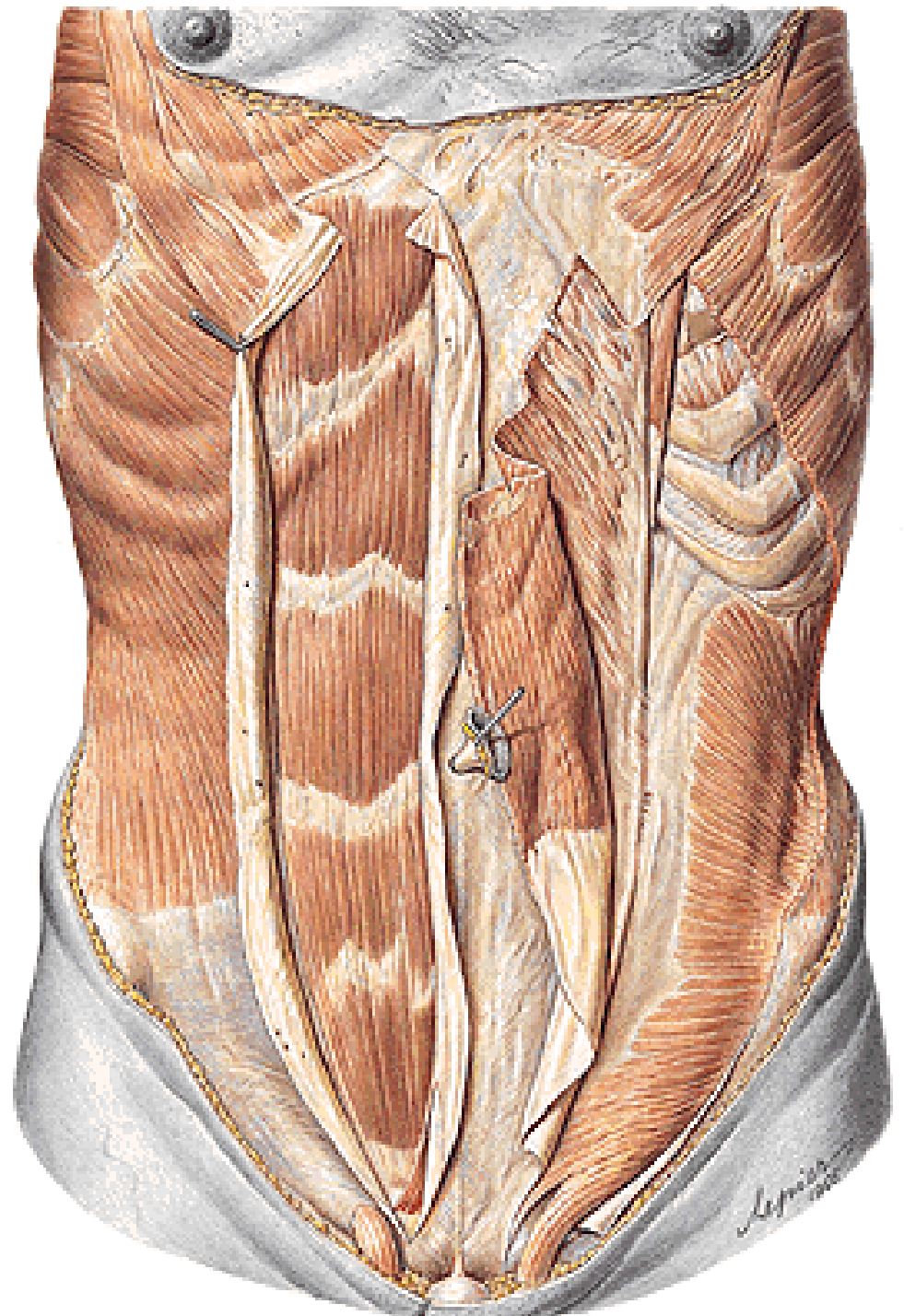
MOAE - M. OBLIQUUS ABDOMINIS EXTERNUS  
 MOAI - M. OBLIQUUS ABDOMINIS INTERNUS  
 MTA - M. TRANSVERSUS ABDOMINIS  
 AIP - ANULUS INGUINALIS PROFUNDUS  
 AIS - ANULUS INGUINALIS SUPERFICIALIS





**LINEA ARCUATA**

**VAGINA**  
**M. RECTI ABDOMINIS**



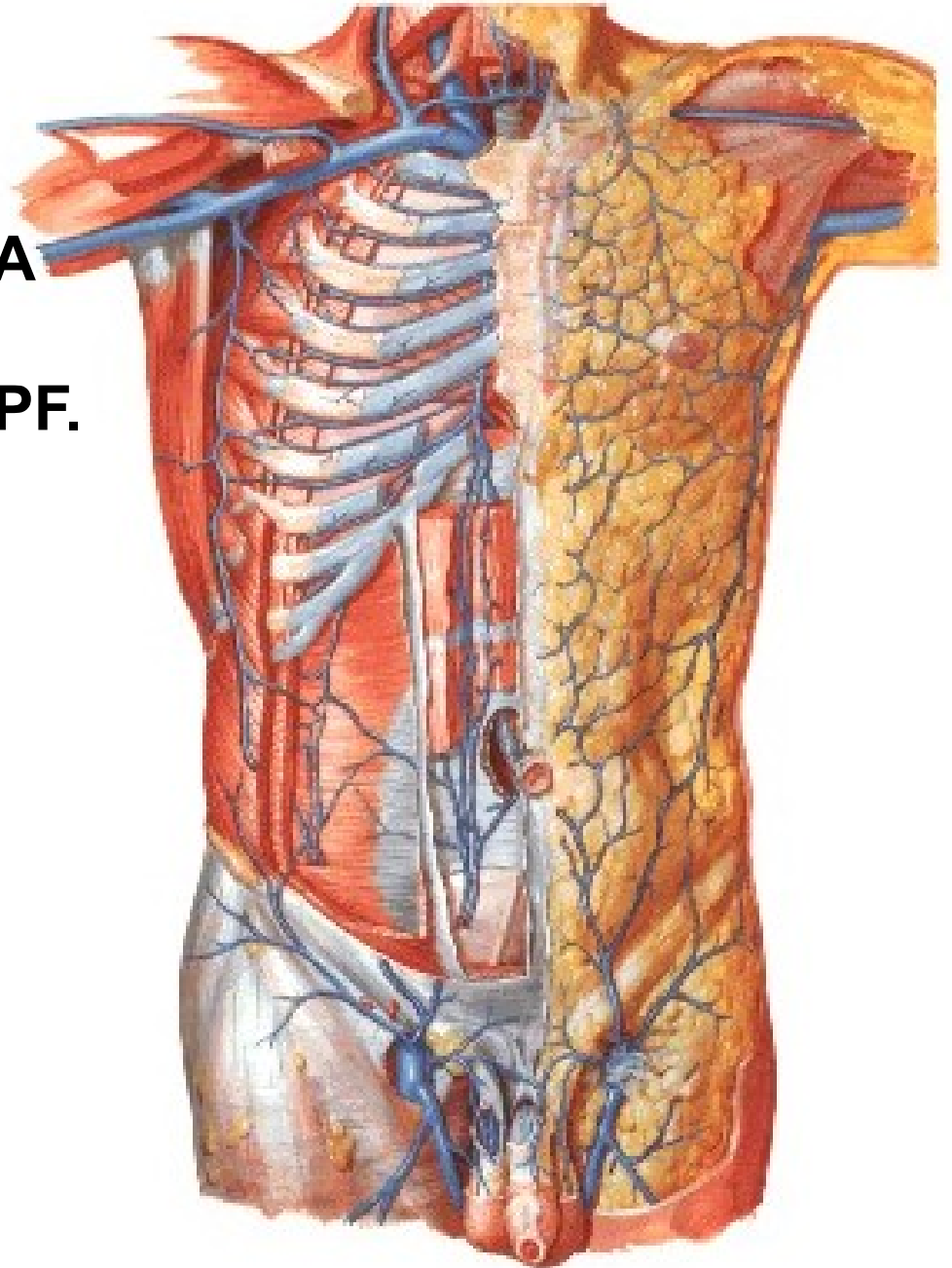
**VV. SUBCUTANEA ABD.**

**V. THORACOEPIGASTRICA**

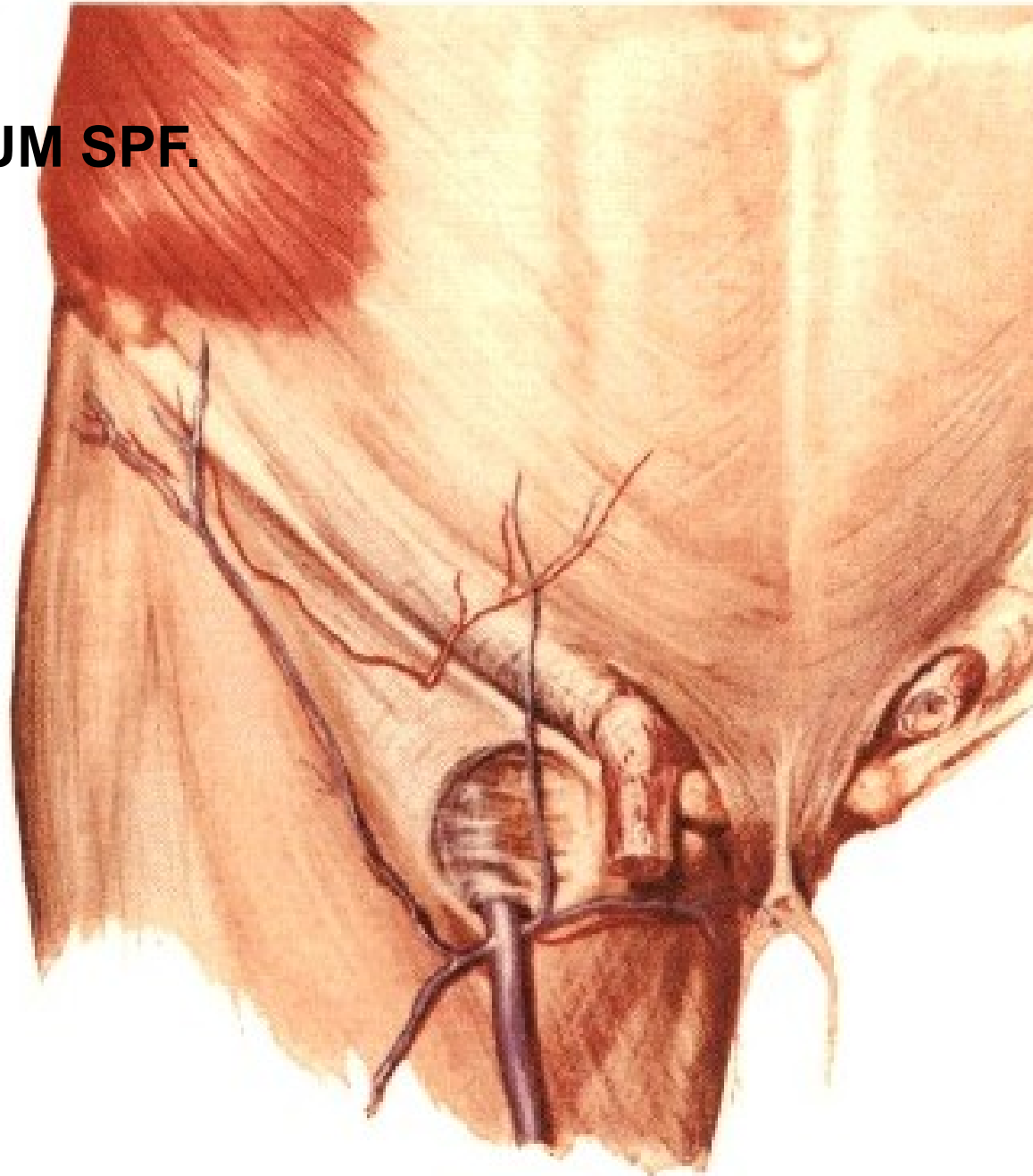
**V. EPIGASTRICA SPF.**

**V. CIRCUMFLEXA ILIUM SPF.**

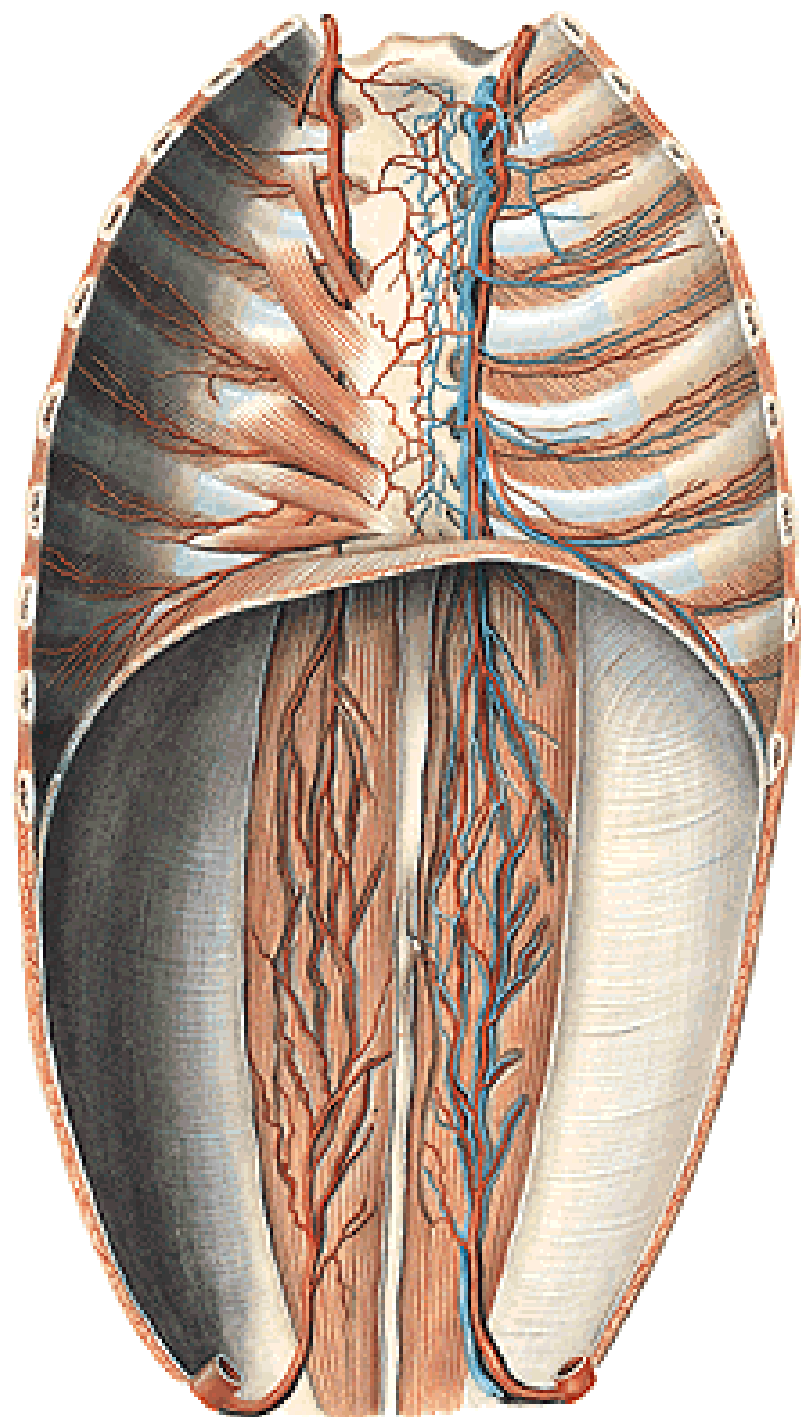
**VV. PARAUMBILICALES**



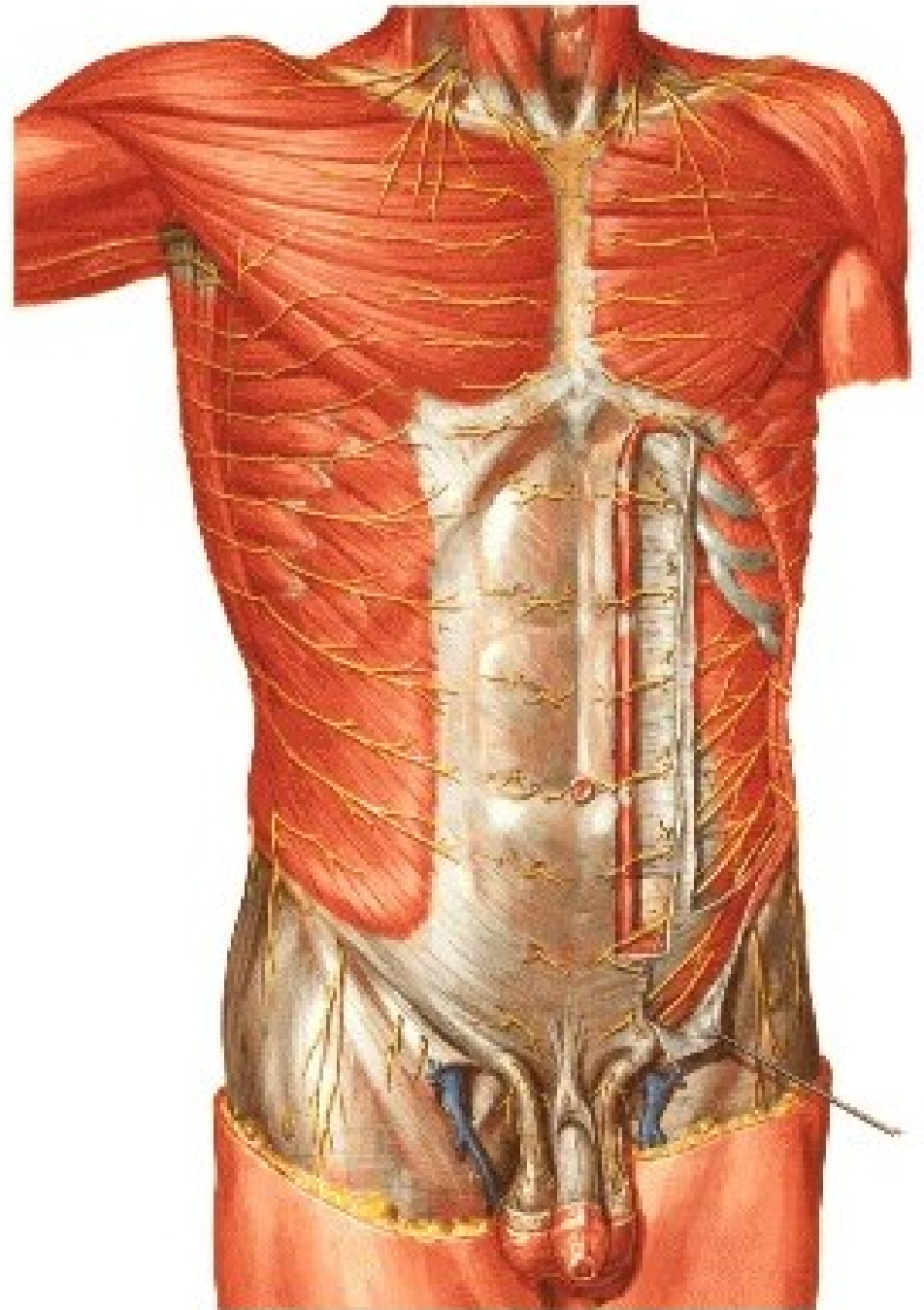
**A. EPIGASTRICA SPF.**  
**A. CIRCUMFLEXA ILIUM SPF.**  
**AA. INTERCOSTALES**  
**A. SUBCOSTALIS**  
**AA. LUMBALES**



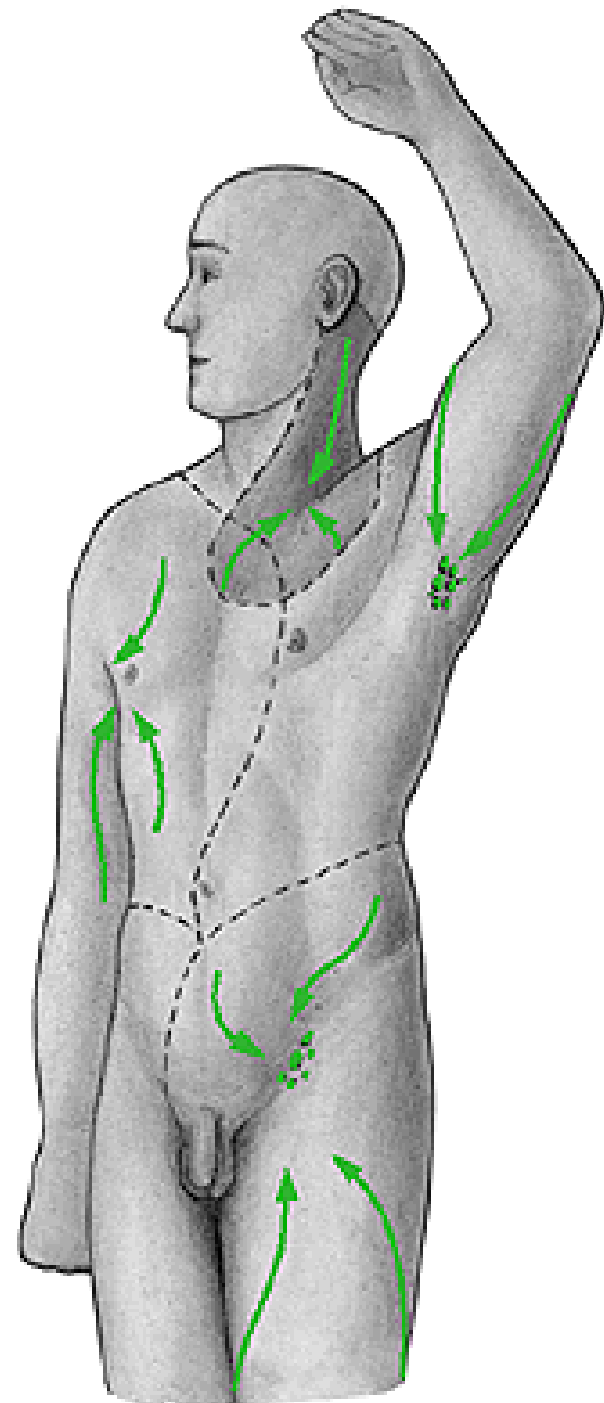
**A. EPIGASTRICA SUP.**  
**A. EPIGASTRICA INF.**  
**A. CIRCUMFLEXA ILIUM PROF.**  
**AA. INTERCOSTALES**  
**A. SUBCOSTALIS**  
**AA. LUMBales**



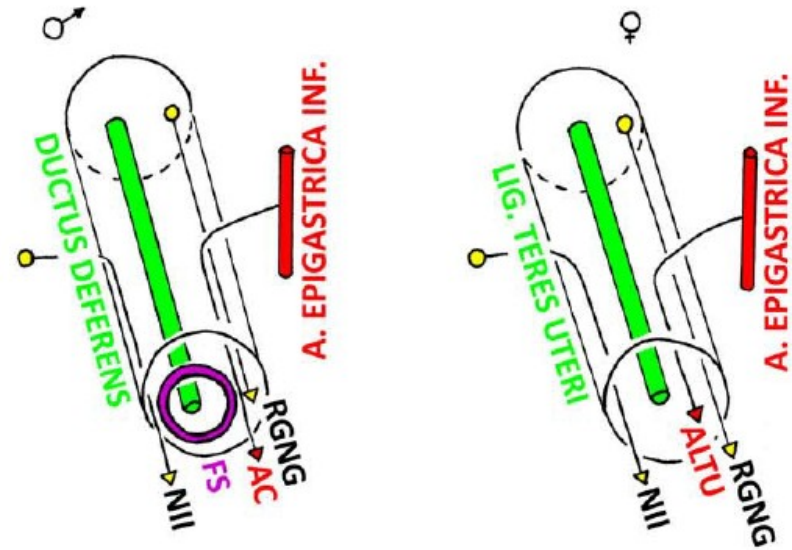
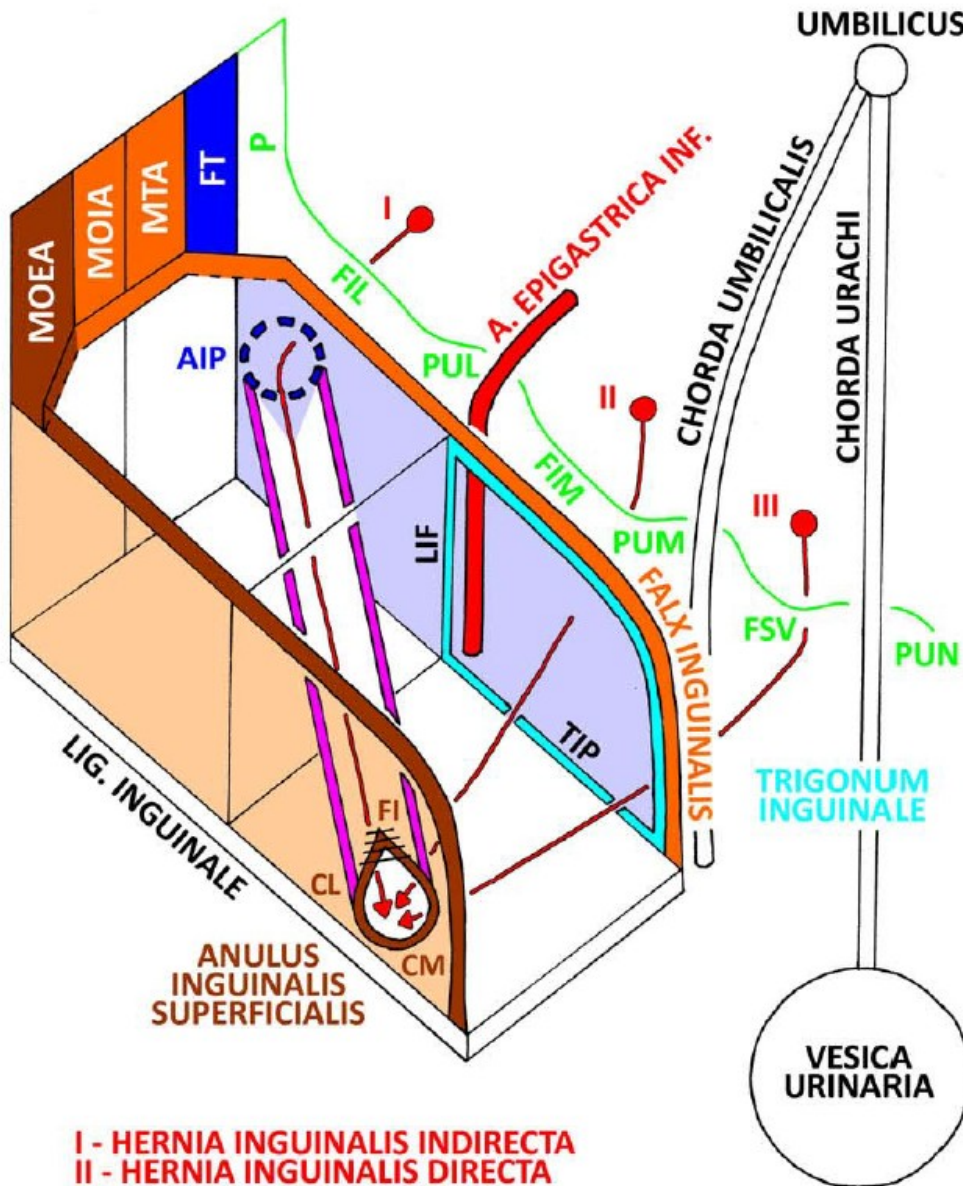
**NN. INTERCOSTALES**  
**N. SUBCOSTALIS**  
**N. ILIOHYPOGASTRICUS**  
**N. ILIOINGUINALIS**



**NODI LYMPHATICI AXILLARES**  
**NODI LYMPHATICI INGUINALES SPF.**



# CANALIS INGUINALIS



MOEA - M. OBLIQUUS EXTERNUS ABDOMINIS  
 MOIA - M. OBLIQUUS INTERNUS ABDOMINIS  
 MTA - M. TRANSVERSUS ABDOMINIS  
 FT - FASCIA TRANSVERSALIS  
 AIP - ANULUS INGUINALIS PROFUNDUS  
 P - PERITONEUM  
 FIL - FOSSA INGUINALIS LAT.  
 PUL - PLICA UMBILICALIS LATERALIS  
 LIF - LIG. INTERFOVEOLARE  
 FIM - FOSSA INGUINALIS MED.  
 PUM - PLICA UMBILICALIS MEDIALIS  
 FSV - FOSSA SUPRAVESICALIS  
 PUN - PLICA UMBILICALIS MEDIANA  
 TIP - TRACTUS ILIOPUBICUS  
 FI - FIBRAE INTERCRURALES  
 CL - CRUS LATERALE  
 CM - CRUS MEDIALE

NII - N. ILIOINGUINALIS  
 FS - FUNICULUS SPERMATICUS  
 AC - A. CREMASTERICA  
 RGNG - R. GENITALIS N. GENITOFEMORALIS  
 ALTU - A. LIGAMENTI TERETIS UTERI



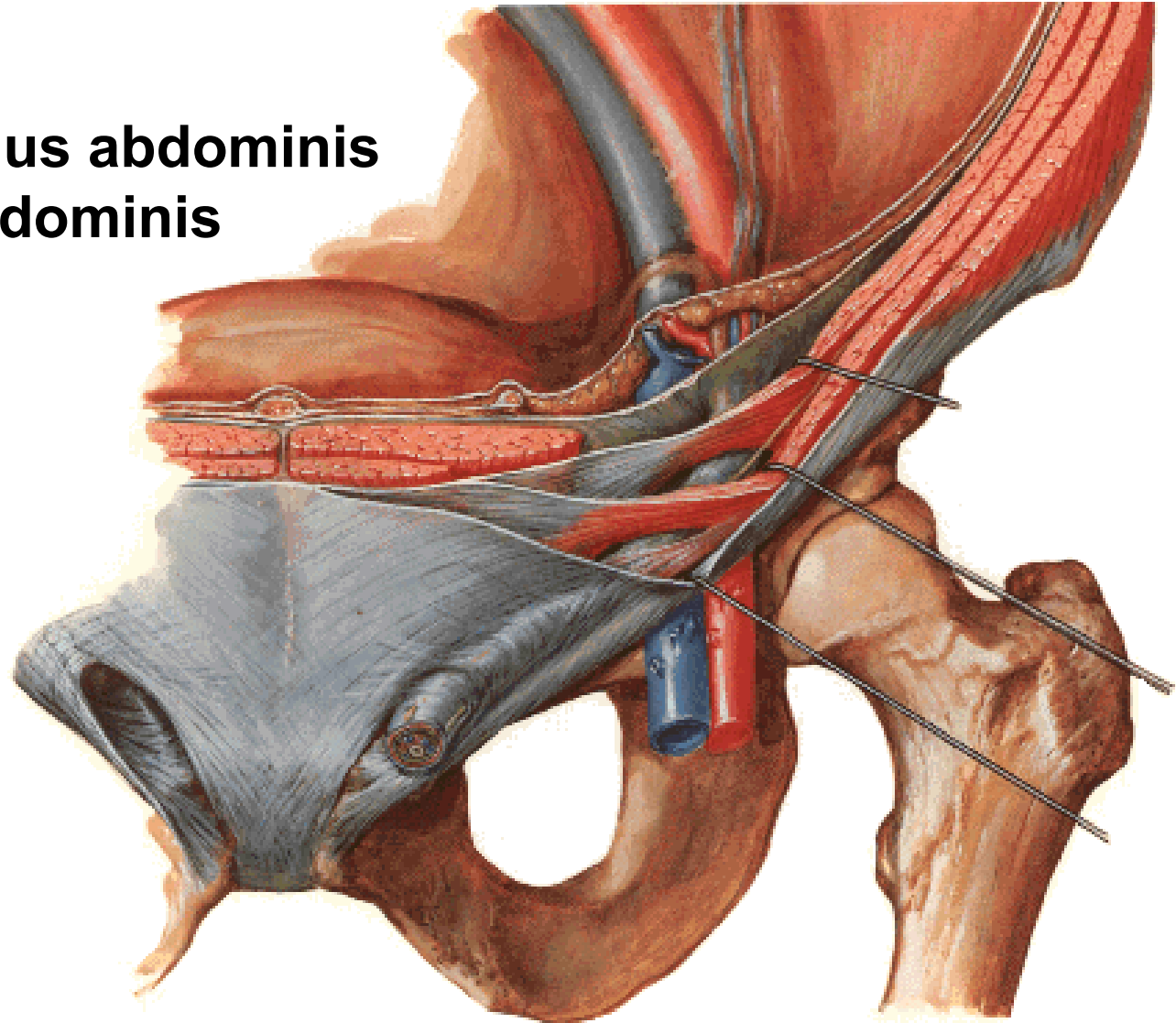
# CANALIS INGUINALIS

*Superior wall:*

**M. obliquus internus abdominis**

**M. transversus abdominis**

- **M. cremaster**



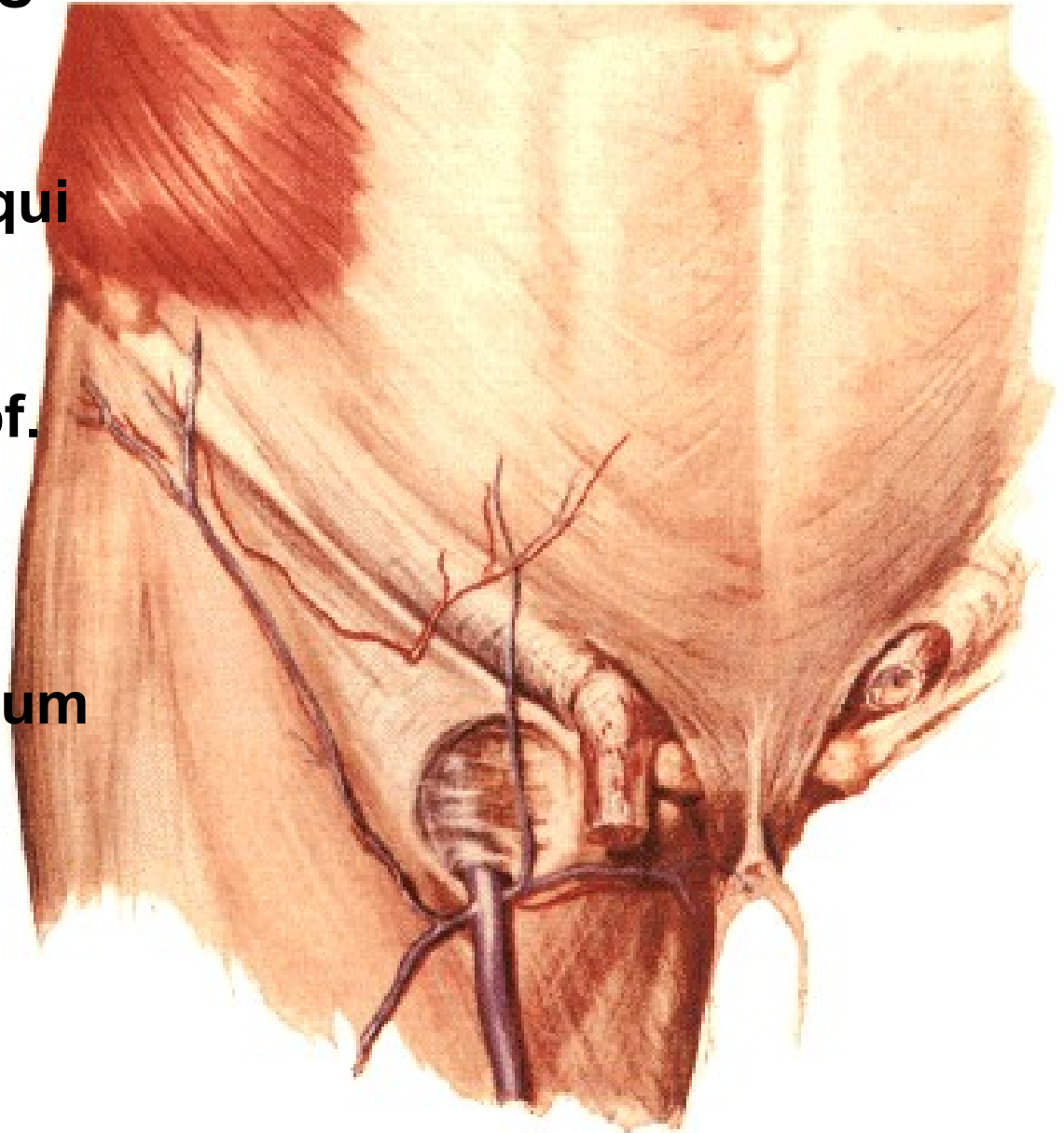
# CANALIS INGUINALIS

*Anterior wall:*

**Aponeurosis m. obliqui  
externi abdominis**

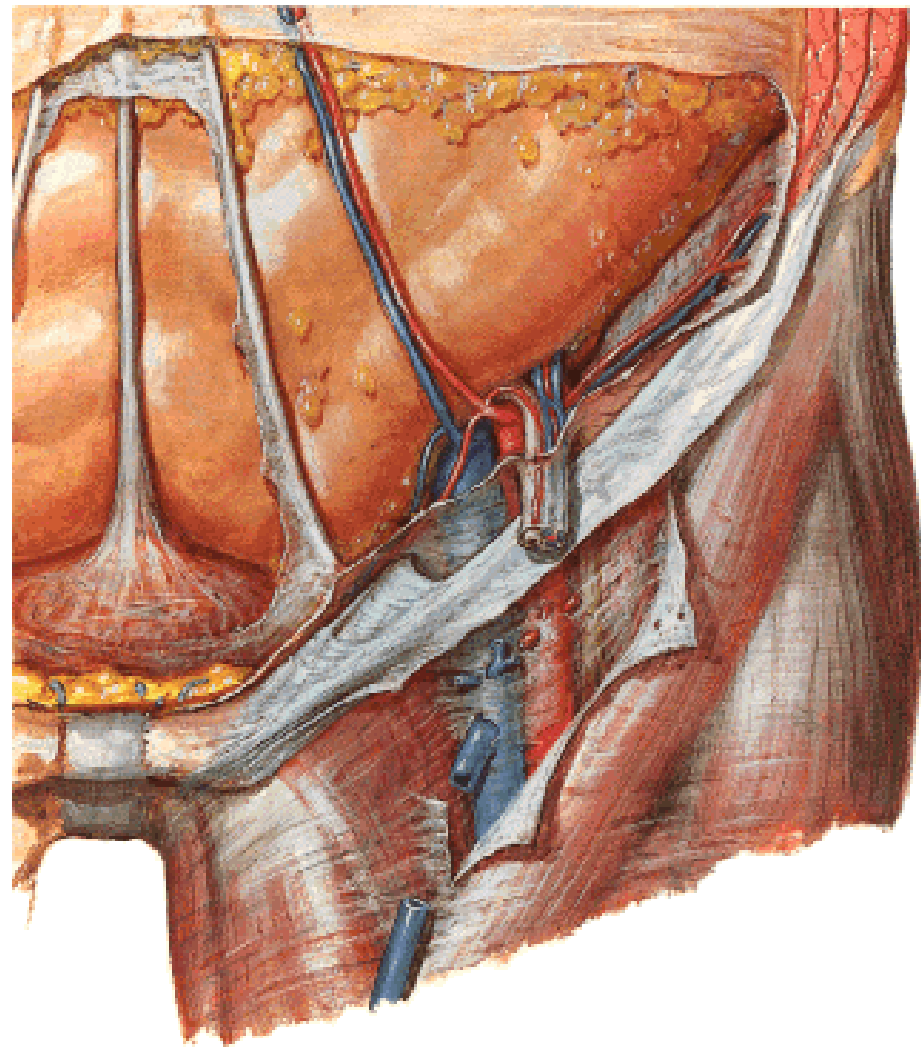
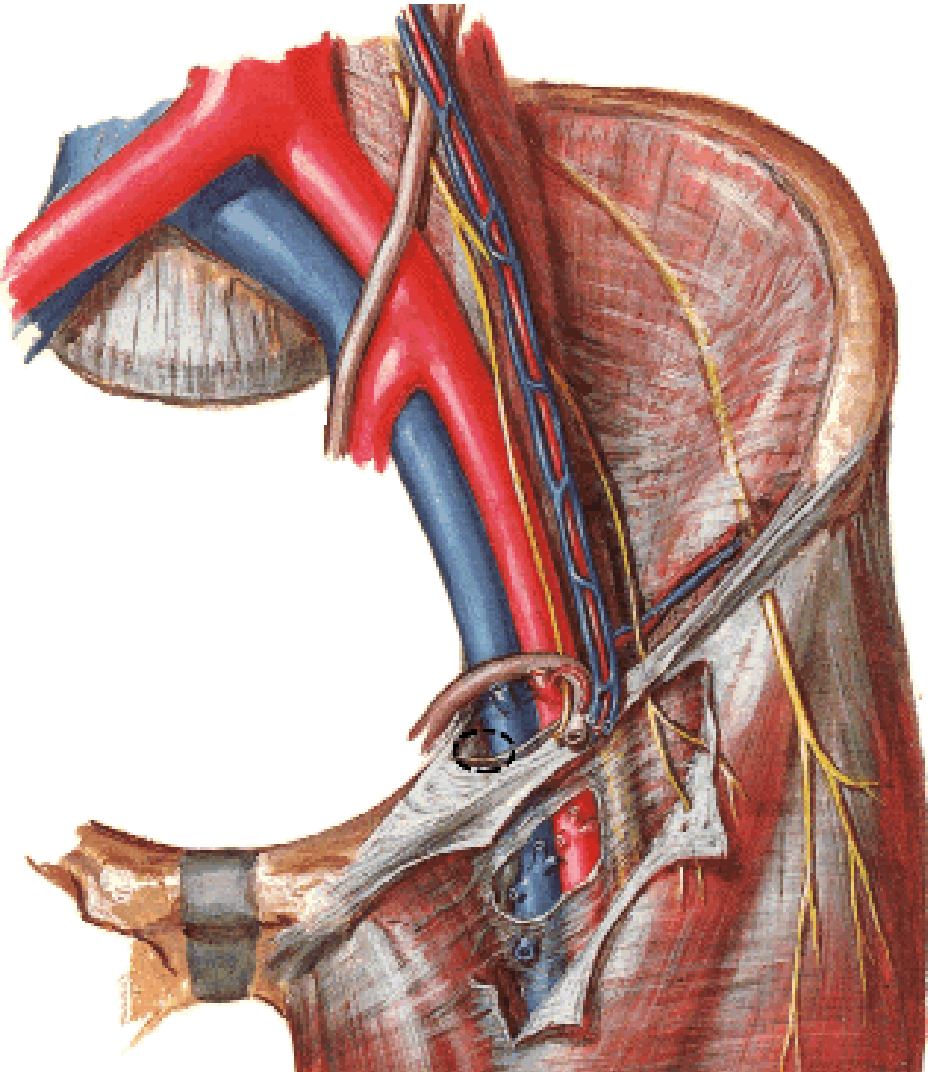
**Anulus inguinalis spf.**

- **crus mediale**
- **crus laterale**
- **fibrae intercrurales**
- **lig. inguinale reflexum**



# CANALIS INGUINALIS

*Inferior wall:*  
**Lig. inguinale**



# CANALIS INGUINALIS

*Posterior wall:*

**Fascia transversalis:**

**Anulus inguinalis prof.**

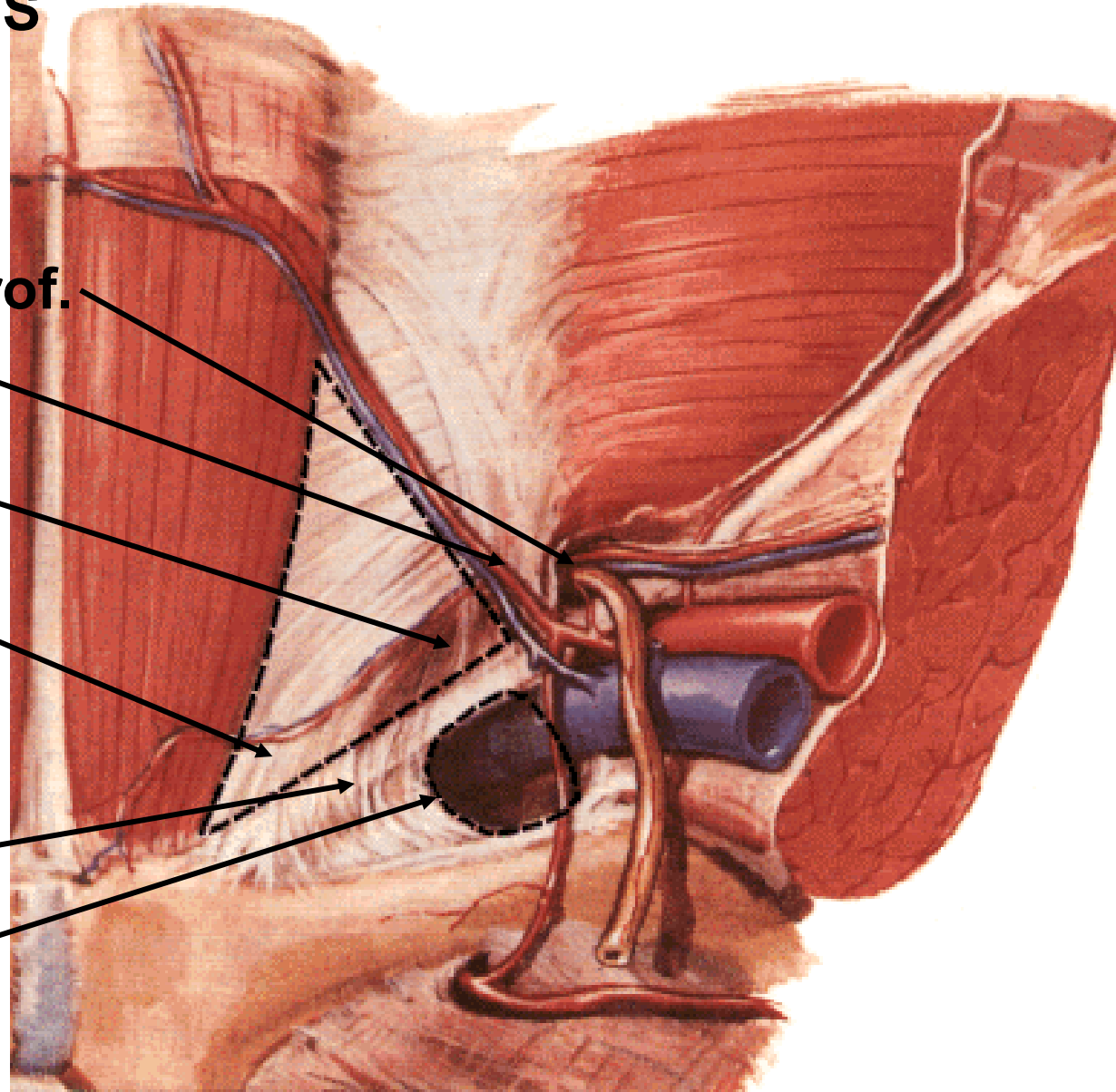
**Lig. interfoveolare**

**Trigonum inguinale  
(Hesselbachi)**

**Falx inguinalis  
(conjoint tendon)**

**Tractus iliopubicus**

**Anulus femoralis**



**Plica umbilicalis mediana**  
- lig. umbilicale medianum  
(chorda urachi)

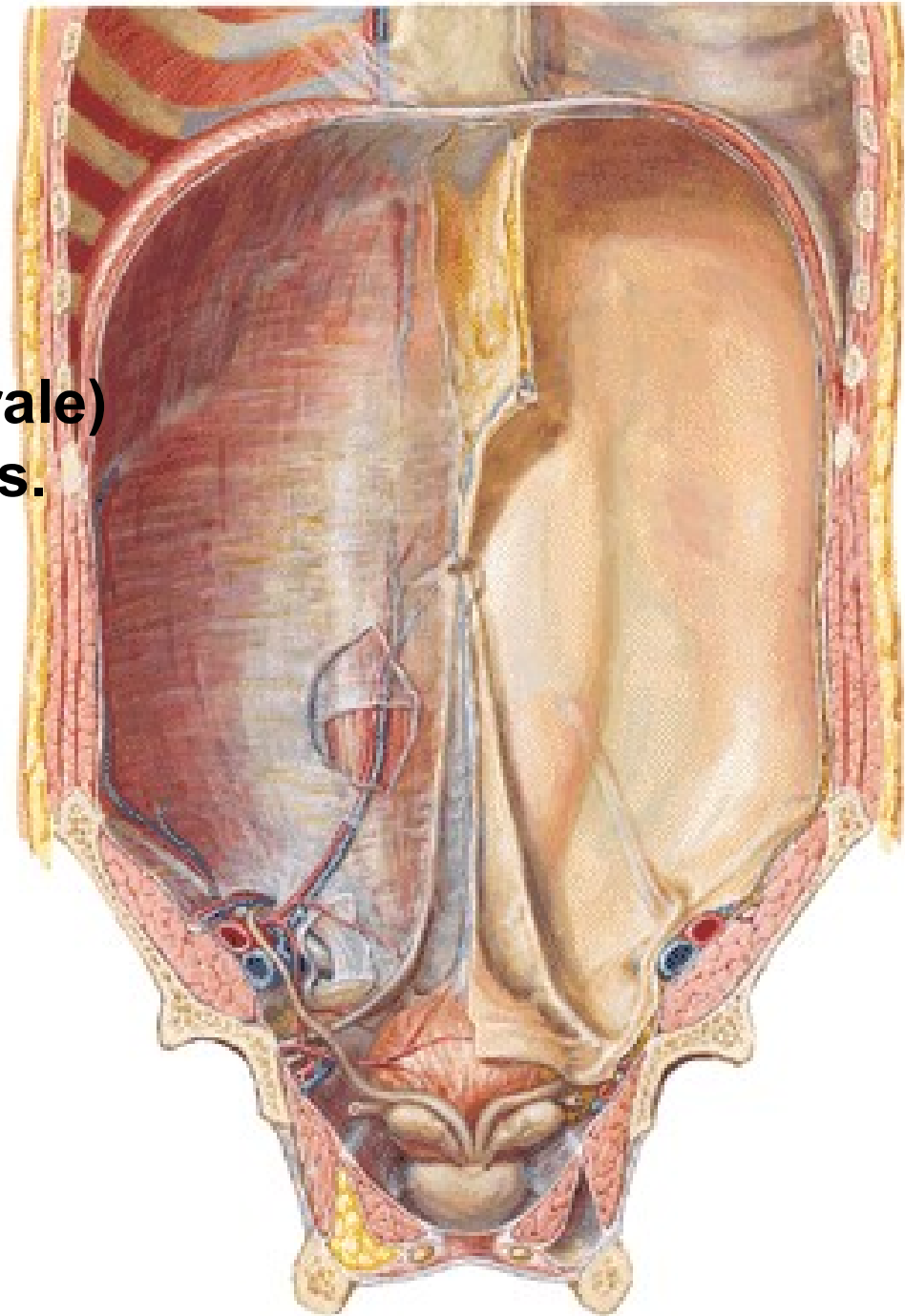
**Fossa supravesicalis**

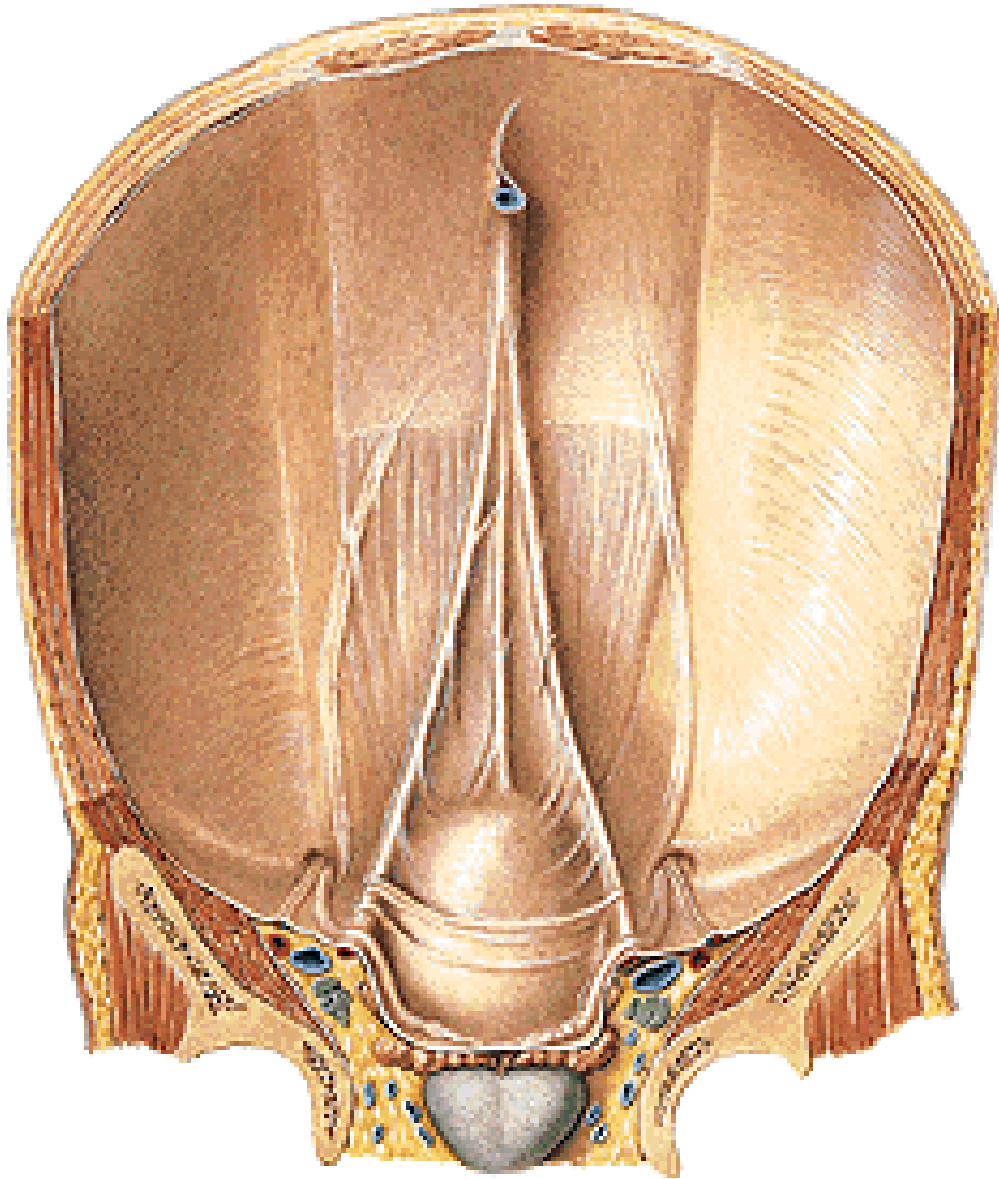
**Plica umbilicalis medialis**  
- lig. umbilicale mediale (laterale)  
(pars occlusa a. umbilicalis s.  
chorda umbilicalis)

**Fossa inguinalis medialis**  
- **direct inguinal hernia**

**Plica umbilicalis lateralis**  
- vasa epigastrica inf.

**Fossa inguinalis lateralis**  
- **indirect inguinal hernia**



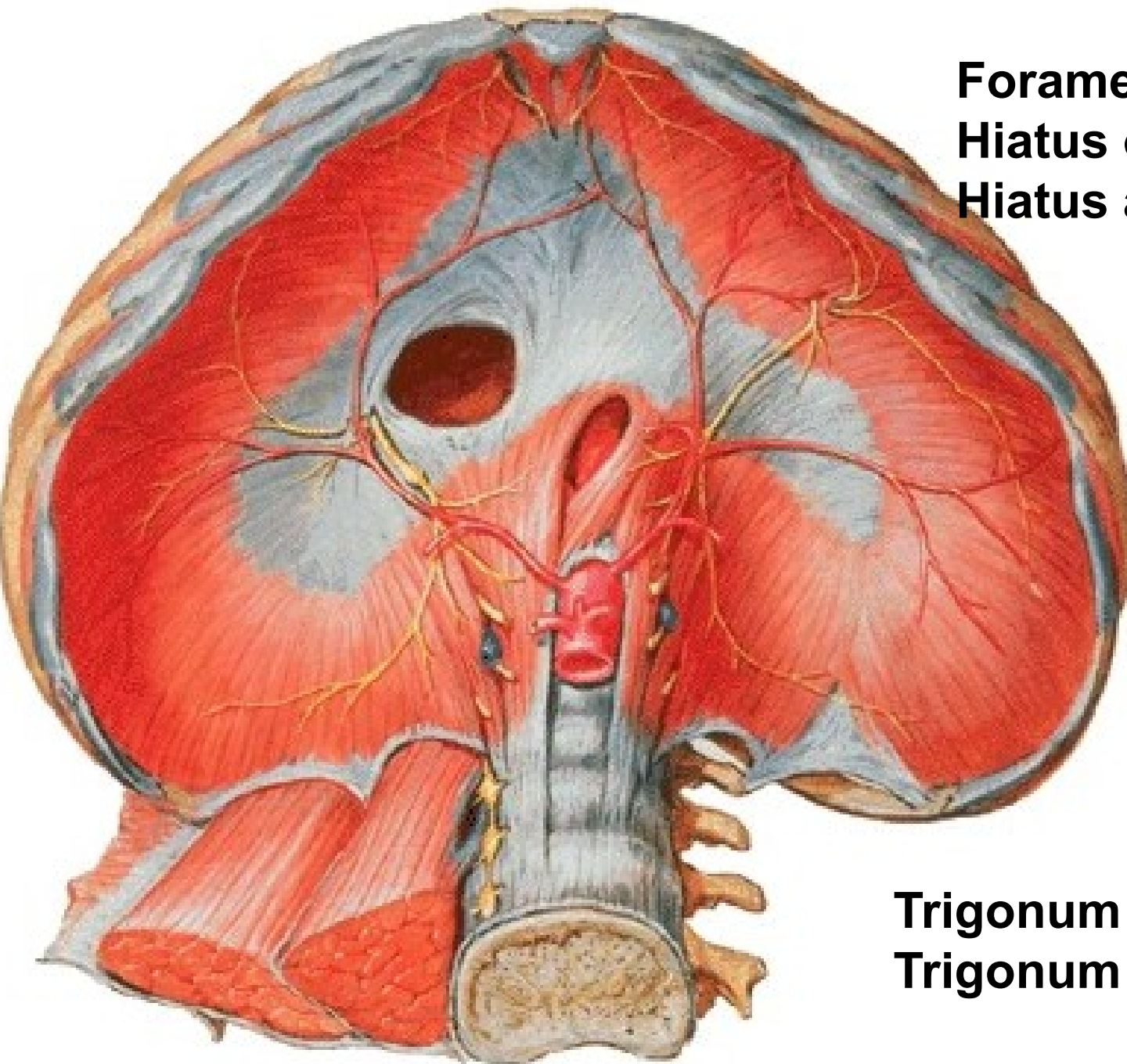


**A. UMBILICALIS**

→ chorda umbilicalis

**V. UMBILICALIS**

→ ligamentum teres  
hepatis



**Foramen v. cavae inf.**  
**Hiatus oesophageus**  
**Hiatus aorticus**

**Trigonum sternocostale**  
**Trigonum lumbocostale**

# **PERITONEAL CAVITY**



# CAVITAS ABDOMINALIS

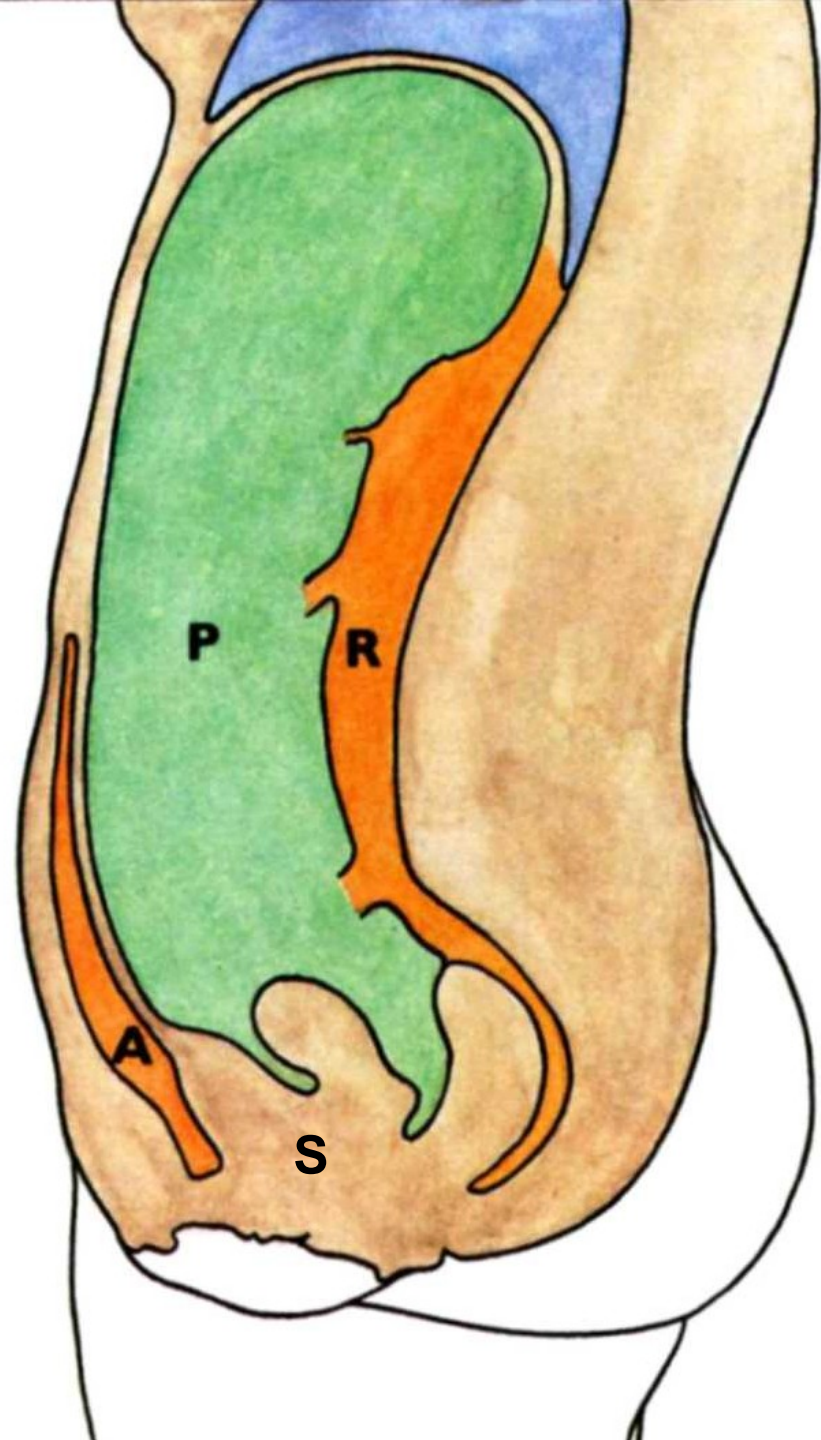
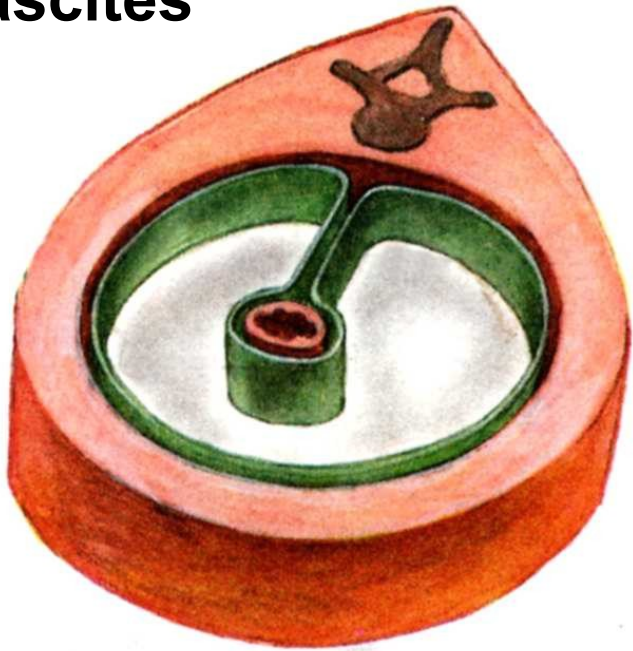
**P – cavitas peritonealis**

**A – spatium preperitoneale**

**R – spatium retroperitoneale**

**S – spatium subperitoneale  
(infraperitoneale)**

**ascites**



## **Intraparitoneal organs:**

**Abdominal part of the oesophagus, stomach, superior part of the duodenum, jejunum, ileum, appendix vermiformis, colon transversum, colon sigmoideum, liver, spleen**

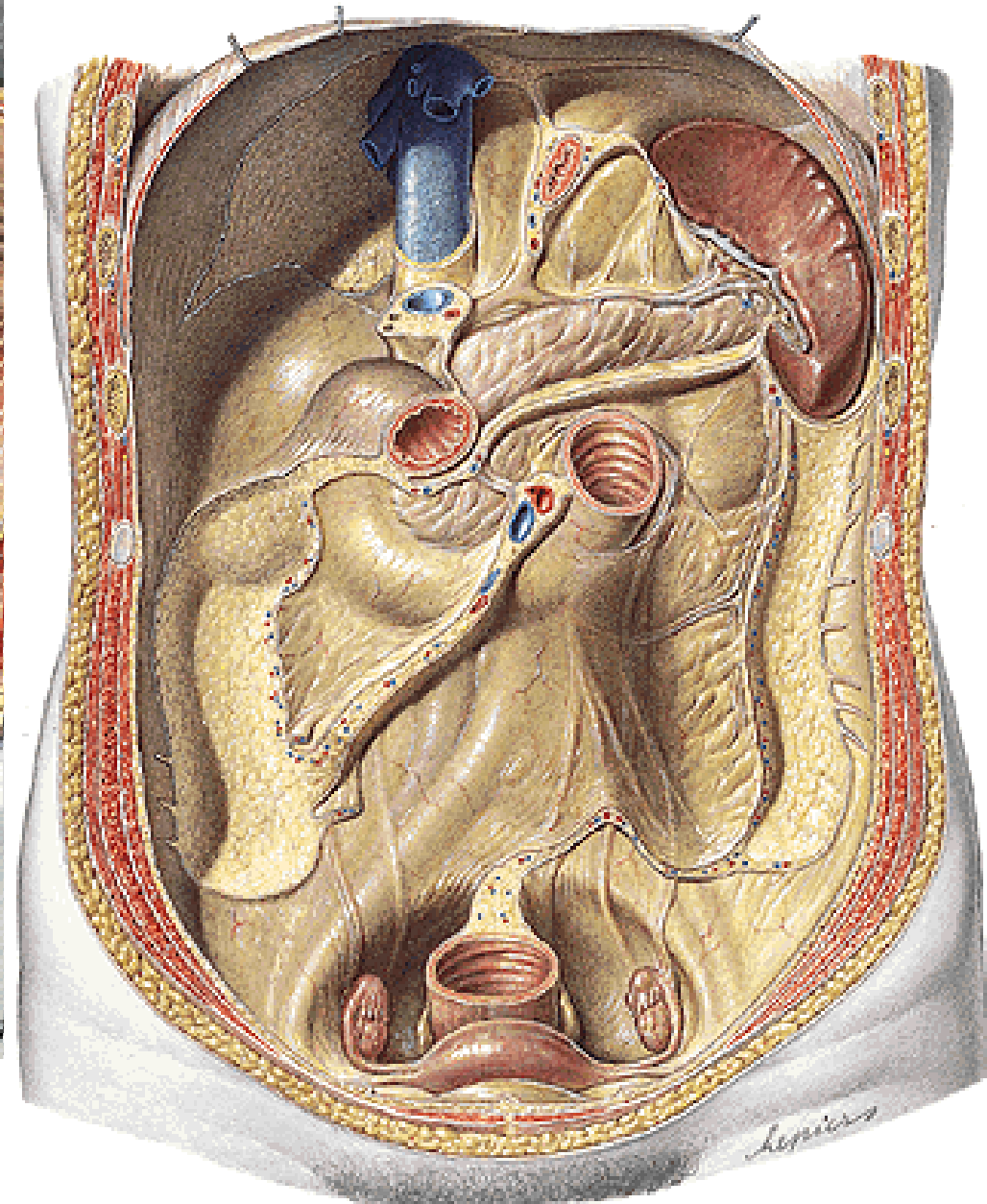
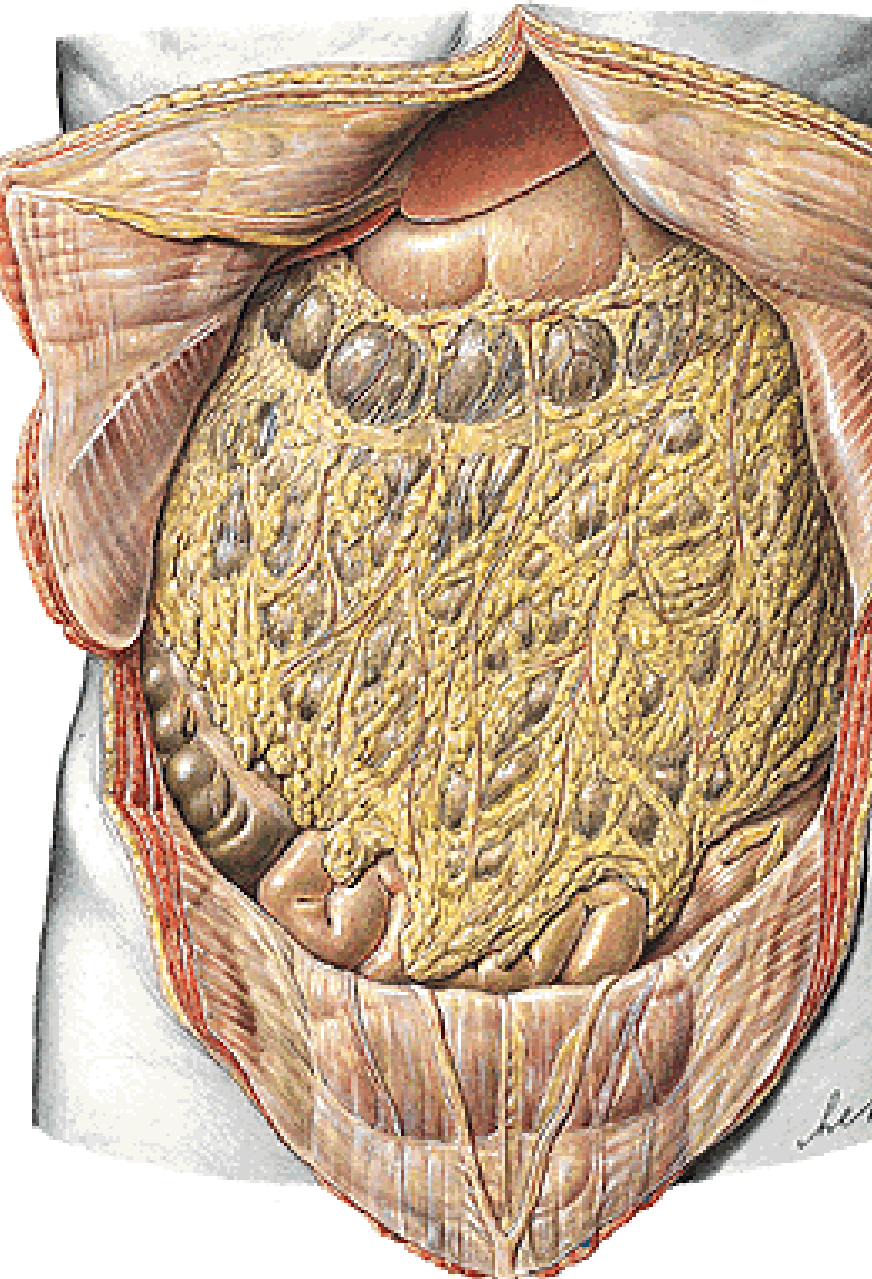
## **Secondarily retroperitoneal organs:**

**Most of duodenum, pancreas, caecum, colon ascendens, colon descendens**

## **Primarily retroperitoneal organs:**

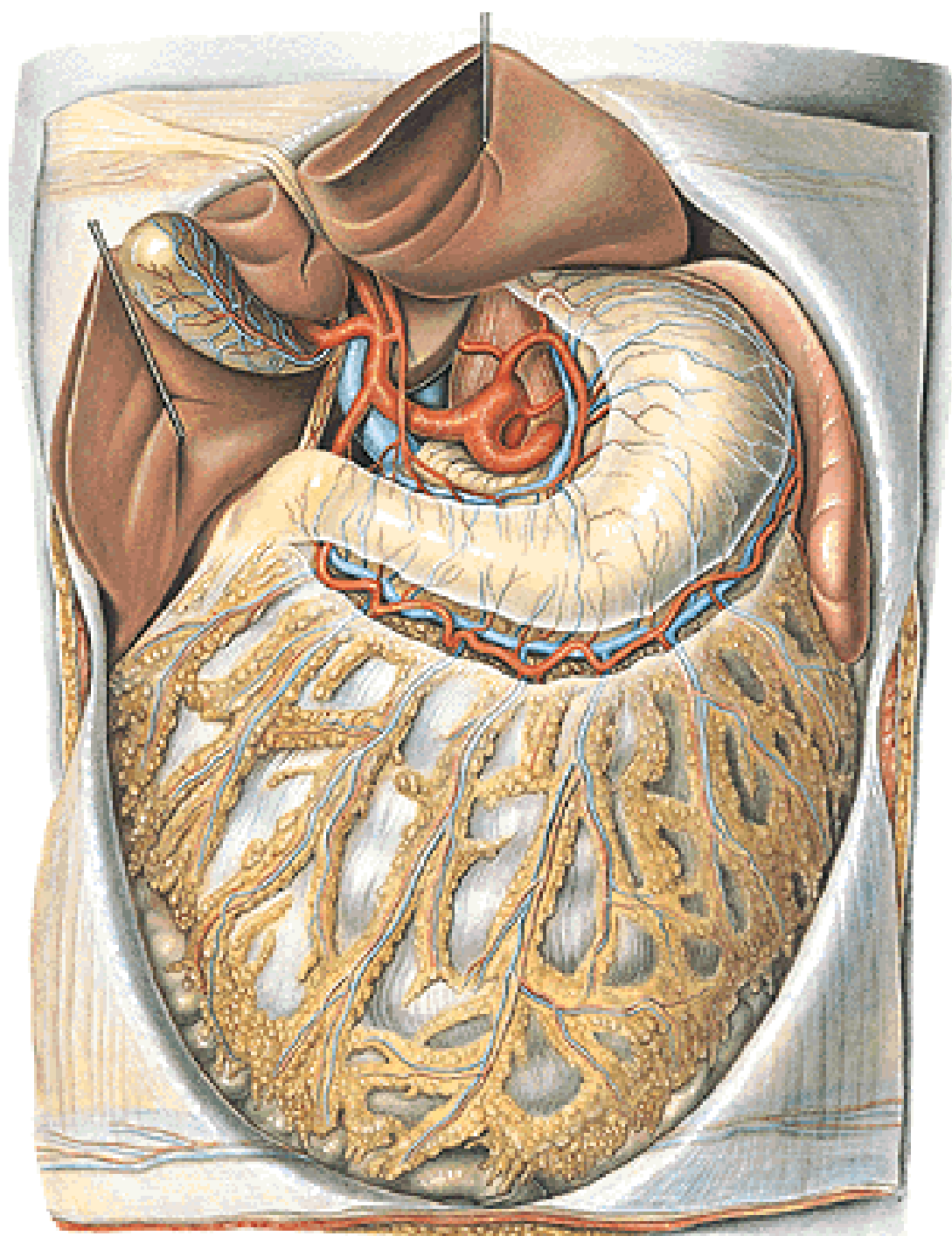
**Kidneys, suprarenal glands, aorta, vena cava inf.**

# Cavitas peritonealis - pars supramesocolica, inframesocolica



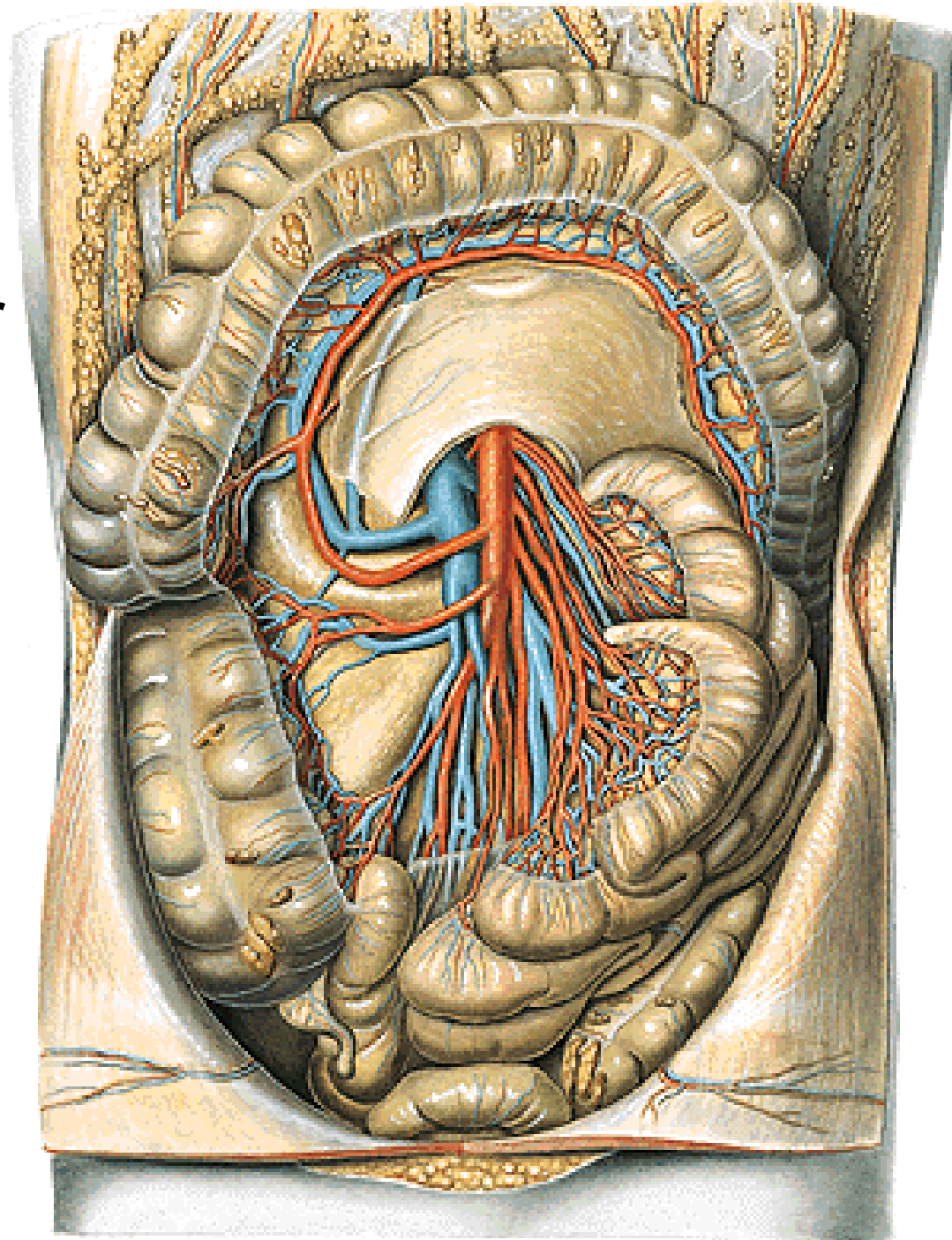
**Pars supramesocolica**

**Truncus coeliacus**



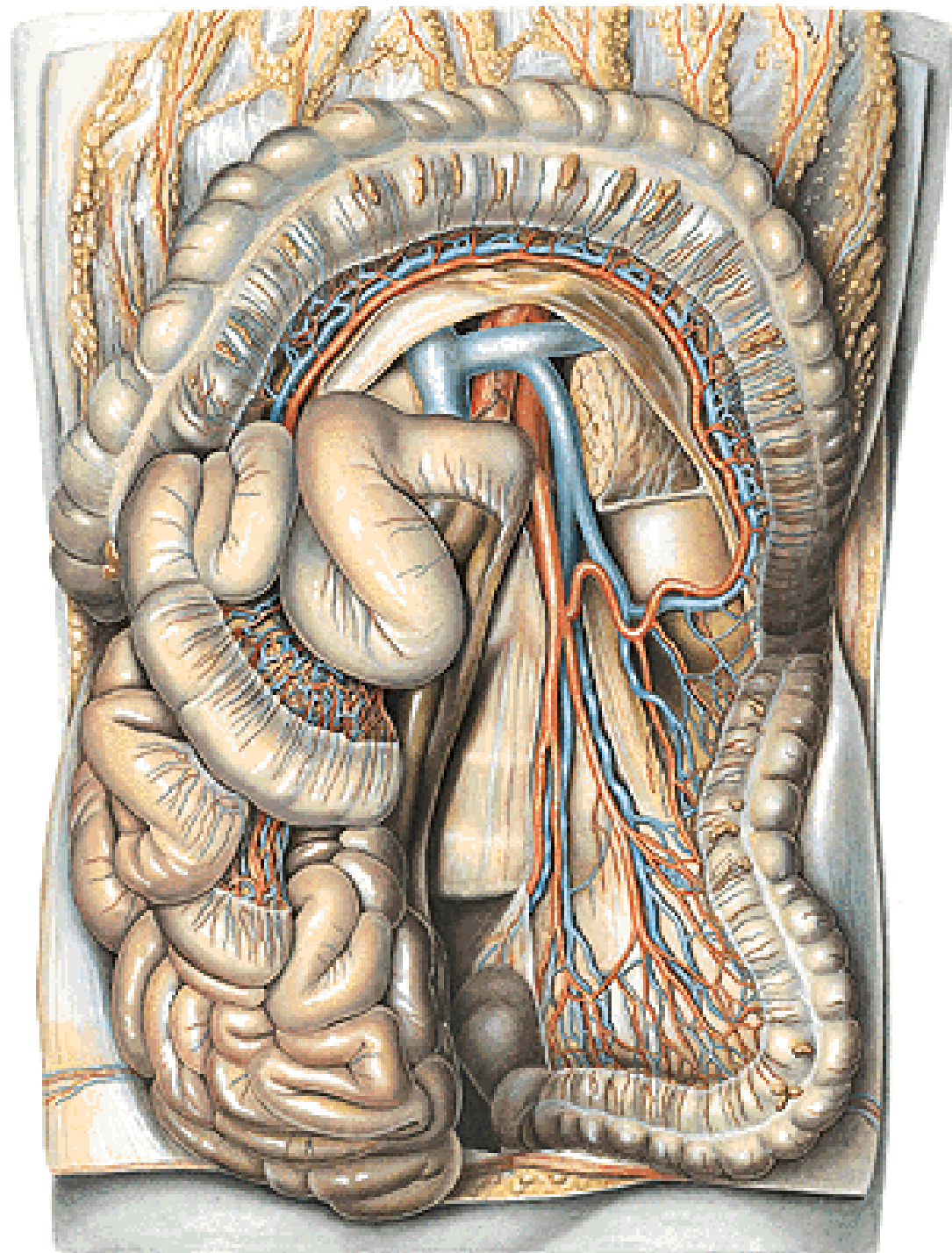
**Right infra(meso)colic  
compartment**

**A. mesenterica superior**

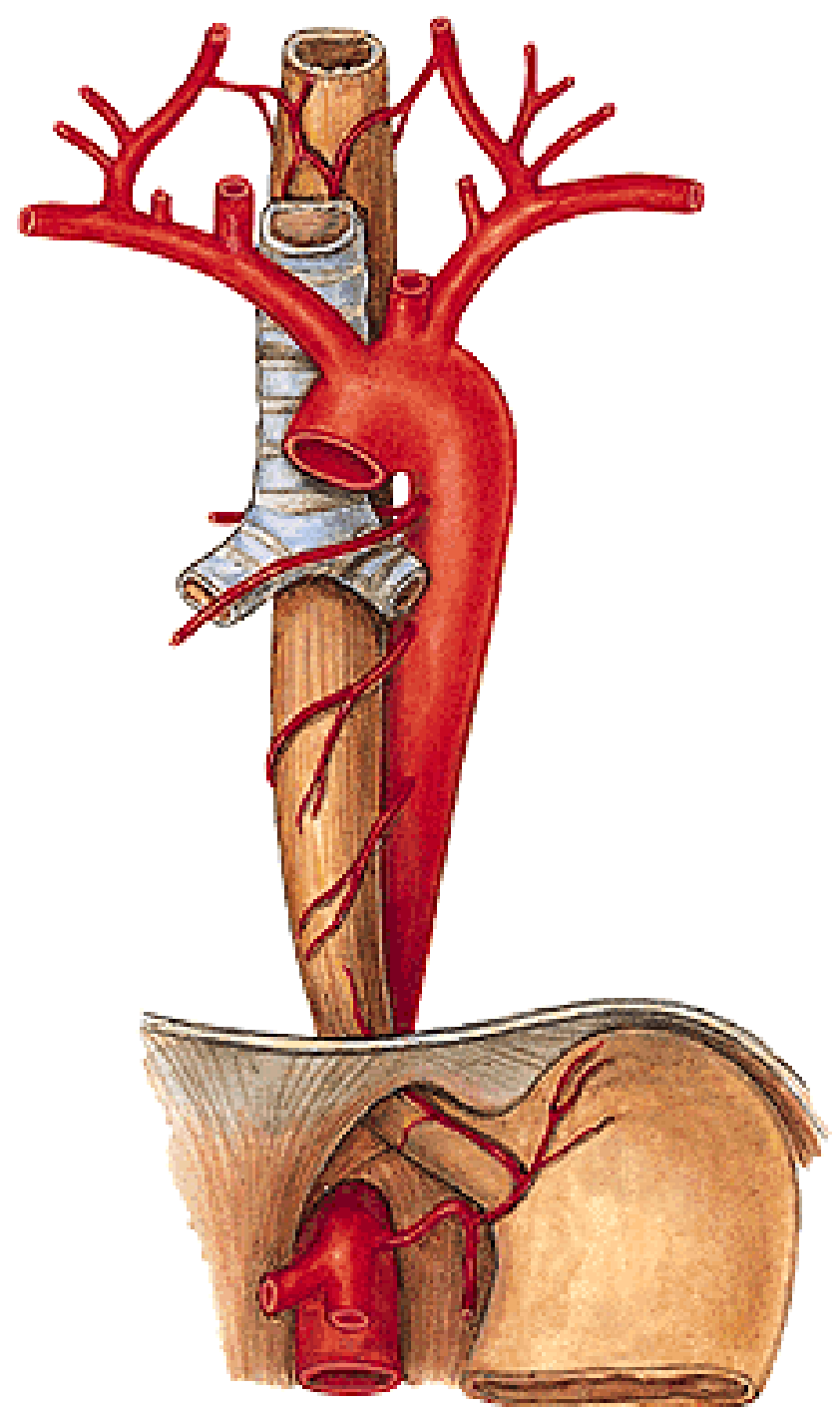


**Left infra(meso)colic  
compartment**

**A. mesenterica inferior**



# PARS ABDOMINALIS OF THE OESOPHAGUS



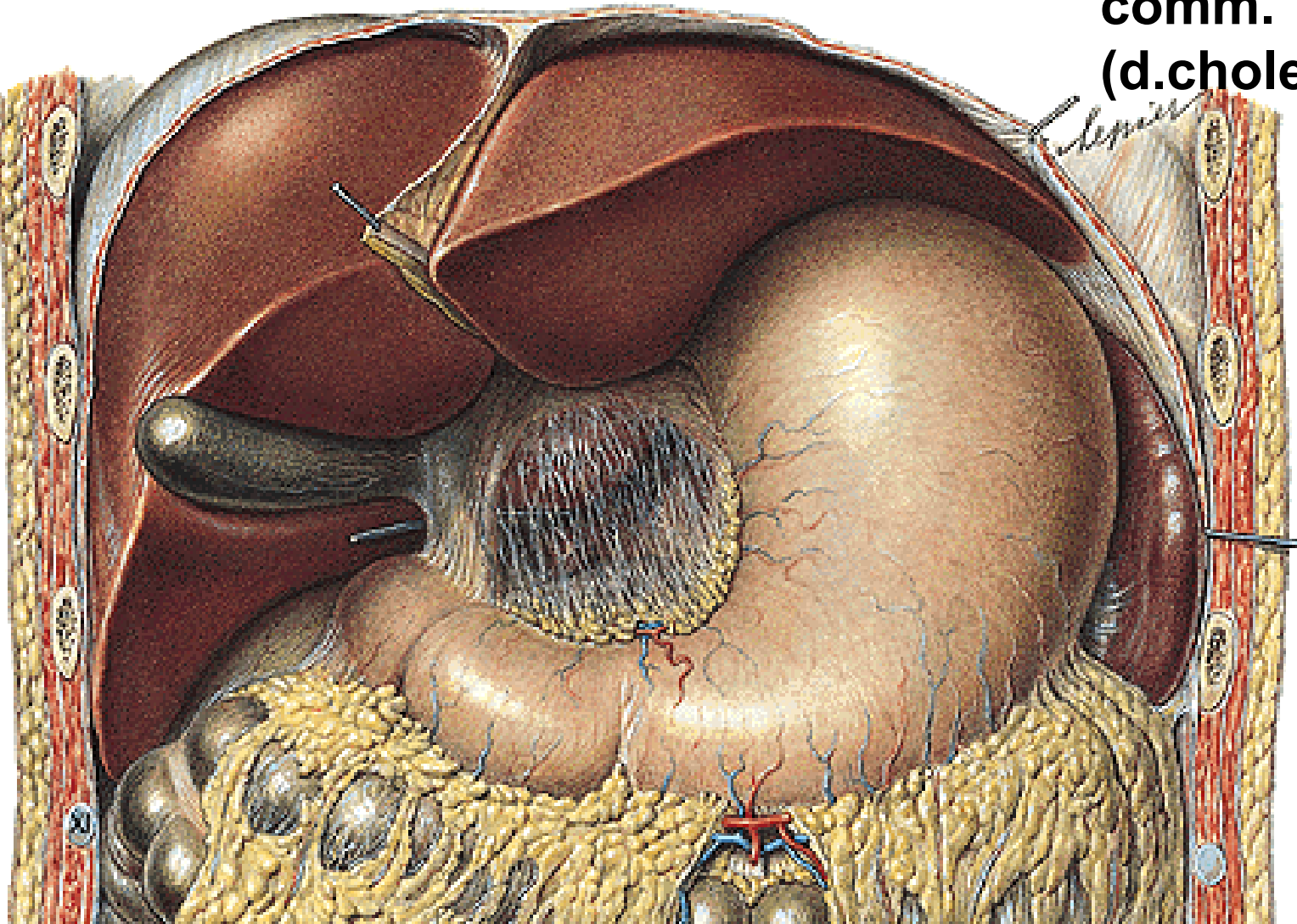
**Omentum minus - lig. hepatogastricum**

**- lig. hepatoduodenale - a. hepatica propria**

**- v. portae**

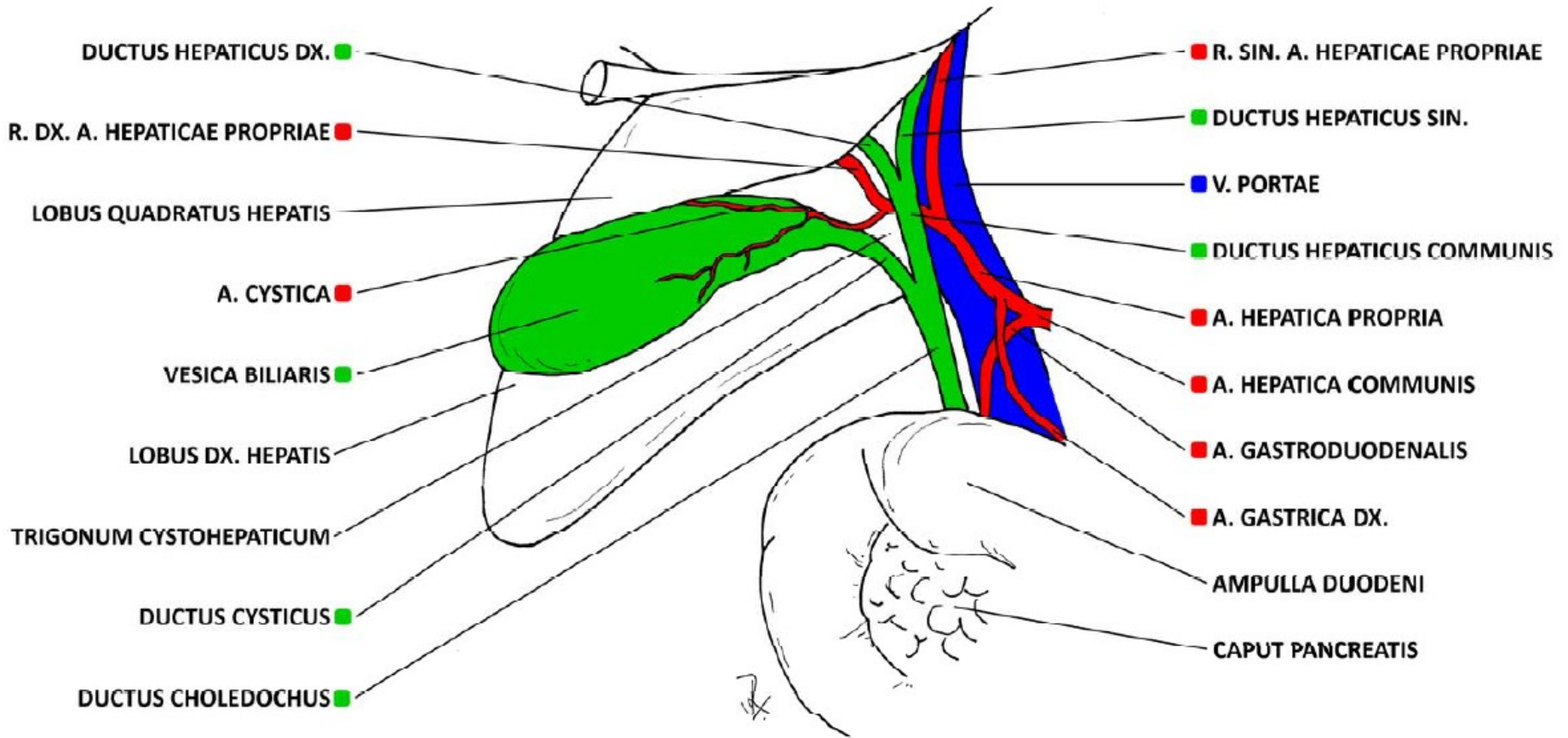
**- ductus hepaticus  
comm.**

**(d.choledochus)**

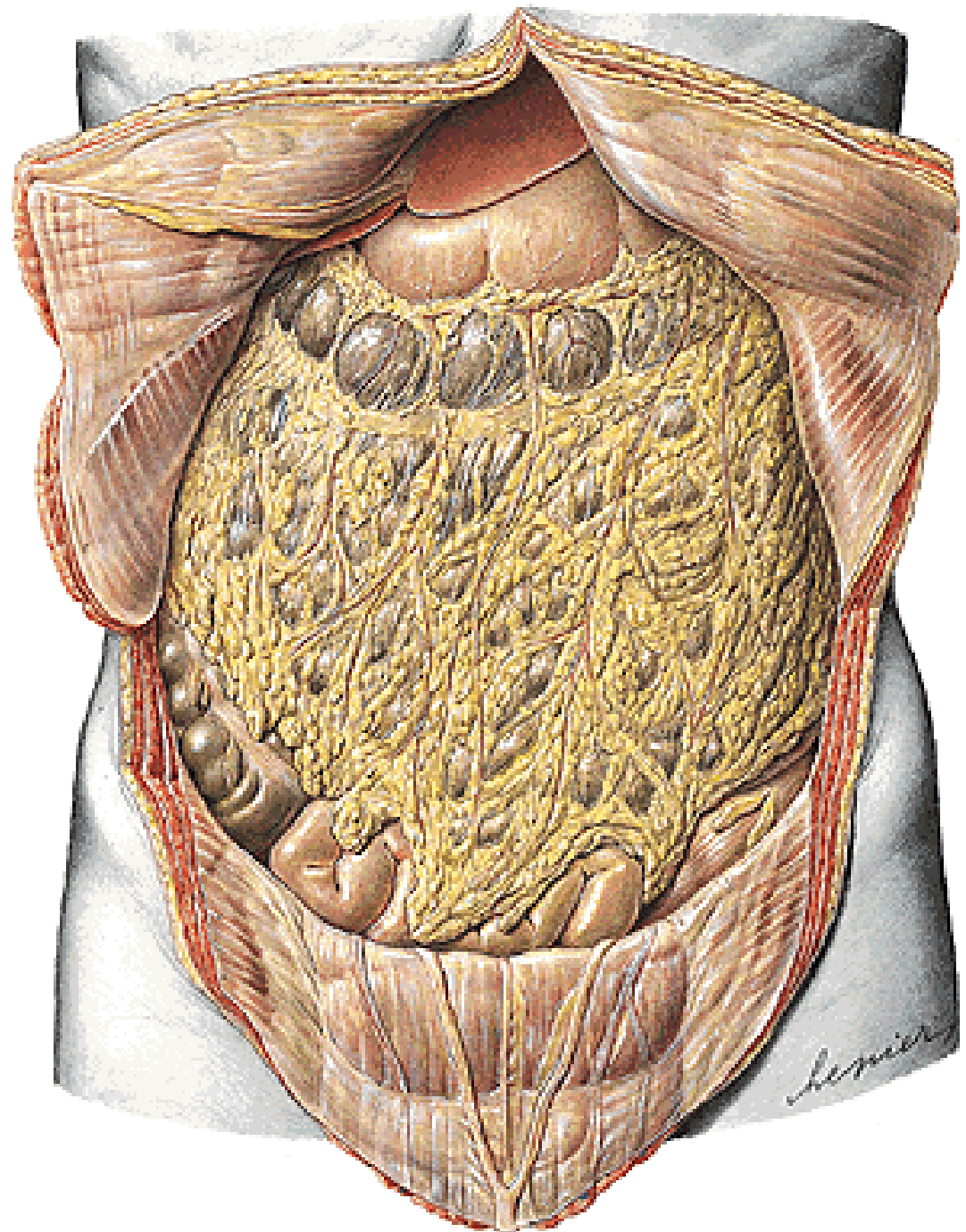




# LIGAMENTUM HEPATODUODENALE

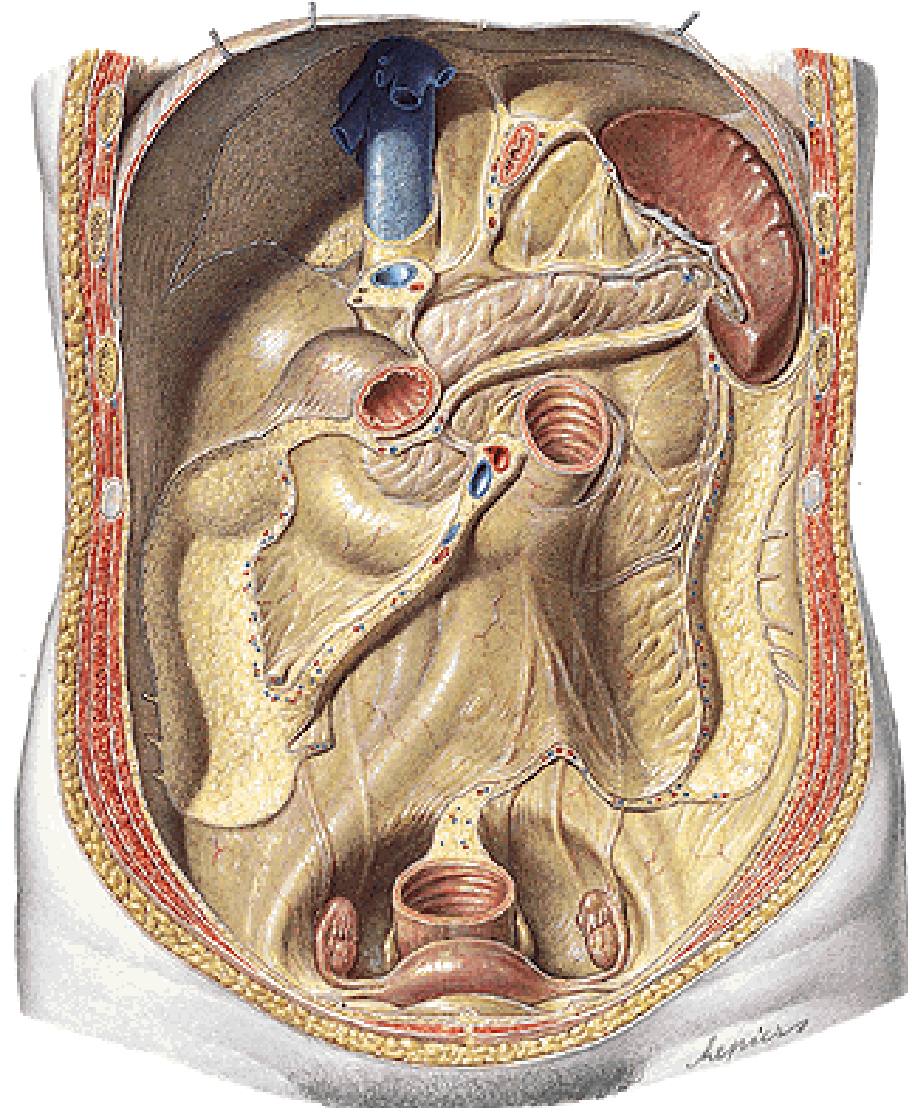
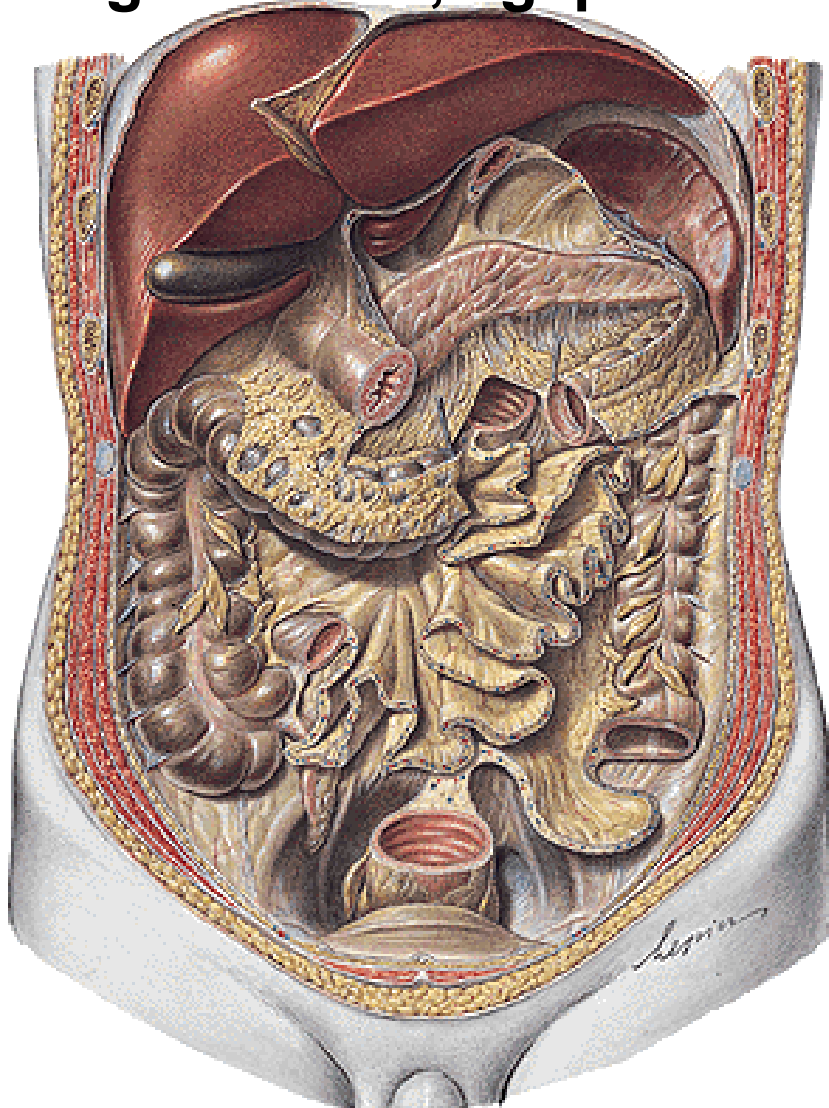


**Omentum majus**  
**- lig. gastrocolicum**

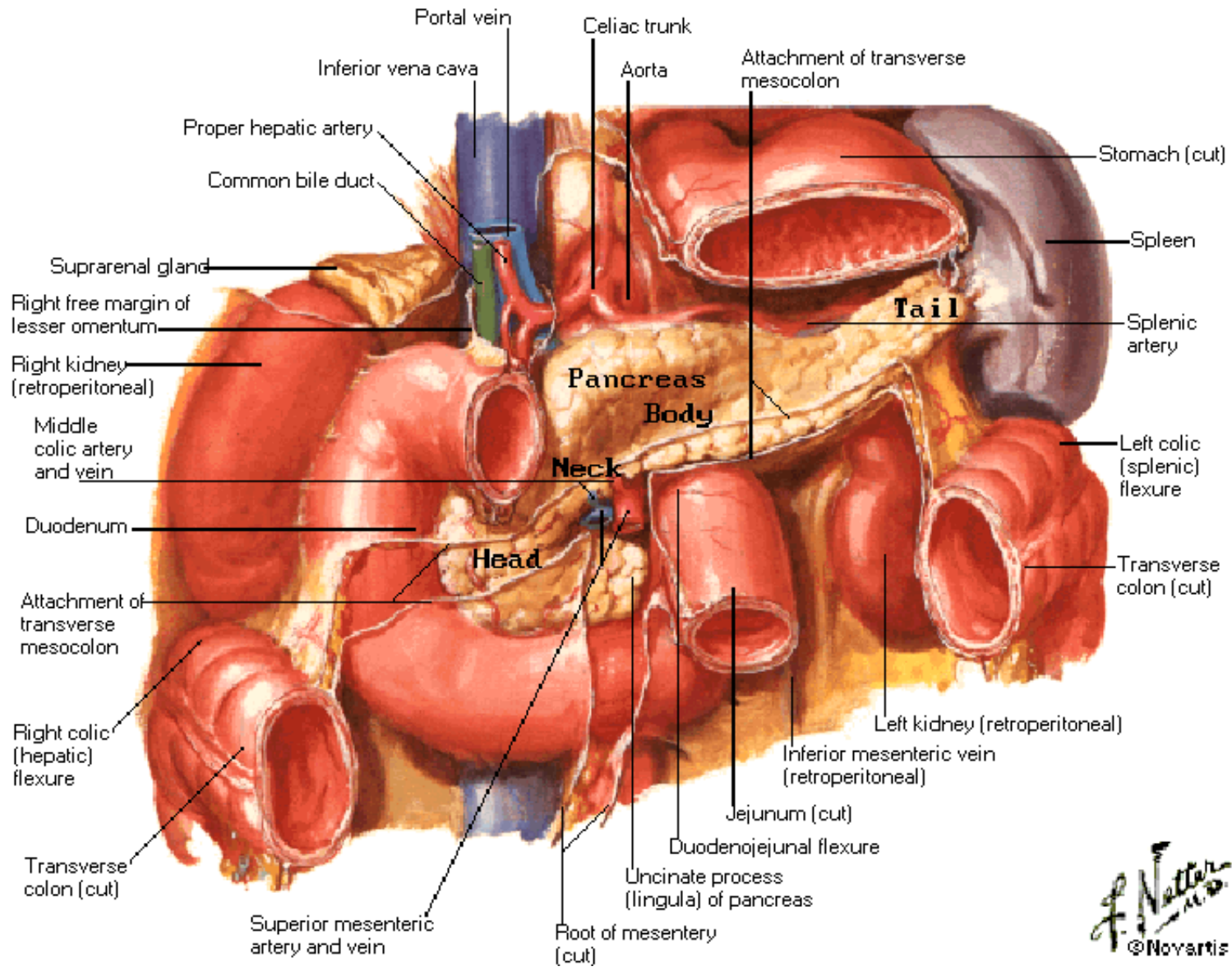




**Lig. gastrosplenicum, phrenicosplenicum, splenorenale**  
**Mesenterium – radix mesenterii**  
**Mesocolon transversum, mesoappendix, mesocolon**  
**sigmoideum, lig. phrenicocolicum**



# Pancreas in Situ

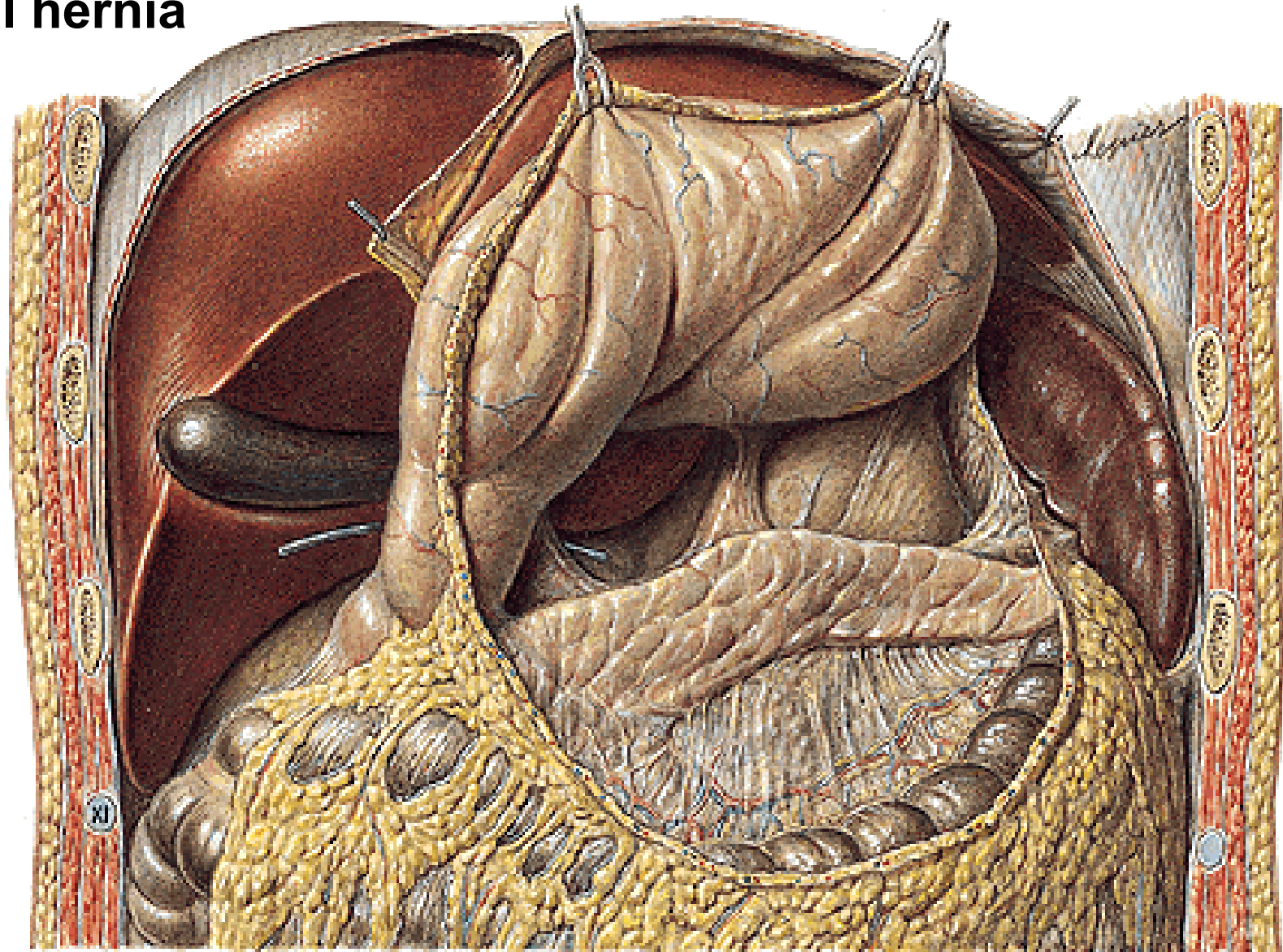


*F. Netter M.D.*  
©Novartis

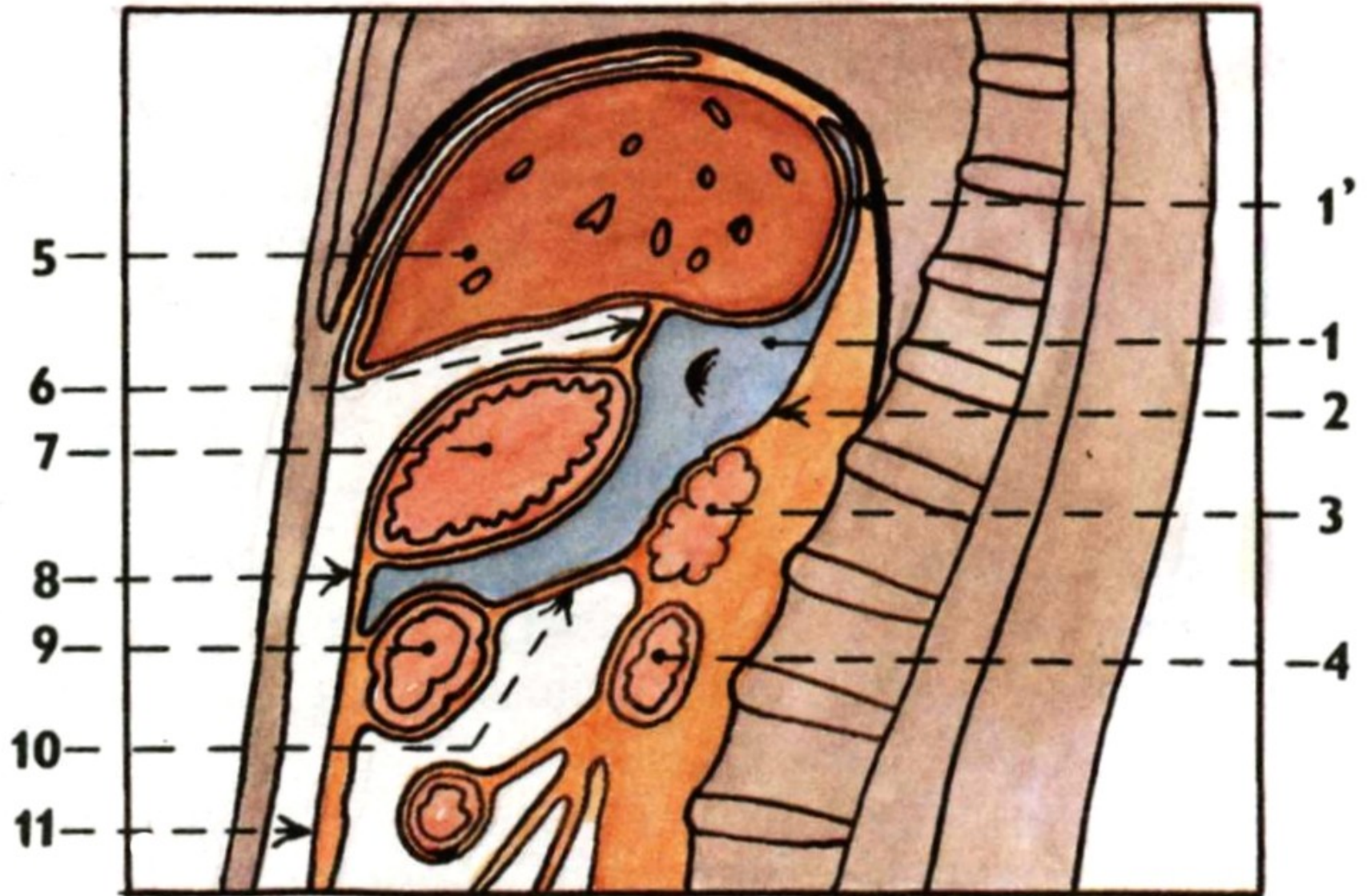
# **RECESSUS PERITONEI**

# Bursa omentalis

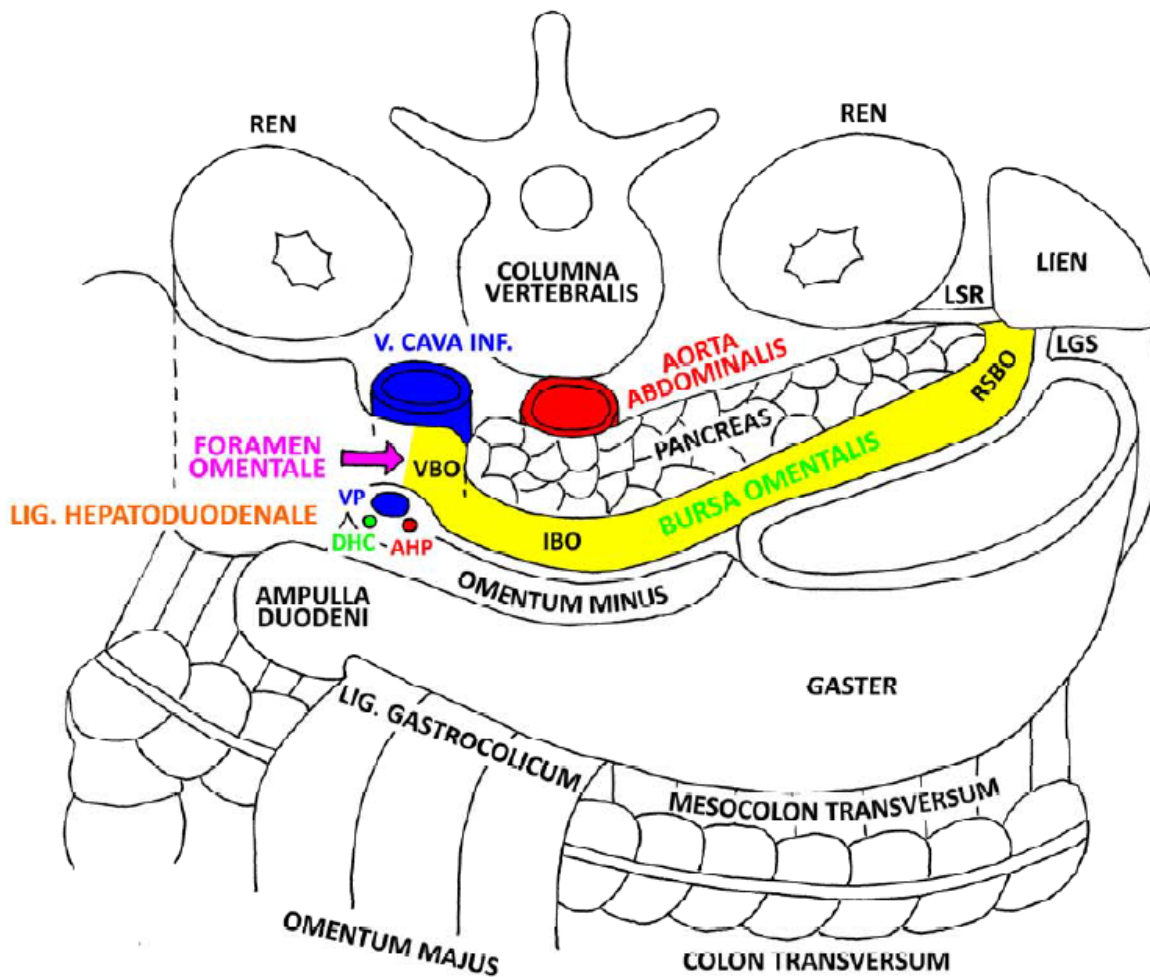
## Internal hernia



# Bursa omentalis



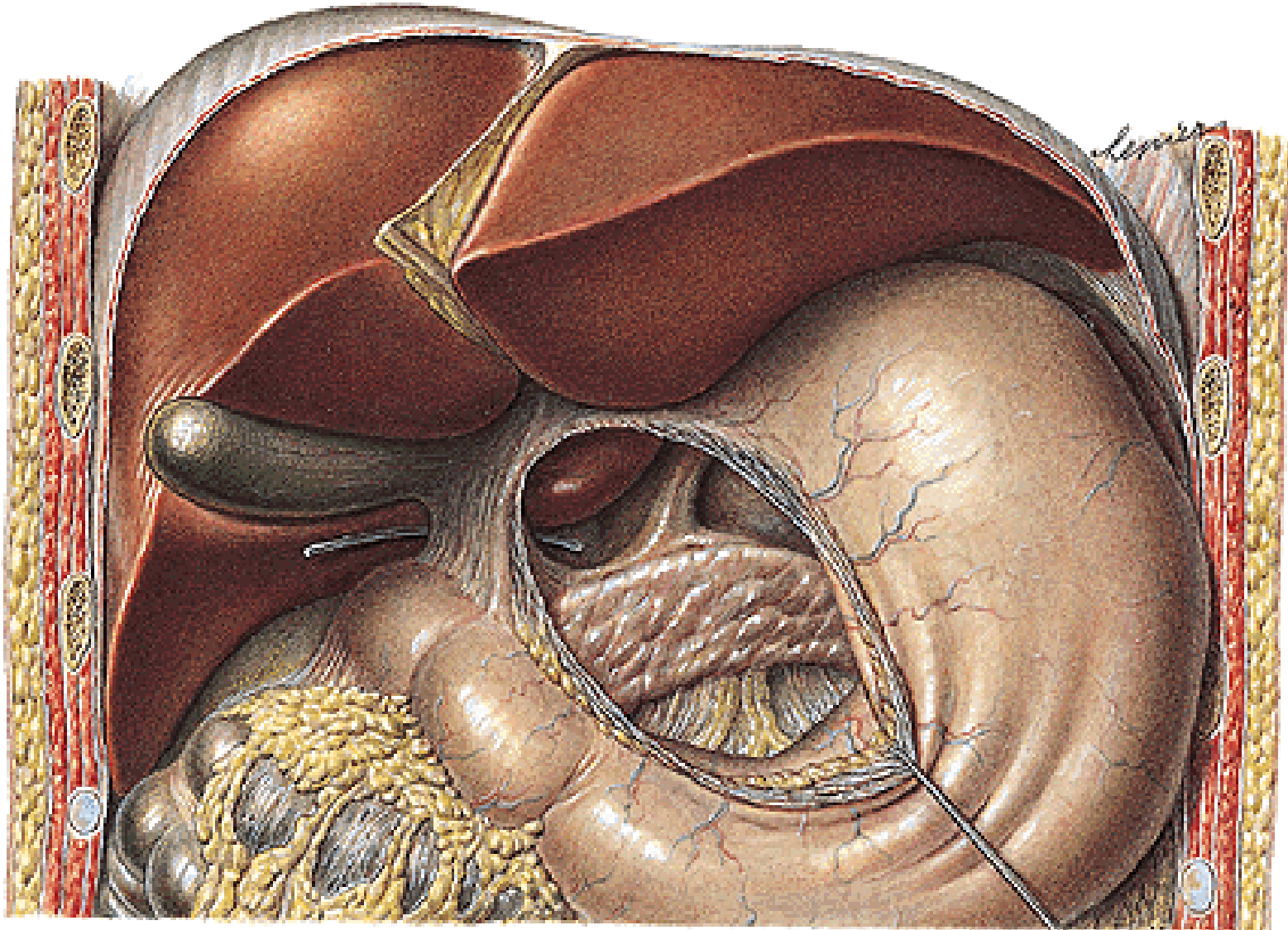




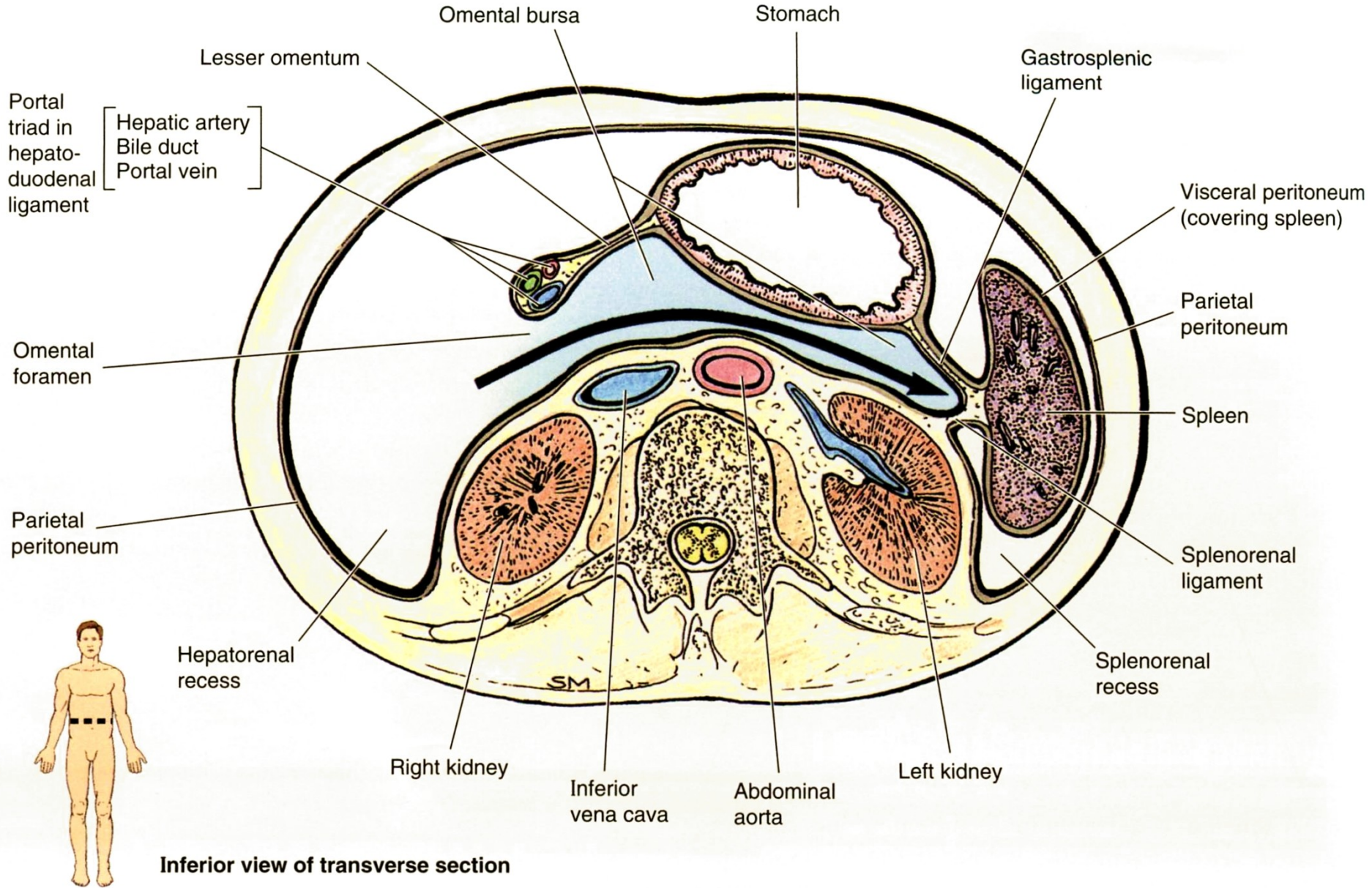
LSR - LIG. SPLENORENALE  
 LGS - LIG. GASTROSPLENICUM  
 RSBO - RECESSUS SPLENICUS BURSAE OMENTALIS  
 IBO - ISTHMUS BURSAE OMENTALIS  
 VBO - VESTIBULUM BURSAE OMENTALIS

VP - V. PORTAE  
 DHC - DUCTUS HEPATICUS COMMUNIS  
 AHP - A. HEPATICA PROPRIA

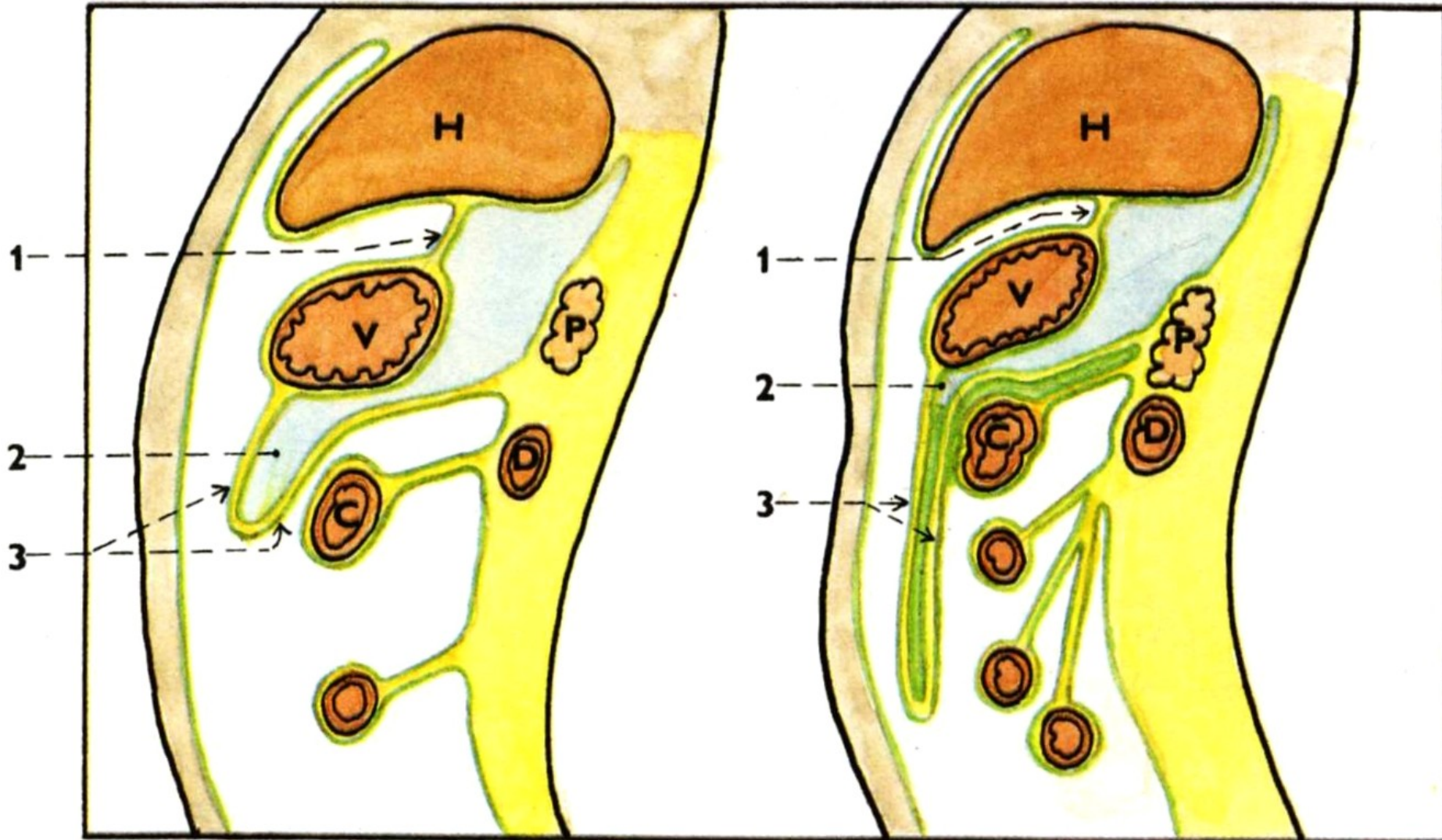
**Foramen omentale/epiploicum (Winslow)**  
**Recessus sup., splenicus, inf.**



# Abdominal Wall and Viscera

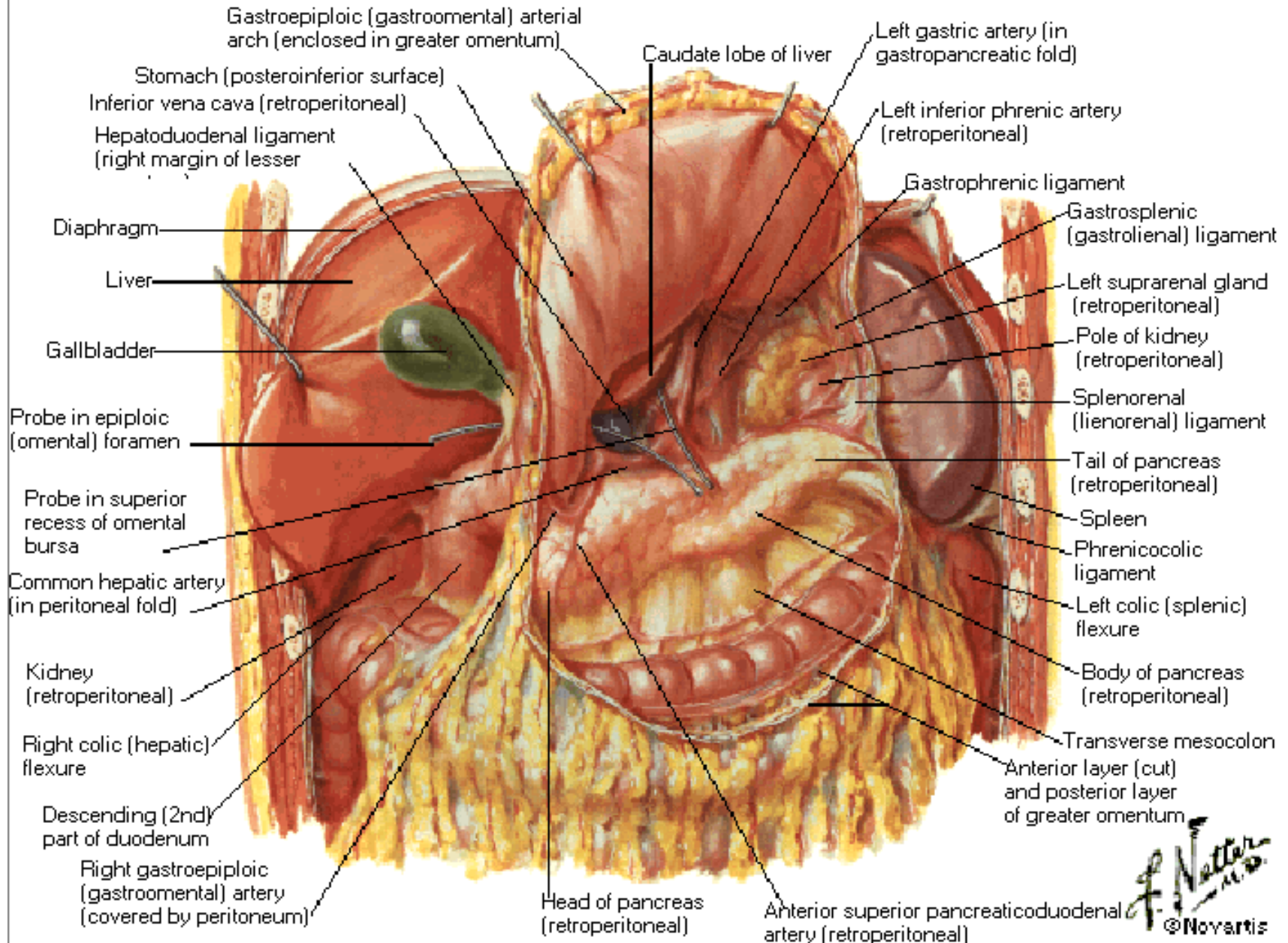


## Recessus inferior bursae omentalis (2)



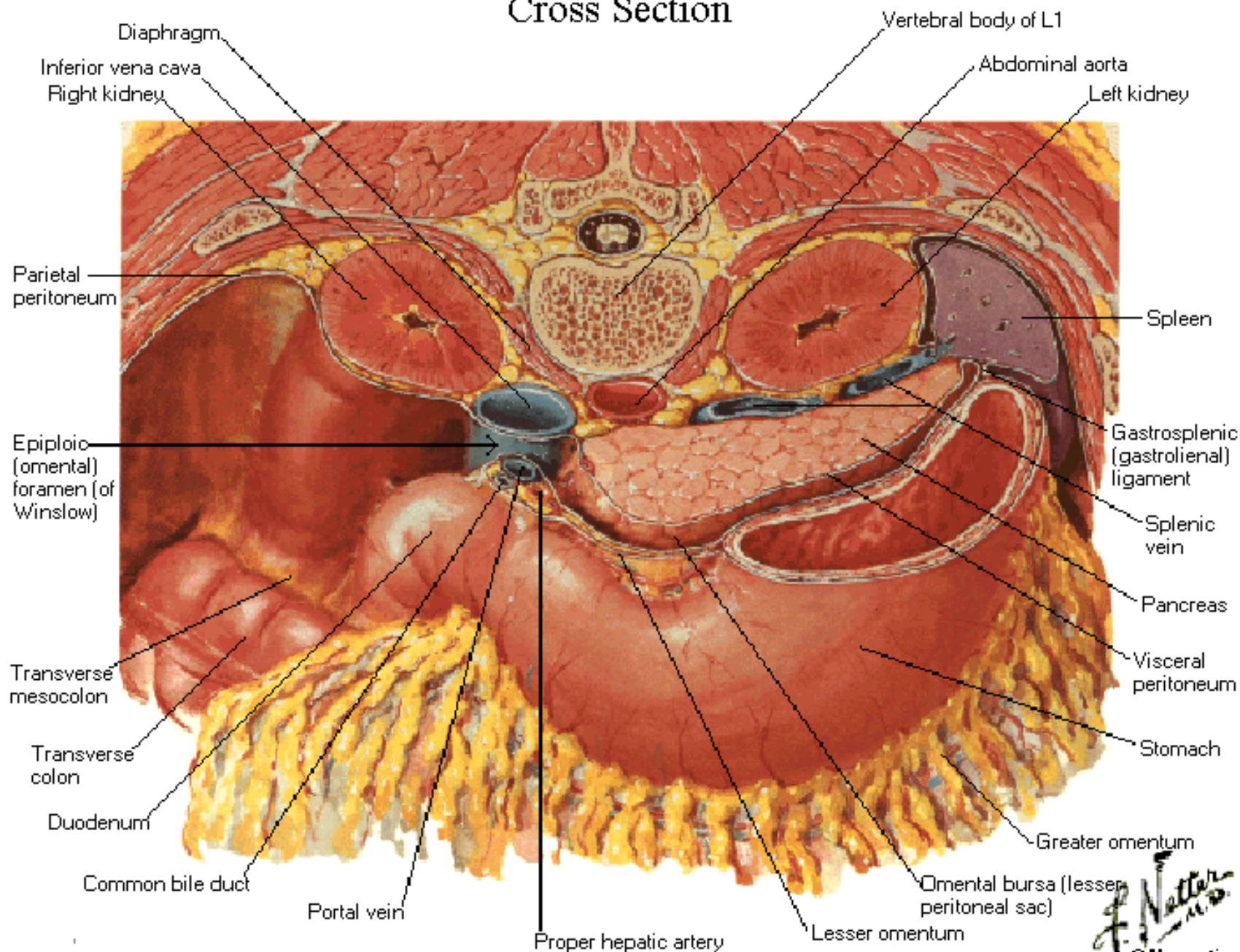
# Omental Bursa

## Stomach Reflected

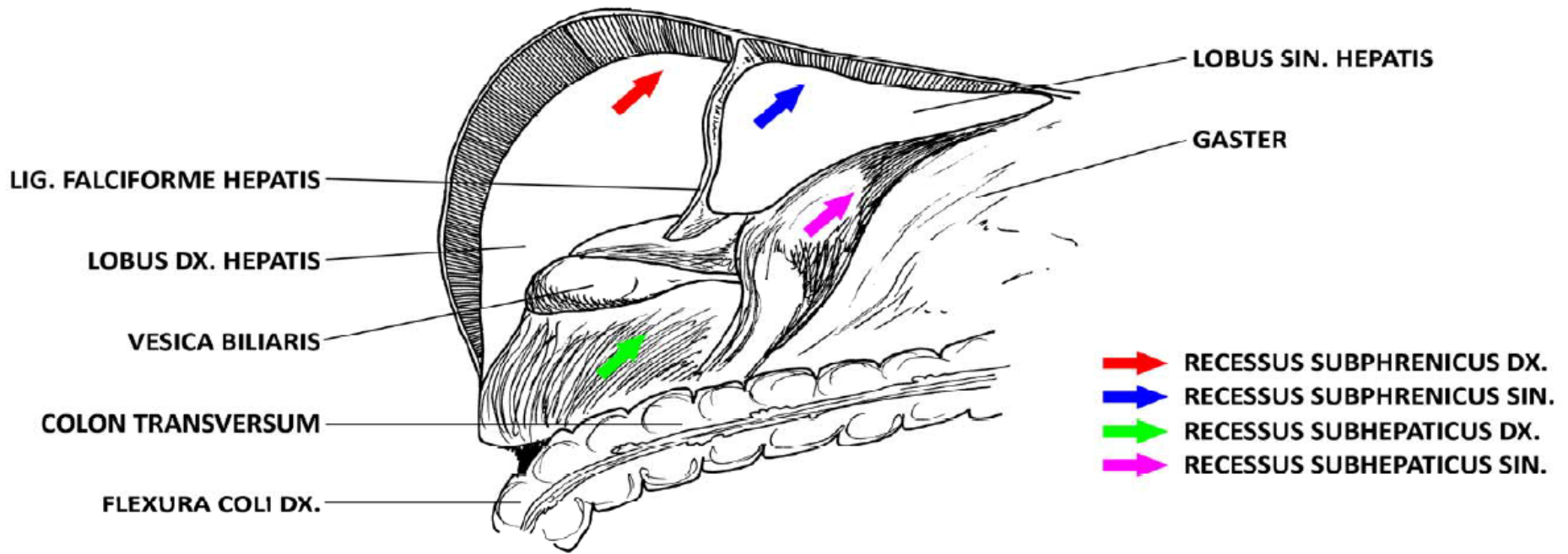


# Omental Bursa

## Cross Section



# RECESSUS PERITONEALES

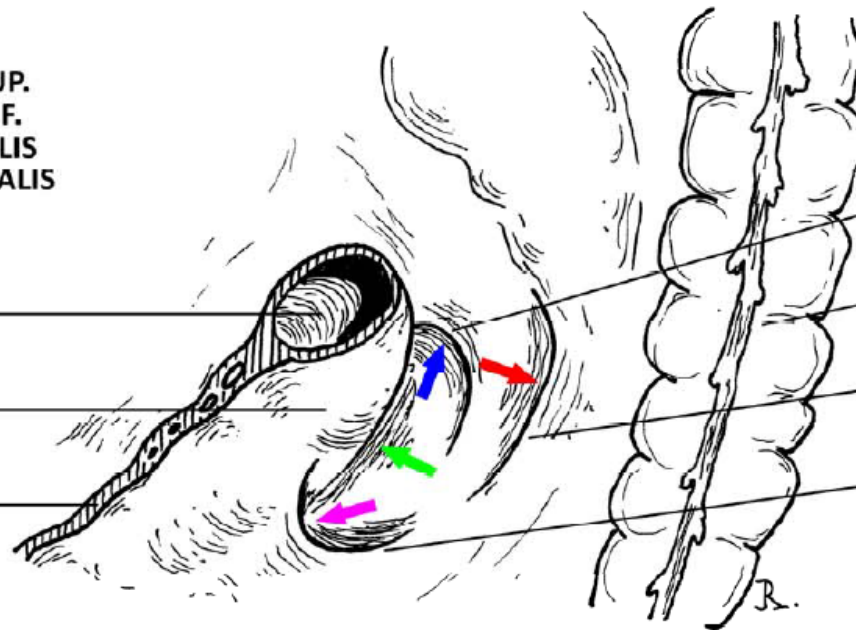


- ➔ RECESSUS DUODENALIS SUP.
- ➔ RECESSUS DUODENALIS INF.
- ➔ RECESSUS PARADUODENALIS
- ➔ RECESSUS RETRODUODENALIS

FLEXURA DUODENOJEJUNALIS

PARS ASCENDENS DUODENI

RADIX MESENTERII



PLICA DUODENALIS SUP.

COLON DESCENDENS

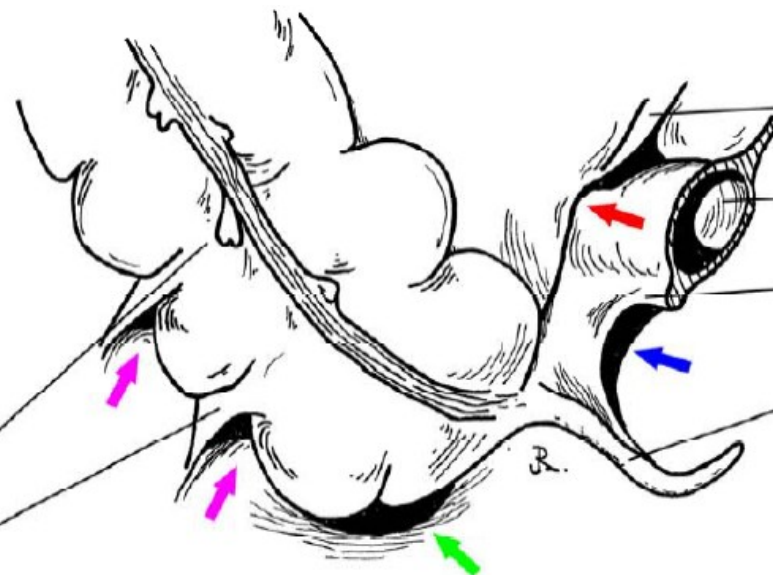
PLICA PARADUODENALIS

PLICA DUODENALIS INF.

- ➔ RECESSUS ILEOCAECALIS SUP.
- ➔ RECESSUS ILEOCAECALIS INF.
- ➔ RECESSUS RETROCAECALIS
- ➔ SULCI PARACOLICI

CAECUM

PLICA CAECALIS



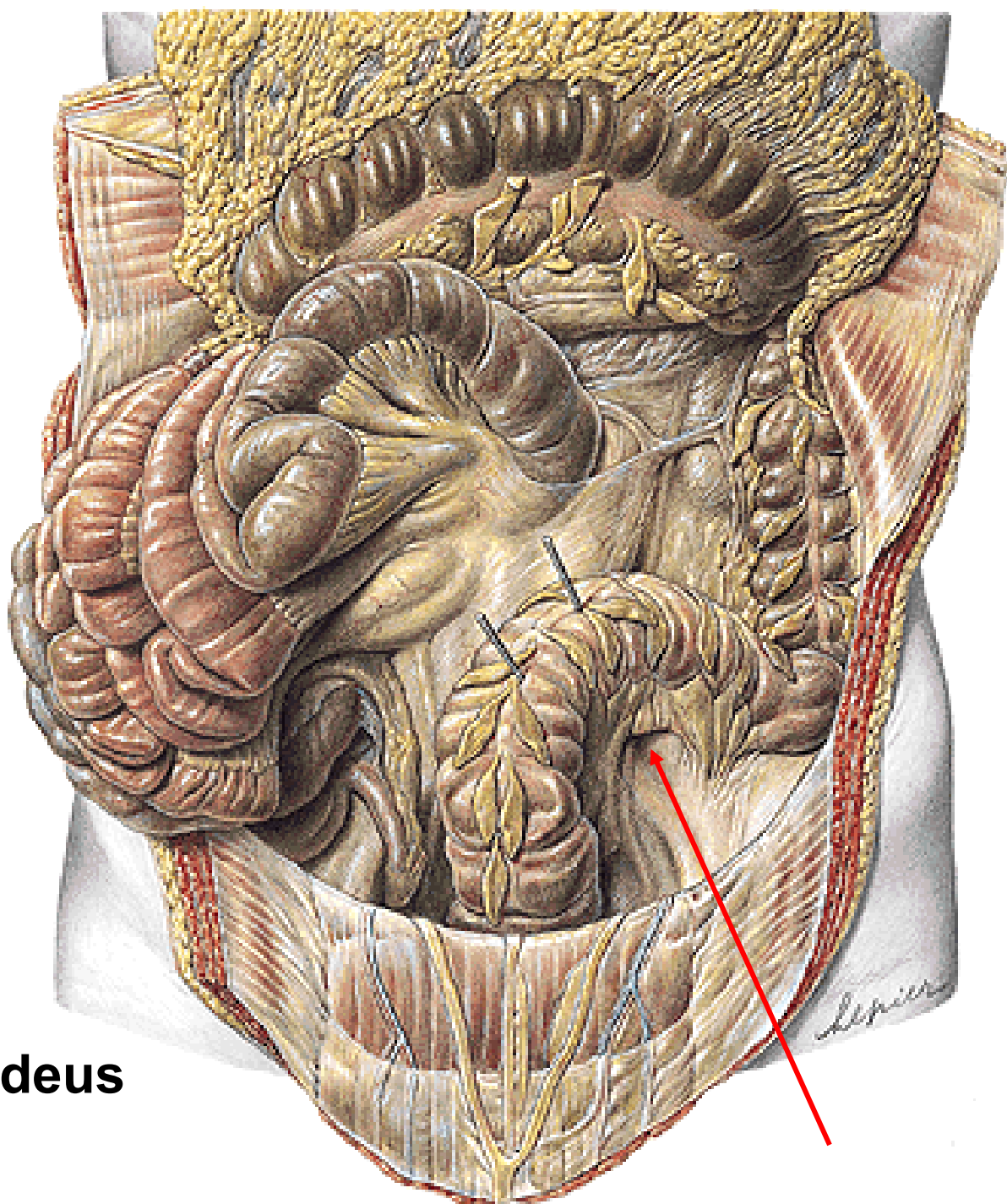
PLICA CAECALIS VASCULARIS

ILEUM

PLICA ILEOCAECALIS

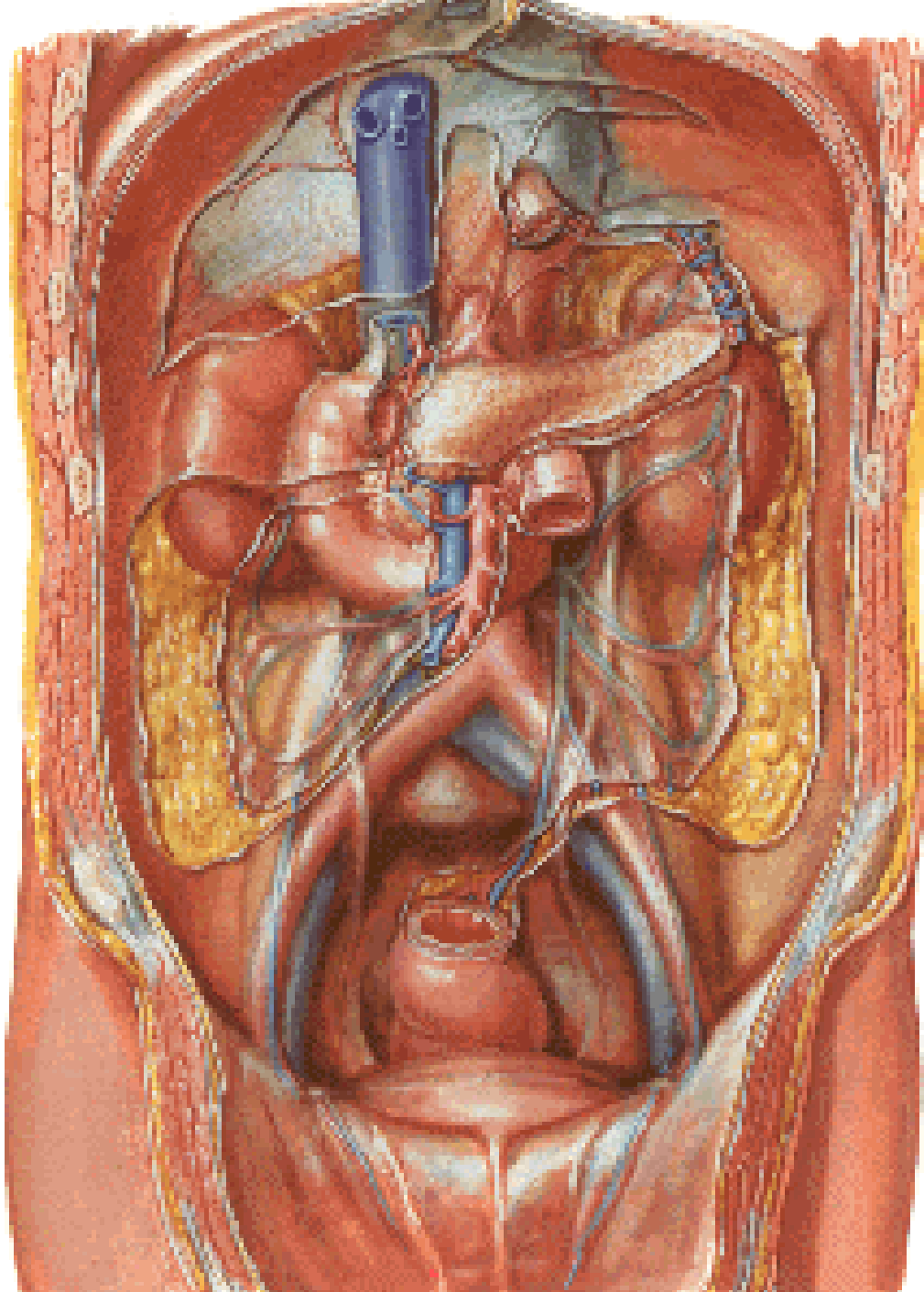
APPENDIX VERMIFORMIS





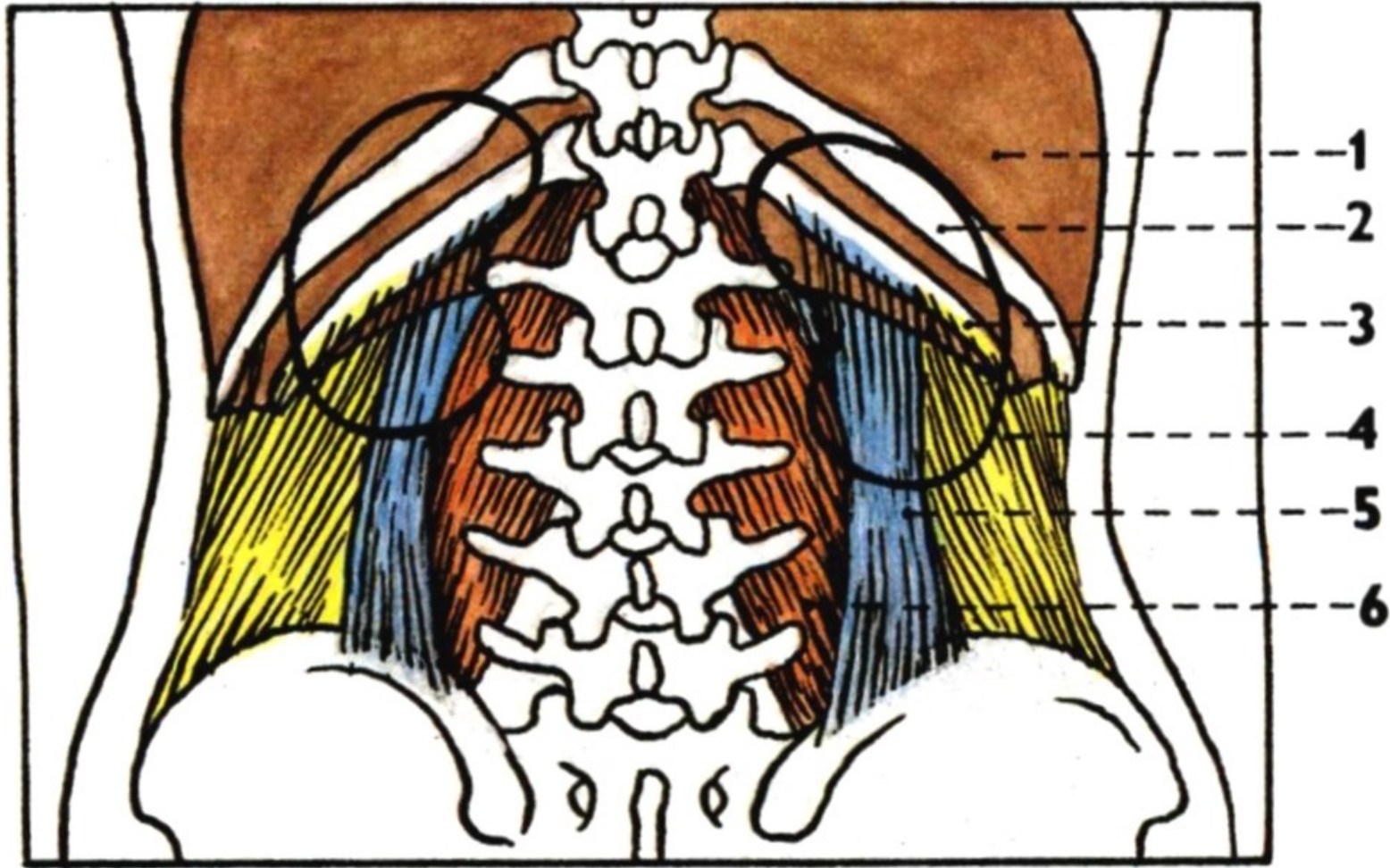
**Recessus intersigmoideus**

# **SPATIUM RETROPERITONEALE**



- 1. diaphragma
- 2. 11<sup>th</sup> rib
- 3. 12<sup>th</sup> rib

- 4. m. transversus abdominis
- 5. m. quadratus lumborum
- 6. m. psoas major

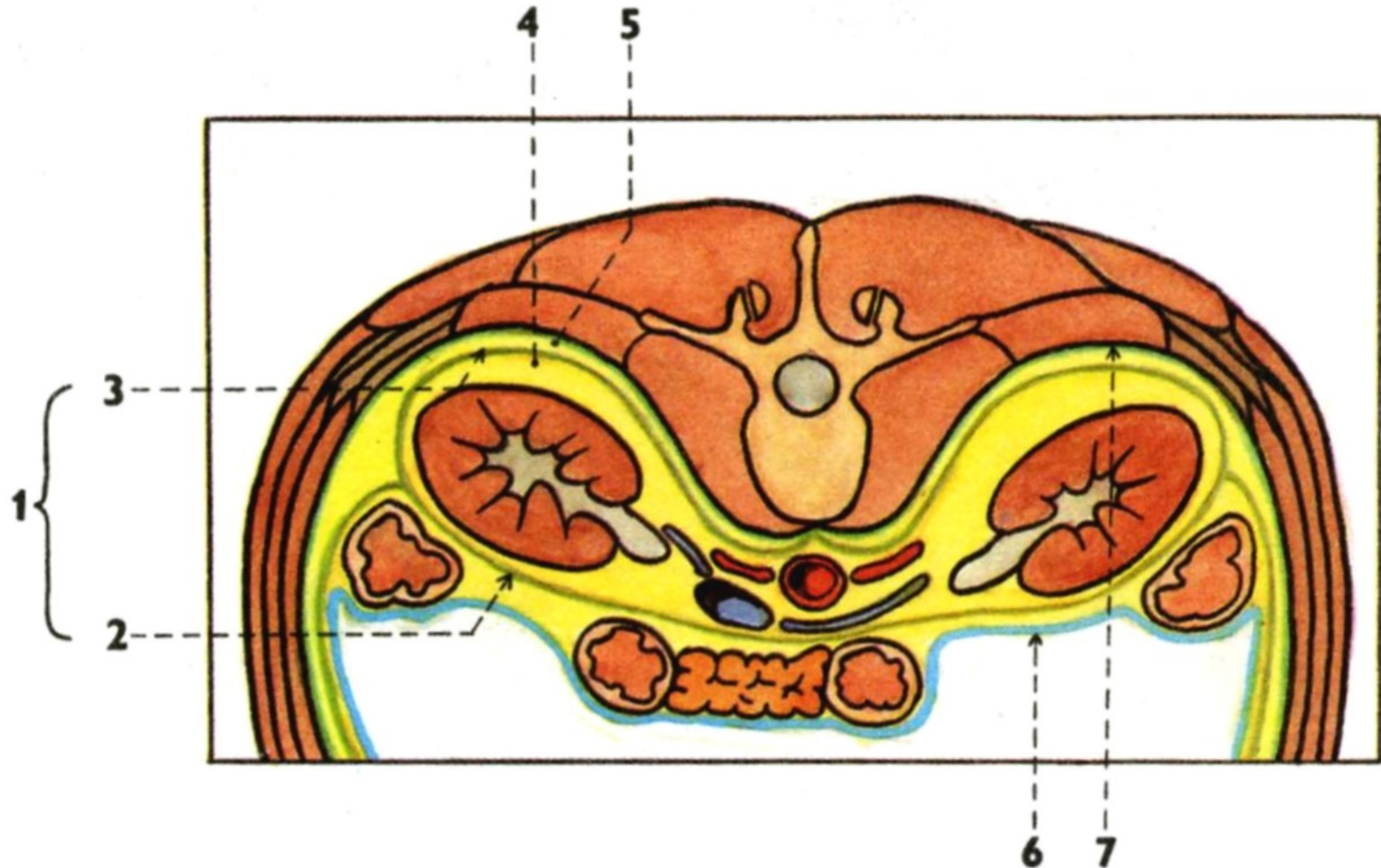


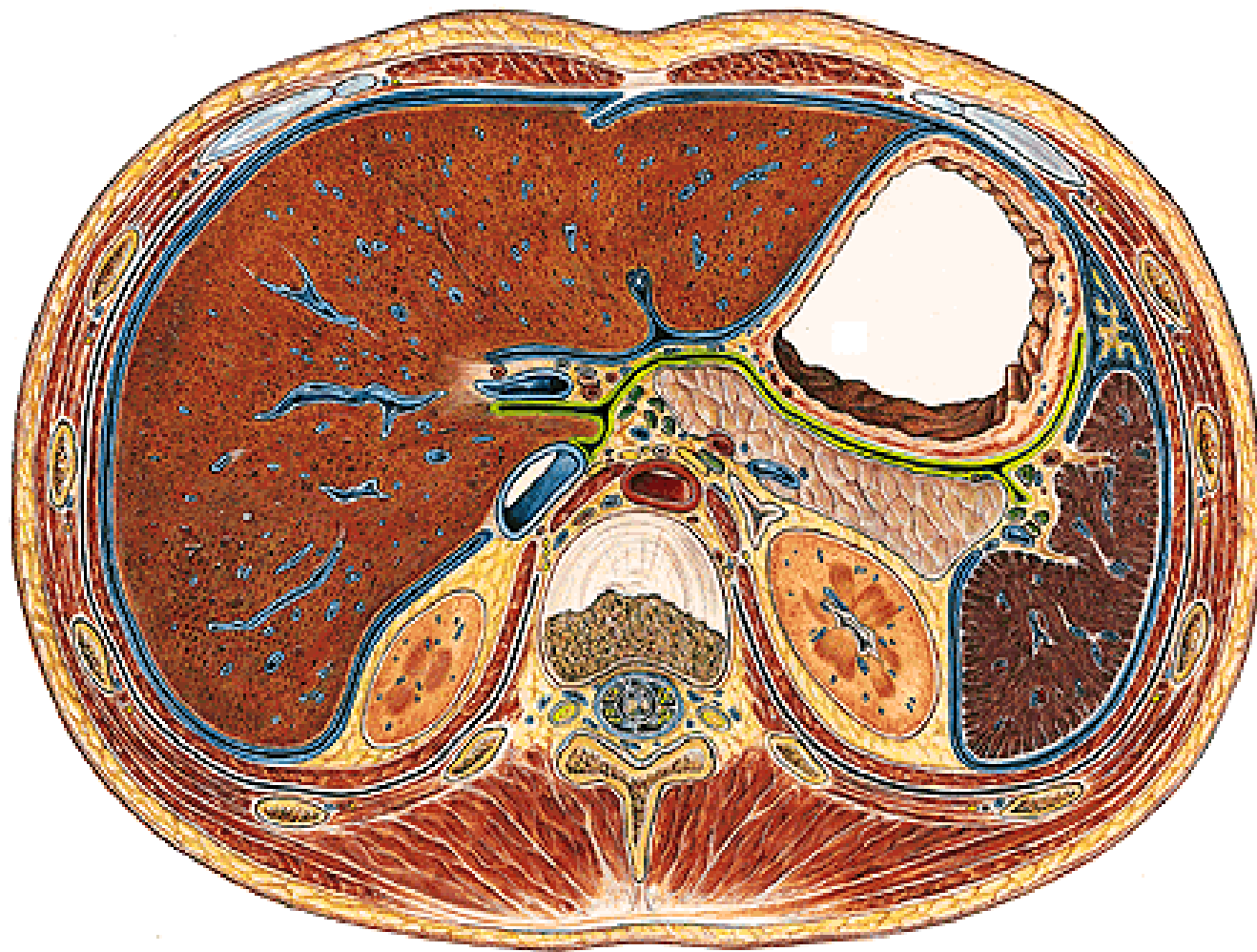
SIN.

DX.

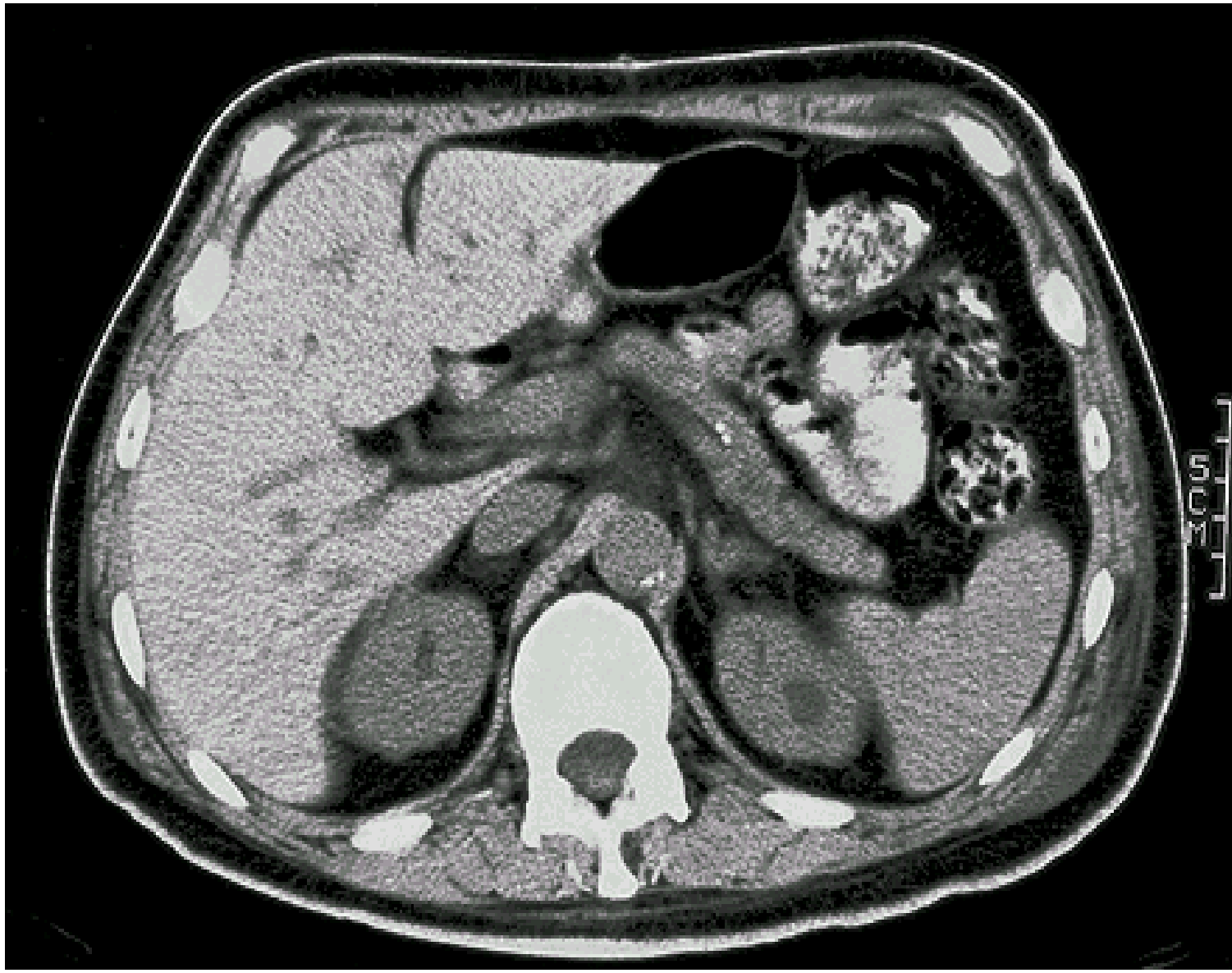
1. fascia renalis
2. lamina praerenalis
3. lamina retrorenalis
4. capsula adiposa

5. corpus adiposum pararenale
6. peritoneum
7. fascia transversalis





**Th XII**



Illustrations were copied from:

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

**Atlas der Anatomie des Menschen/Sobotta.**

**Putz,R., und Pabst,R. 20. Auflage. München:**

**Urban & Schwarzenberg, 1993**