

Топографска анатомия на корема



1. Топографски области на корема
2. Предна коремна стена
3. Слабинен канал
4. Коремна кухина – горен отдел
5. Коремна кухина – долен отдел

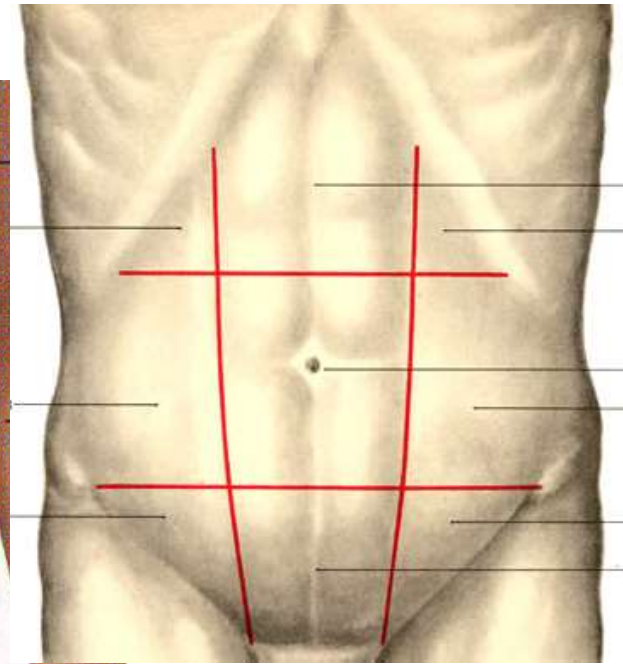
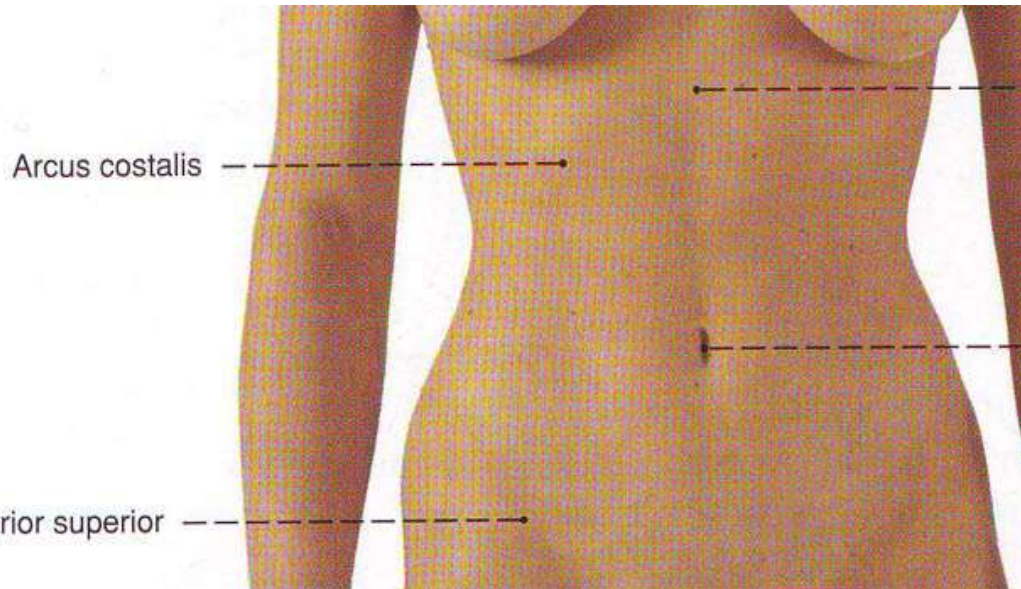


Корем, *abdomen*: граници и етажи

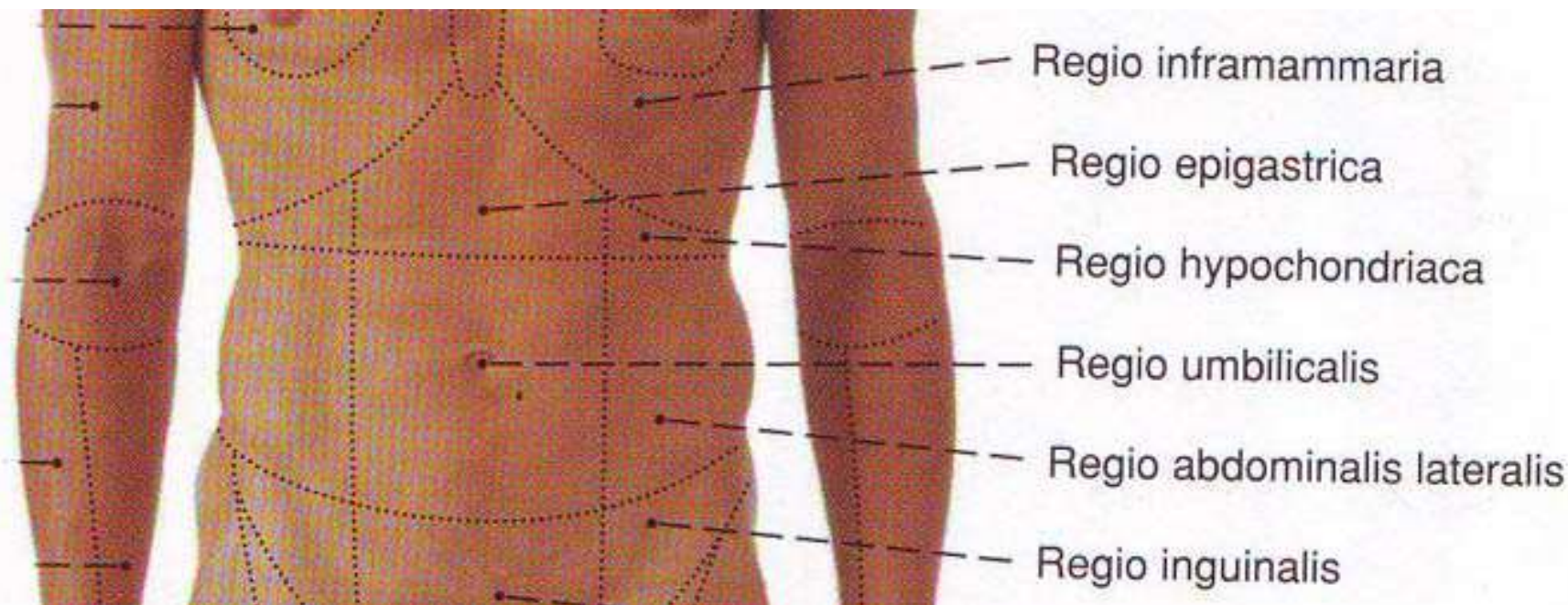
- *linea bicostalis*
- *linea bispinalis*



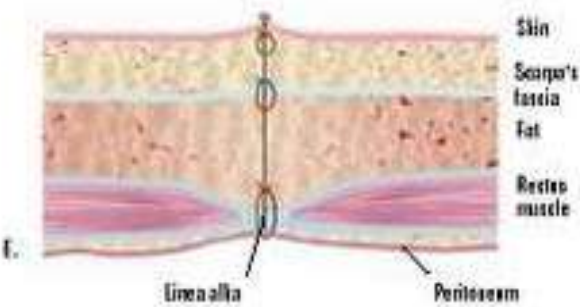
- епигастриум
- мезогастриум
- хипогастриум



Области на корема, *regiones abdominis*



Предна коремна стена: слоеве



Кожа и подкожие

Подкожна (повърхностна) фасция

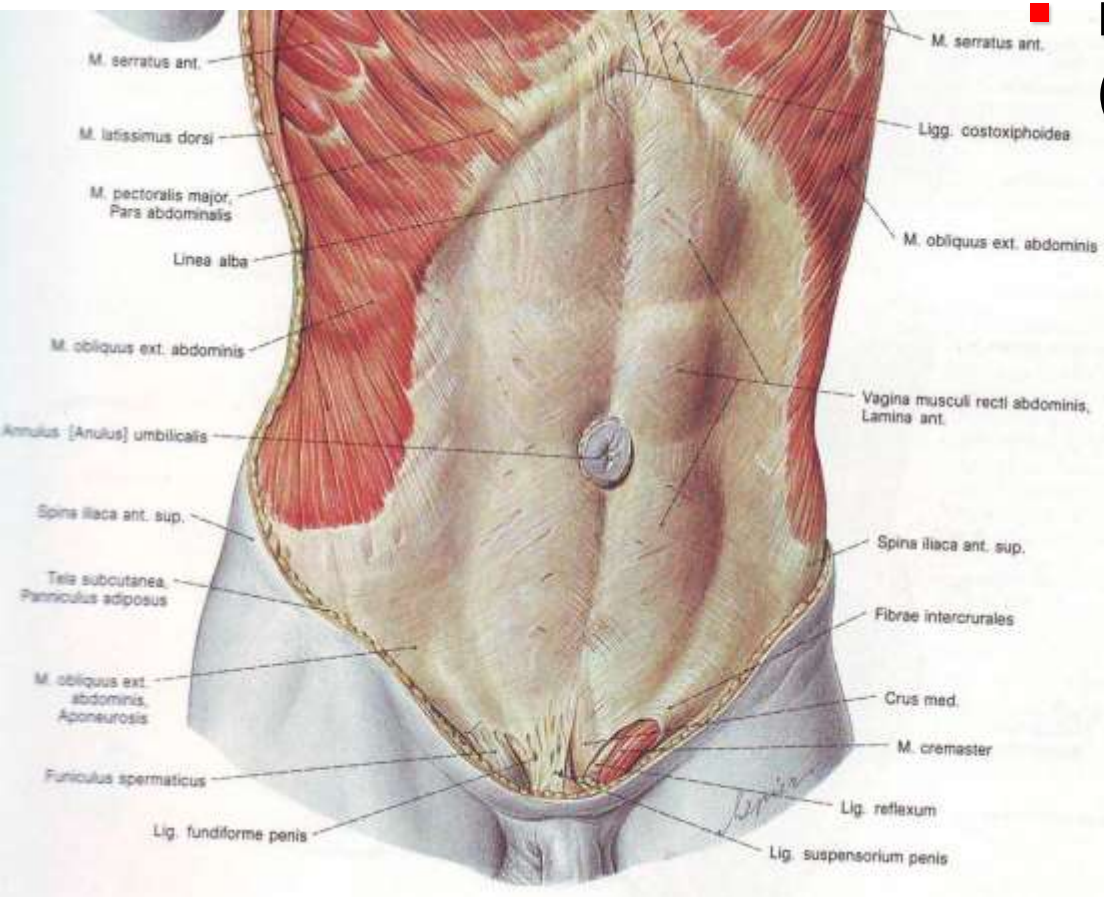
Мускулен слой

Преперитонеален мастен слой

Коремница – париетален лист



Подкожна фасция, *fascia investiens abdominis*



■ **повърхностен лист** (фасция на *Camper*)

- ✓ преминава в бедрена област, без да се прикрепва към слабинната гънка

■ **междинен лист** (мембранозен слой) – фасция на *Scarpa*

■ **дълбок лист** (*lamina secundaria fasciae superficialis*) – фасция на *Thompson*

- ✓ по-плътен, прикрепва се към слабинната гънка – абцеси в пределите на предната коремна стена



Съдово-нервни сплетения

■ Инервация:

VI-XII интеркостален нерв

✓ епигастриум: VII-IX нерв

✓ мезогастриум: X и XI нерв

✓ хипогастриум:

XII нерв

n. iliohypogastricus

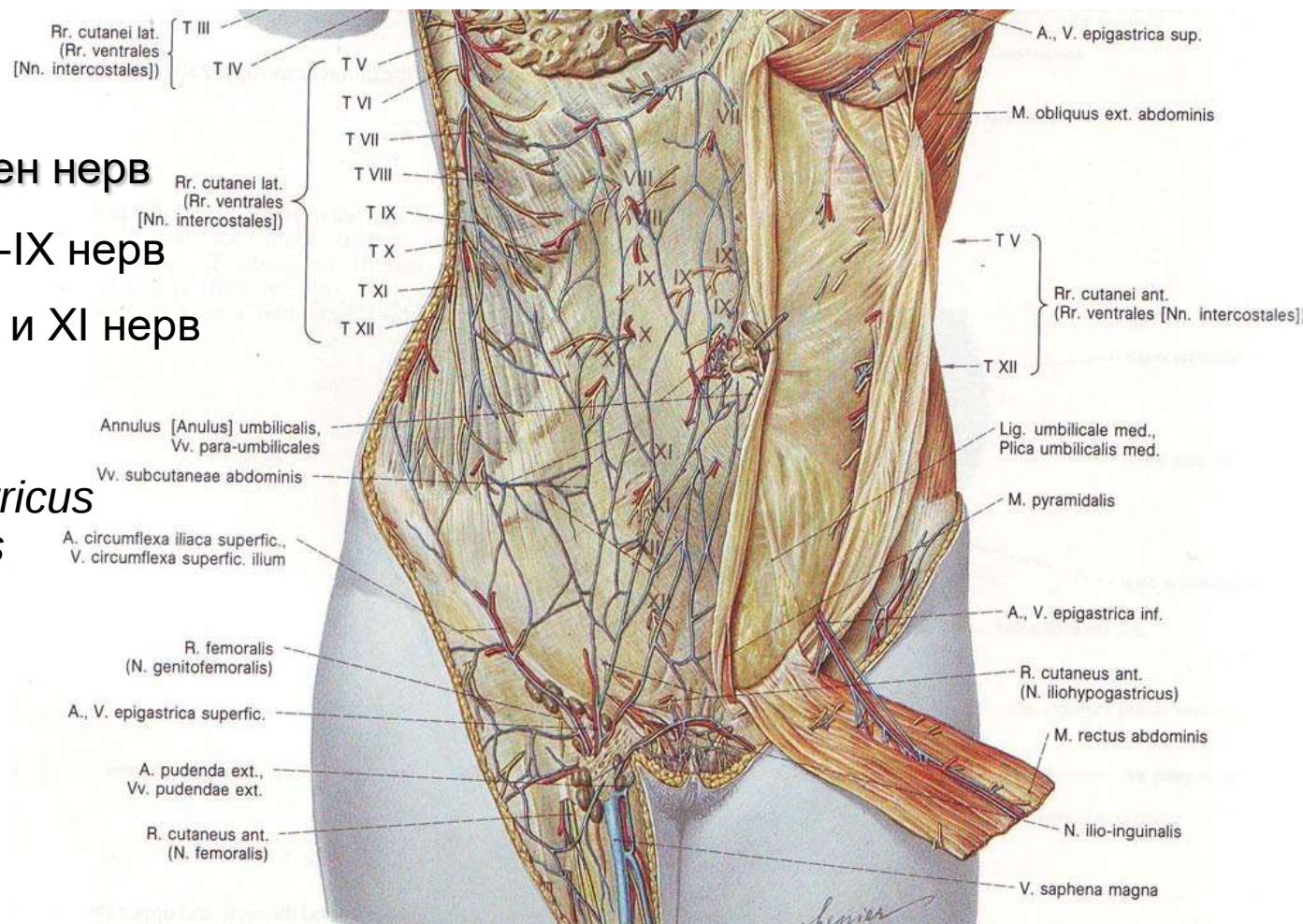
n. ilioinguinalis

■ Анастомози:

✓ кава-кавални

✓ порто-кавални

✓ *caput medusae*



Мускулатура на коремната стена



m. obliquus externus abdominis

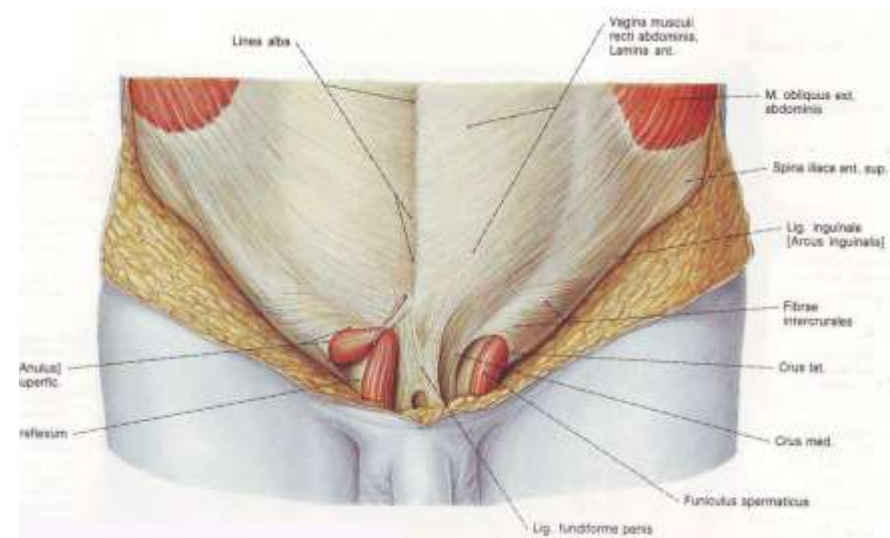
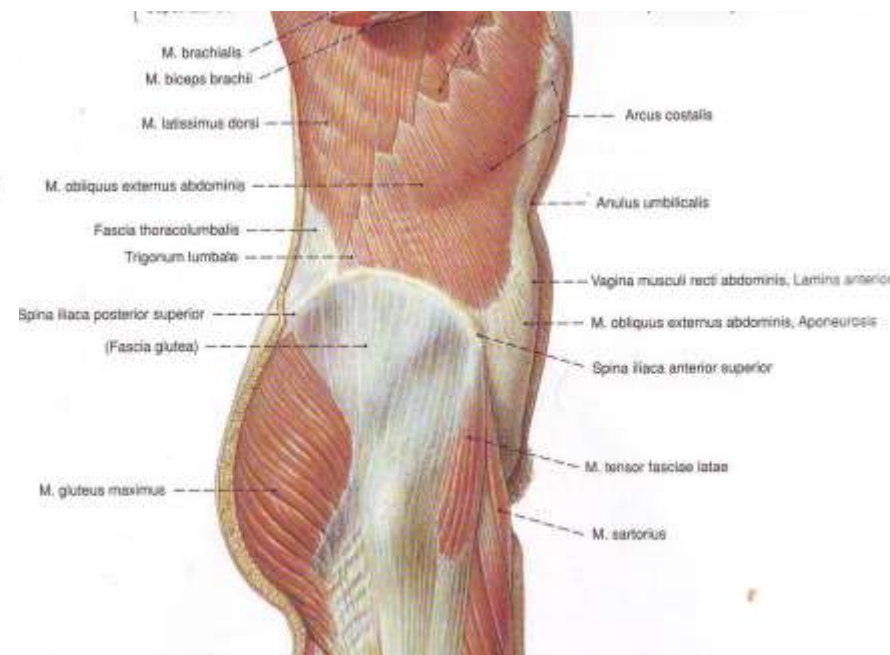
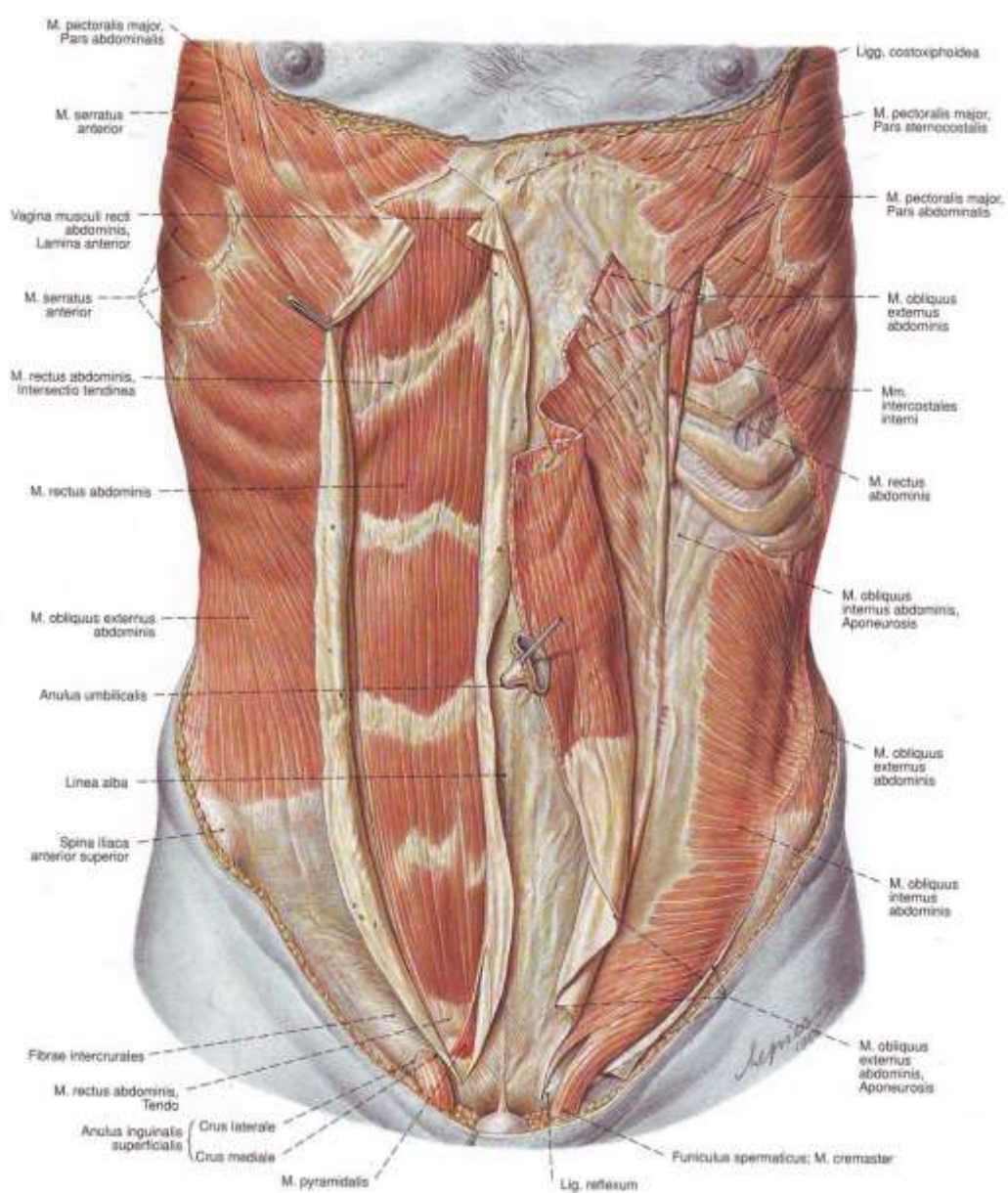
m. obliquus internus abdominis

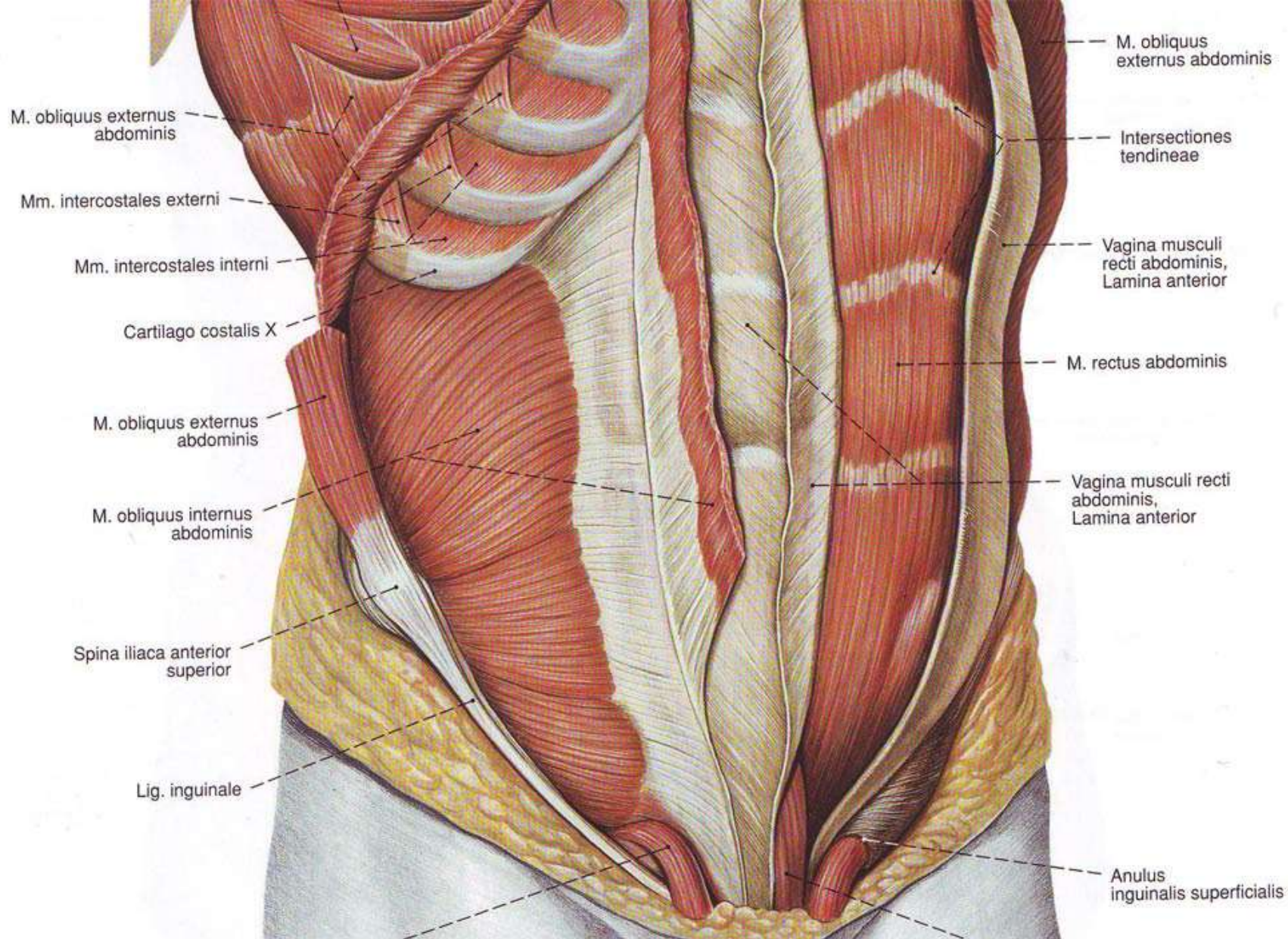
m. transversus abdominis

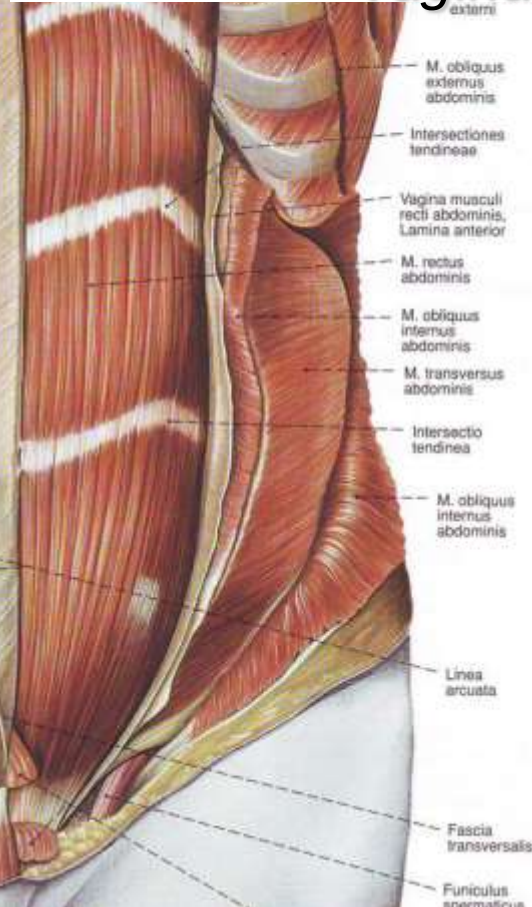
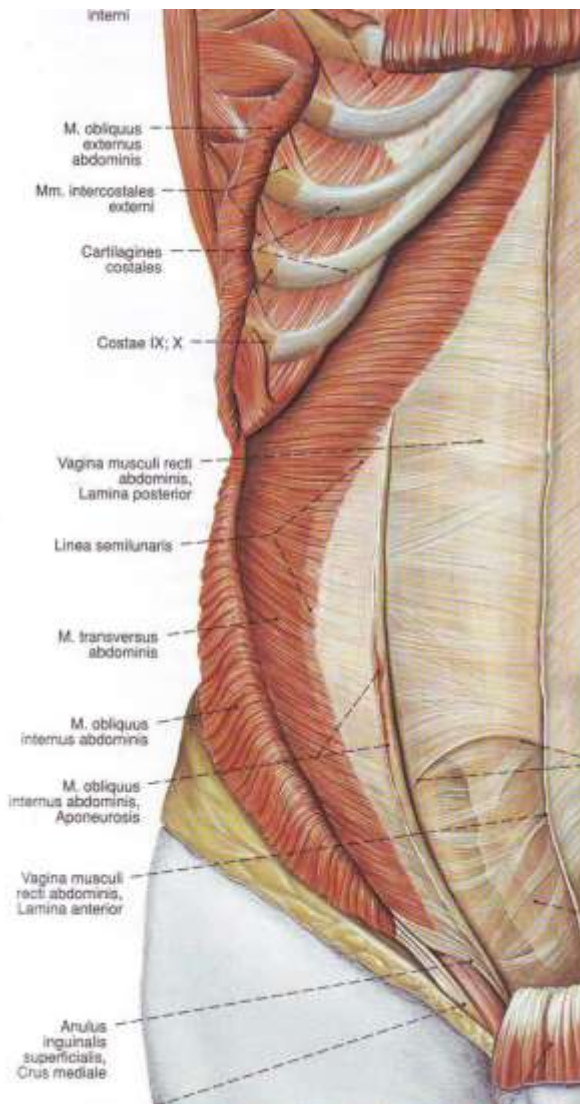
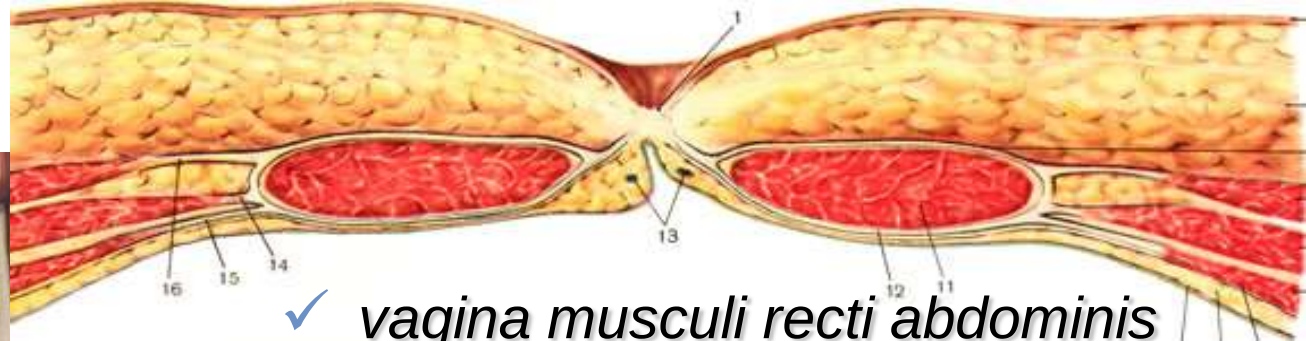
m. rectus abdominalis

m. pyramidalis





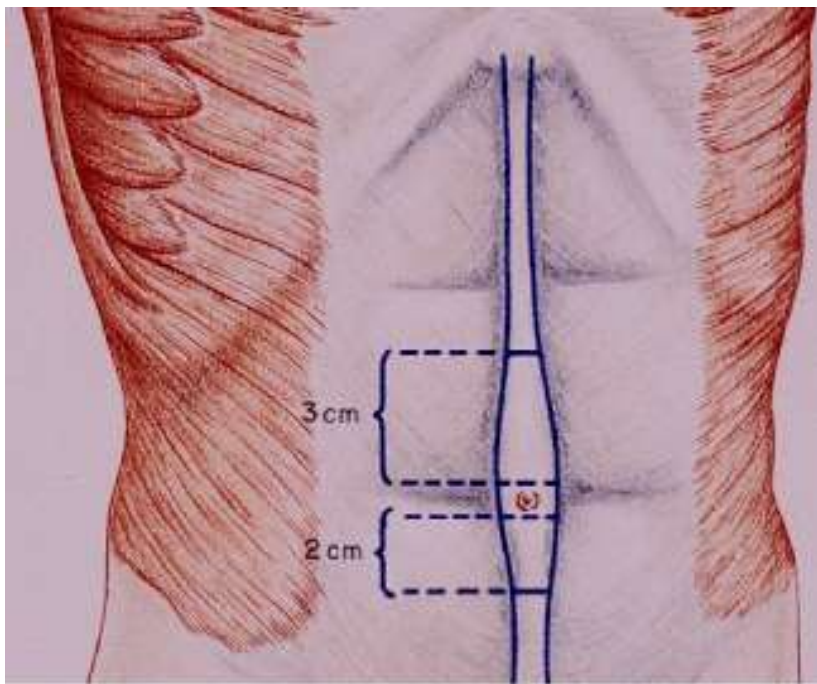




Бяла линия на корема, *linea alba* Пъп, *umbilicus*

■ ширина:

- ✓ *pr. xiphoides* – 5-8 mm
- ✓ над пъпа – 15 mm
- ✓ пъп – 20-25 mm
- ✓ под пъпа – 2-3 mm



■ НИВО: *discus intervertebralis L₃-L₄*

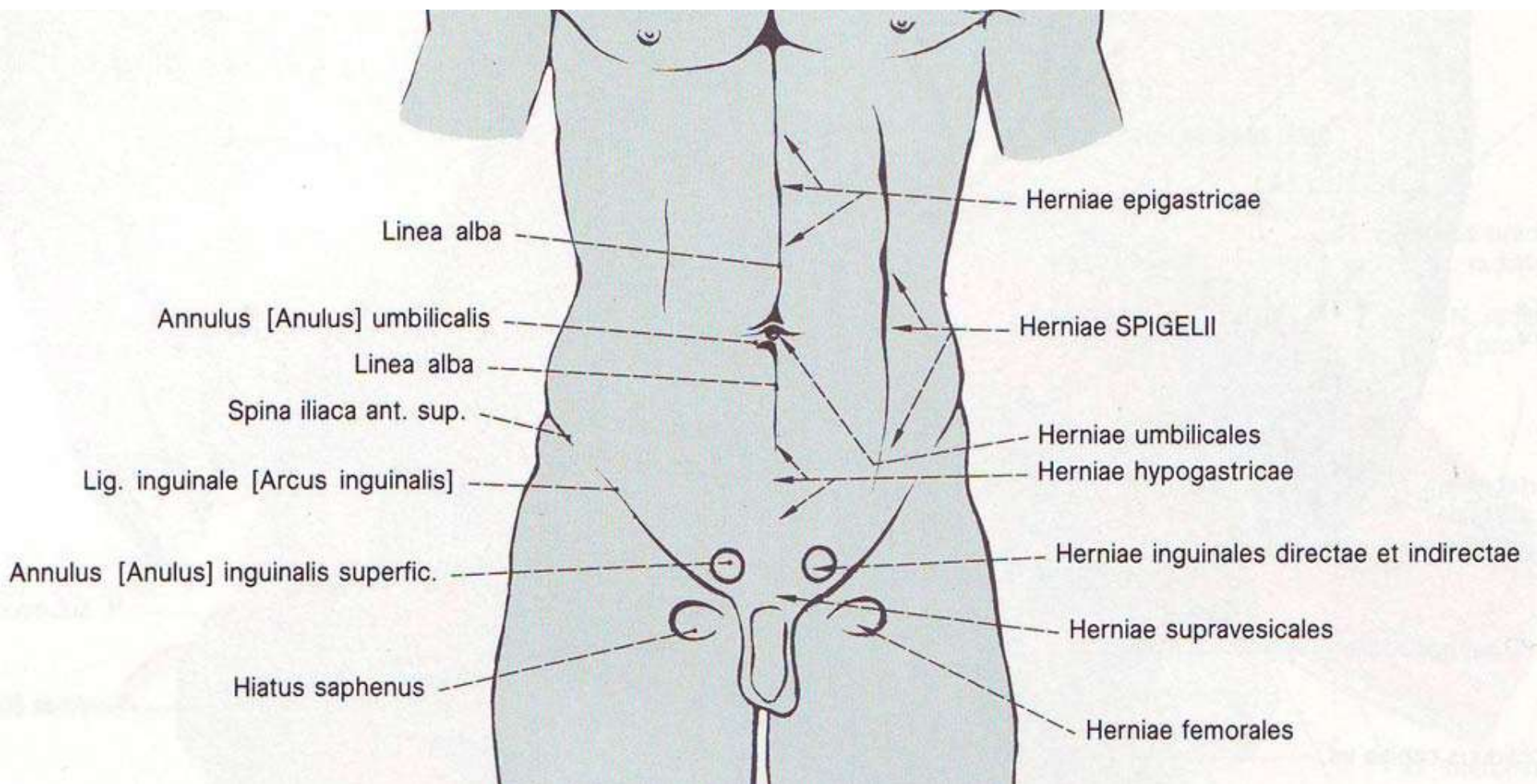


■ СЛОЕВЕ:

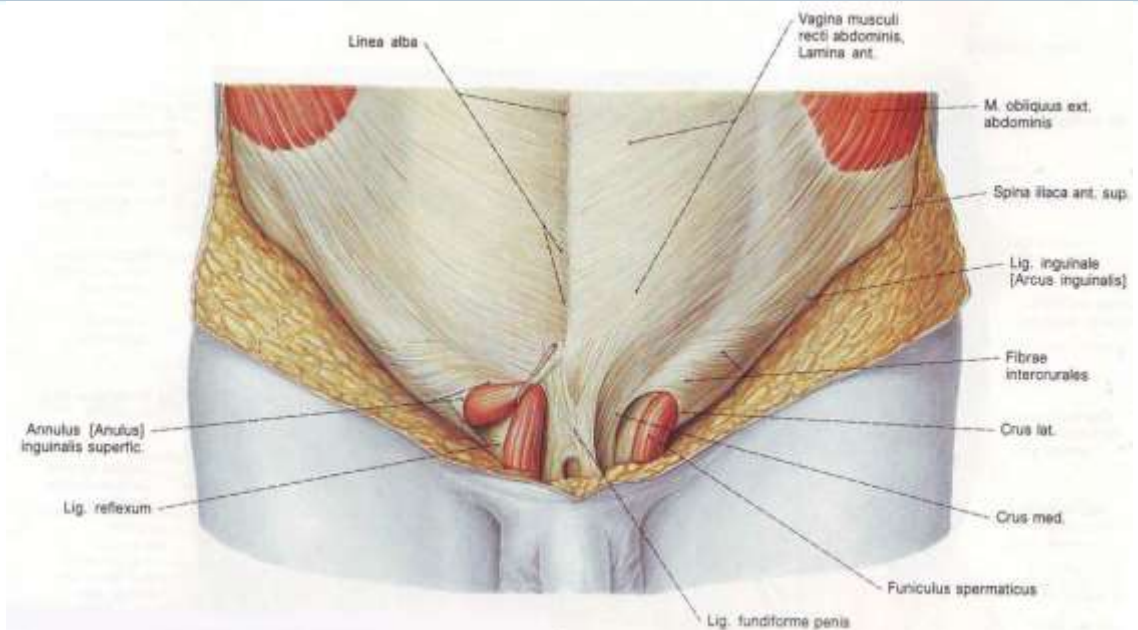
- ✓ кожа
- ✓ ръбцова тъкан
- ✓ пъпна фасция
- ✓ пристенна коремница



Места на образуване на хернии



СЛАБИНЕН КАНАЛ, *Canalis inguinalis*

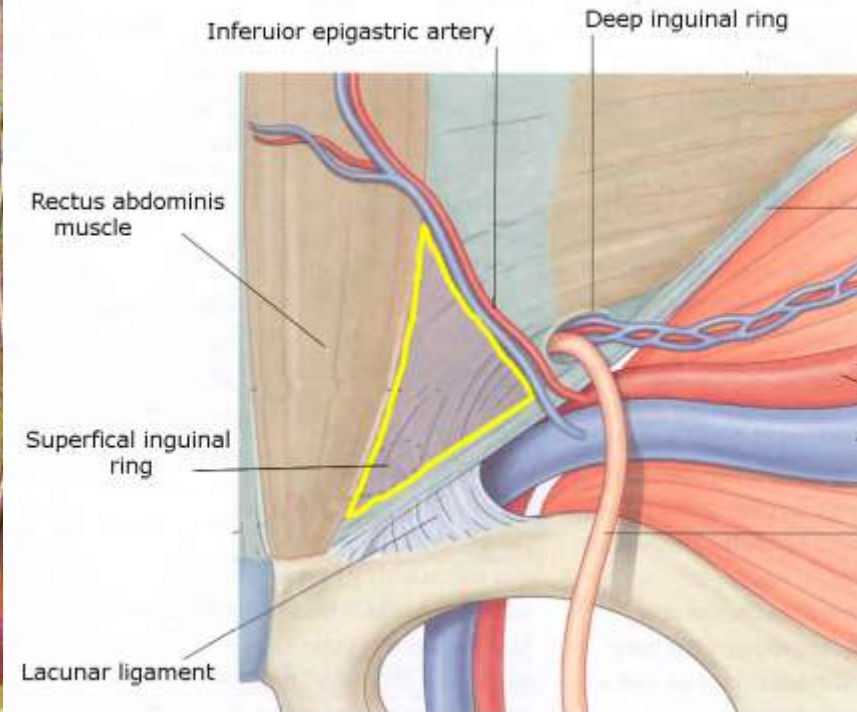
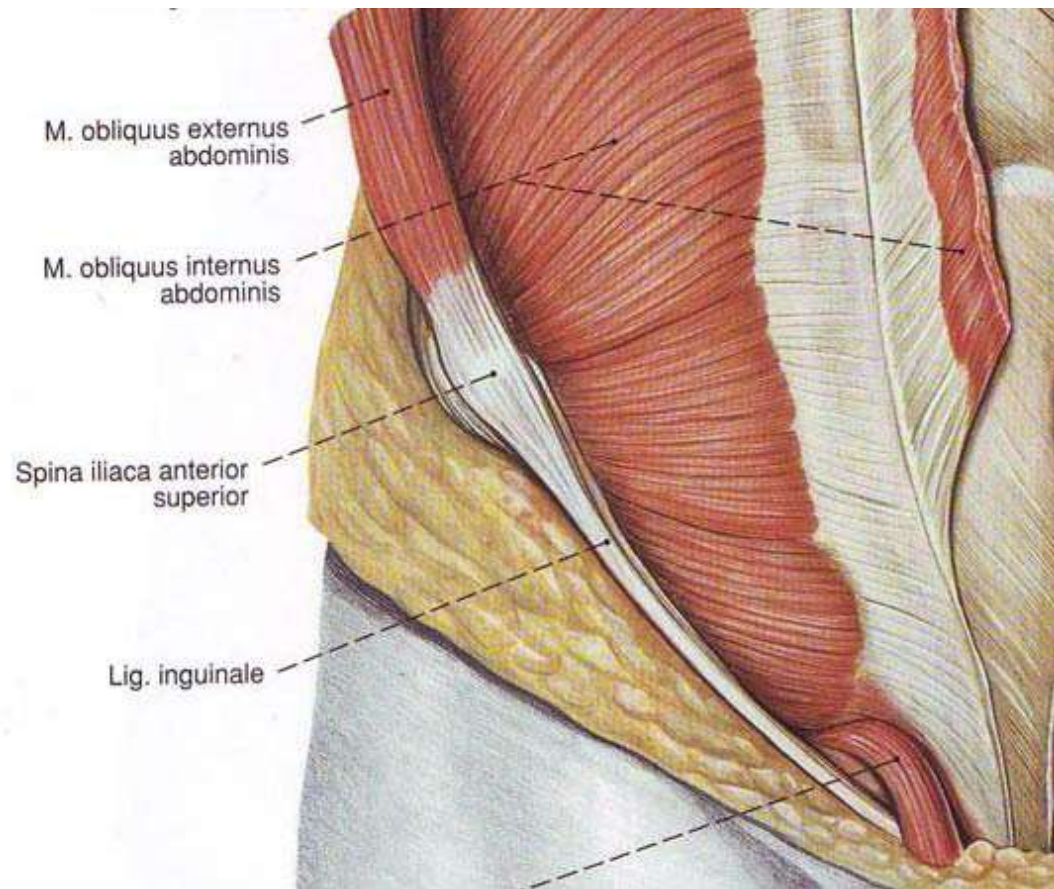


Слабинен канал: разположение

- над *lig. inguinale* (Pouparti)
в *trigonum inguinale* (Hesselbachi)



- дължина: 4-5 cm
- диаметър:
 - ✓ ♂ - ~ 1 cm
 - ✓ ♀ - 0.5 cm



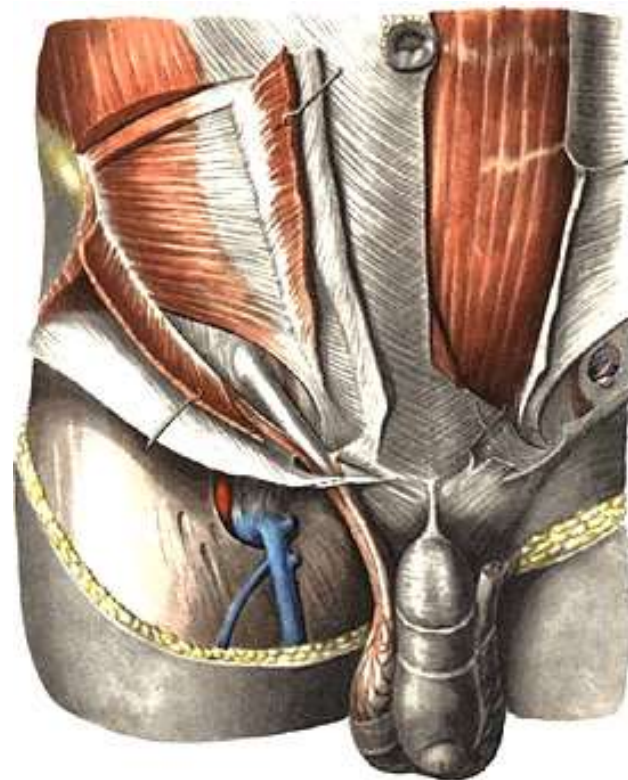
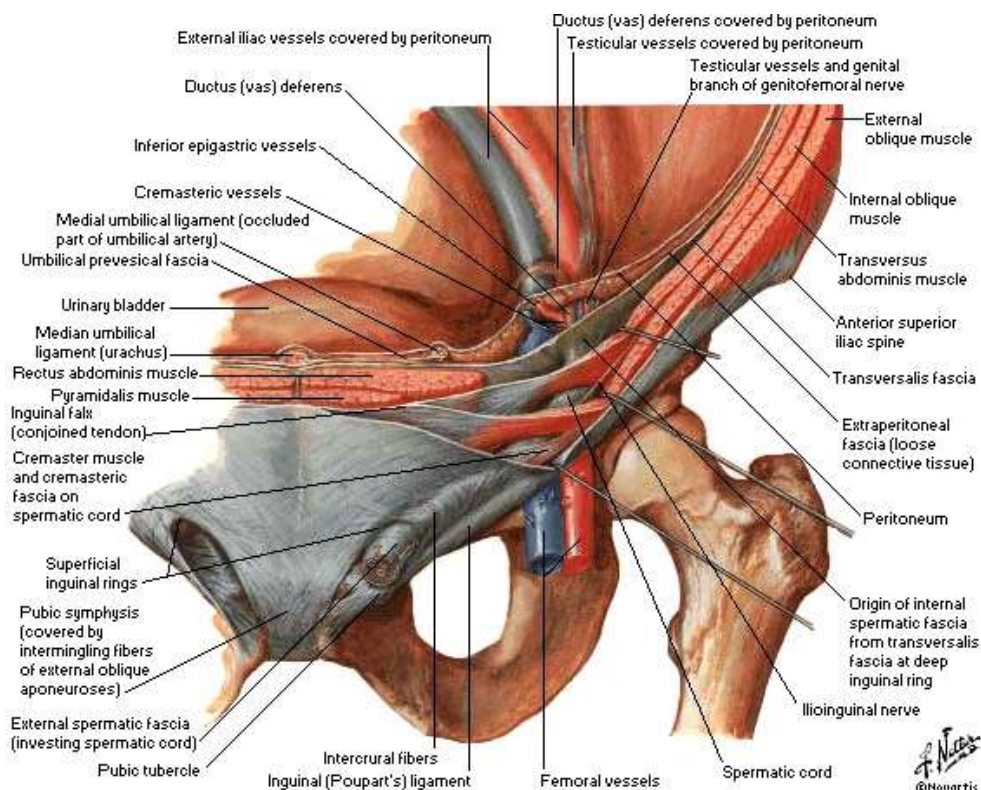
Слабинен канал: отвори

■ *anulus inguinalis superficialis*:

- ✓ медиален край на предна стена
- ✓ форма: овална или триъгълна
- ✓ ширина 1-1,2 cm; височина 2,5 cm

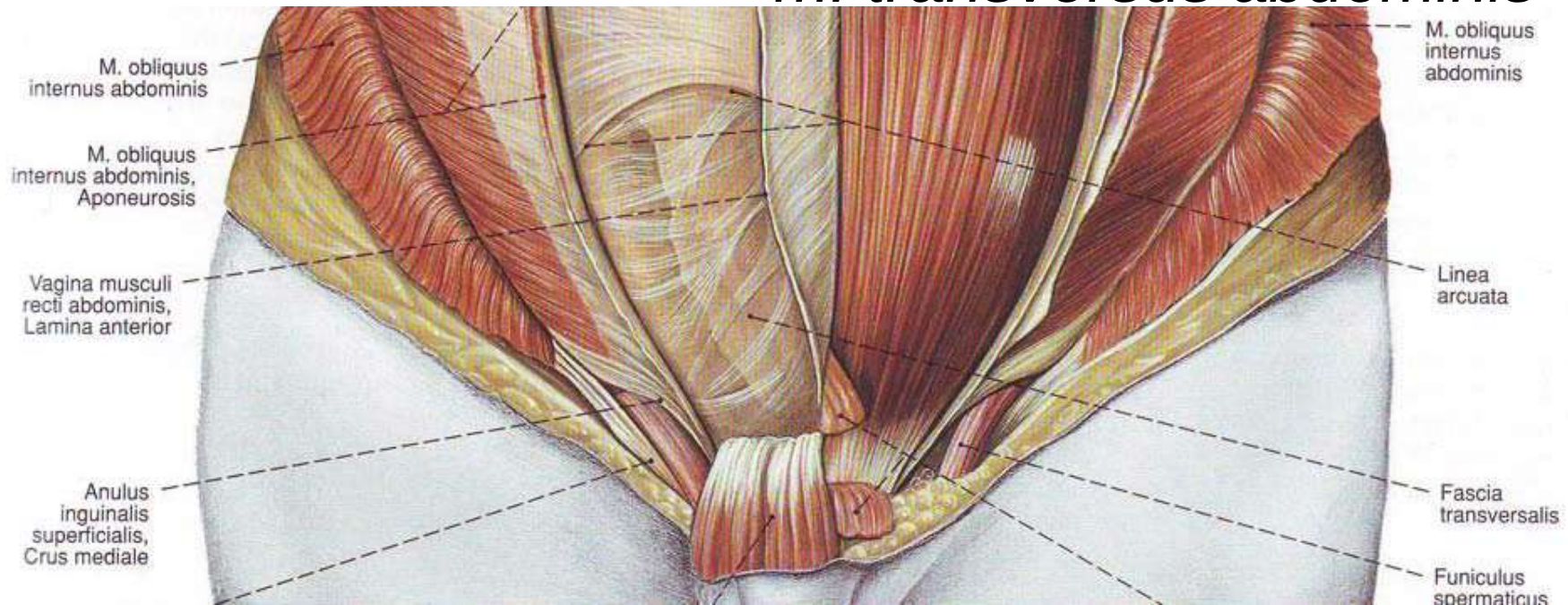
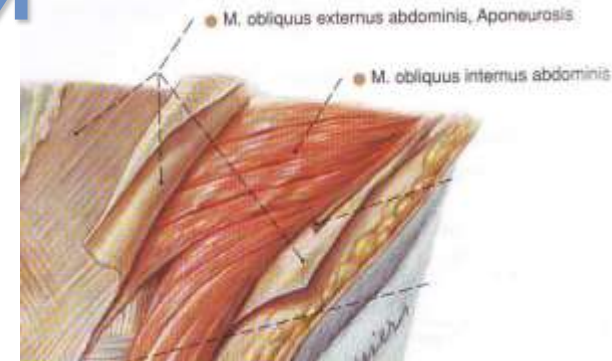
■ *anulus inguinalis profundus*:

- ✓ 5 cm нагоре и латерално
- ✓ форма: вертикална цепка
- ✓ размер: 1-1,5 cm

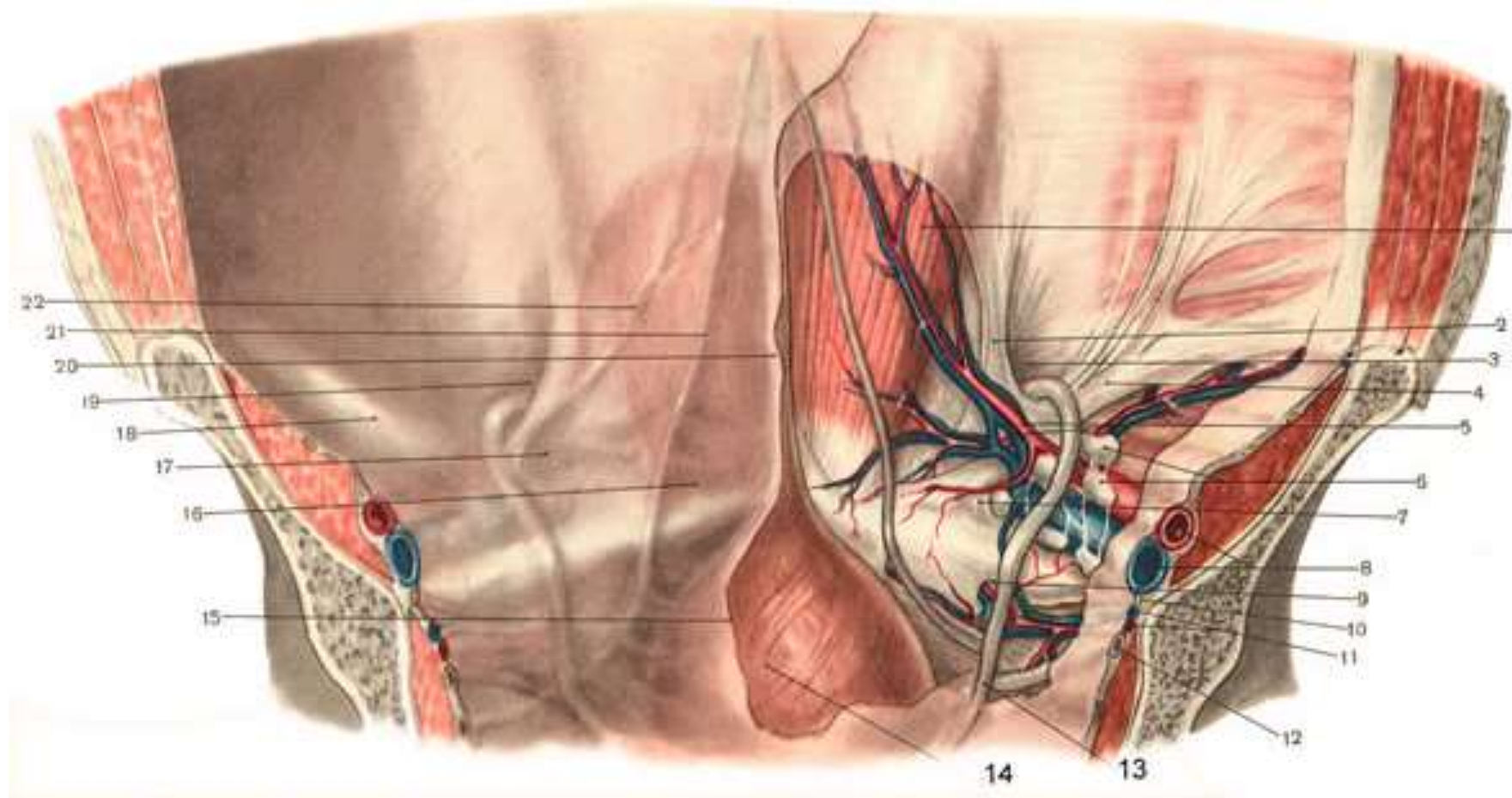


Слабинен канал: стени

- предна: *m. obliquus ext. abdominis*
- долна: *lig. inguinale*
- задна: *fascia transversalis*
- горна: долни ръбове на *m. obliquus int. abdominis*
m. transversus abdominis



Париетален перитонеум



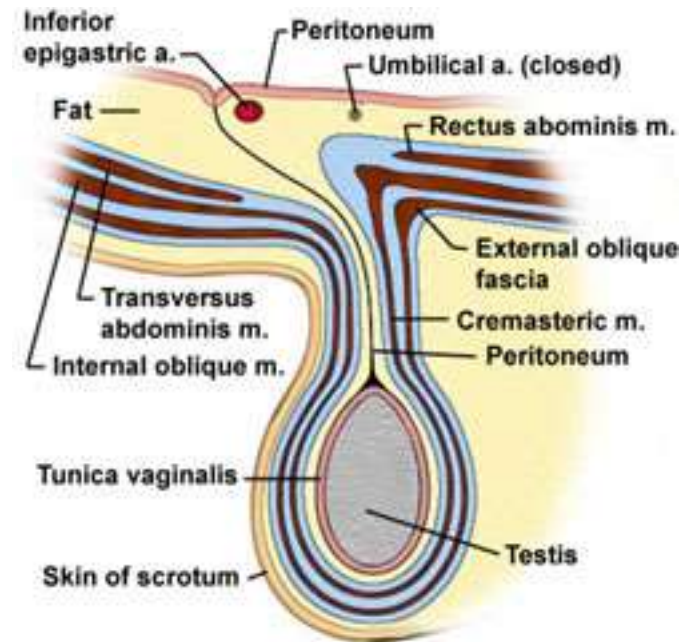
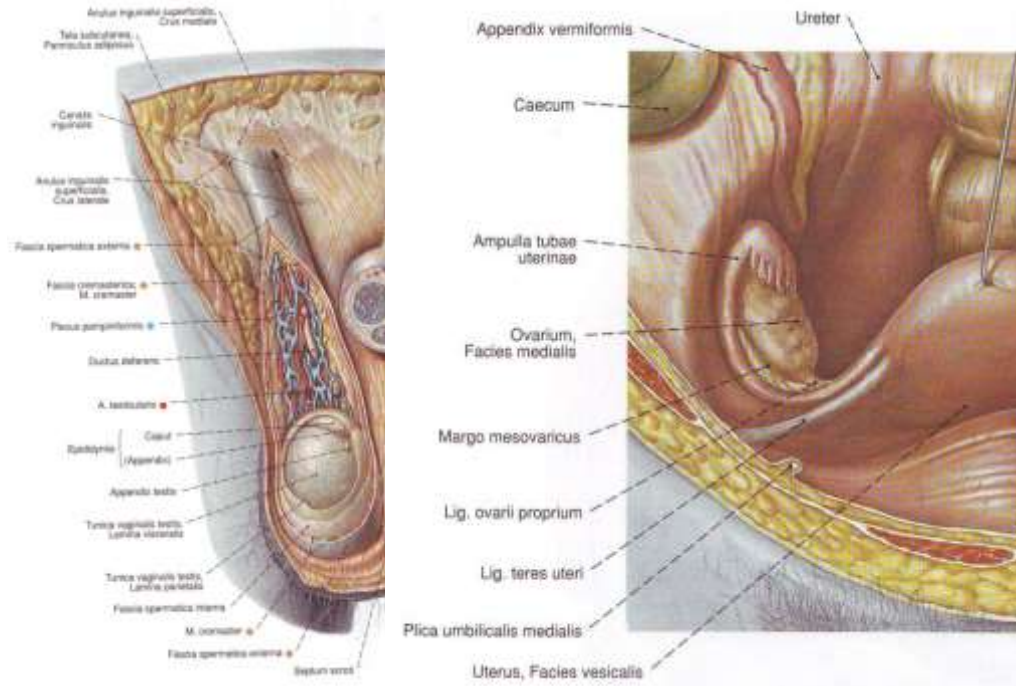
Слабинен канал: съдържание

■ съдържание:

- ✓ ♂ + ♀ - *n. ilioinguinalis*,
r. genitalis n. genitofemoralis
- ✓ ♂ - семенна връв,
- ✓ ♀ - *lig. teres uteri*

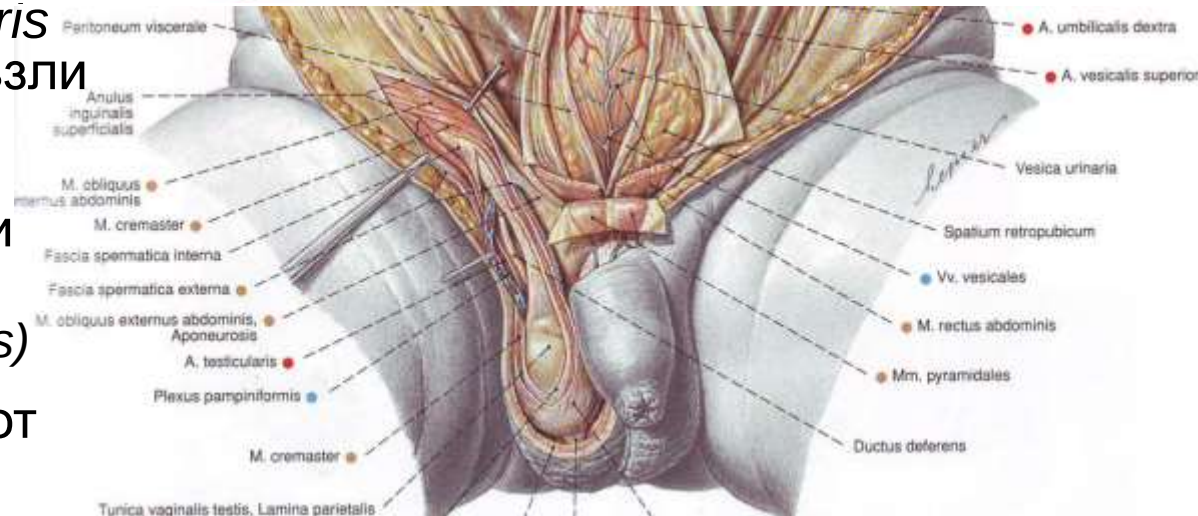
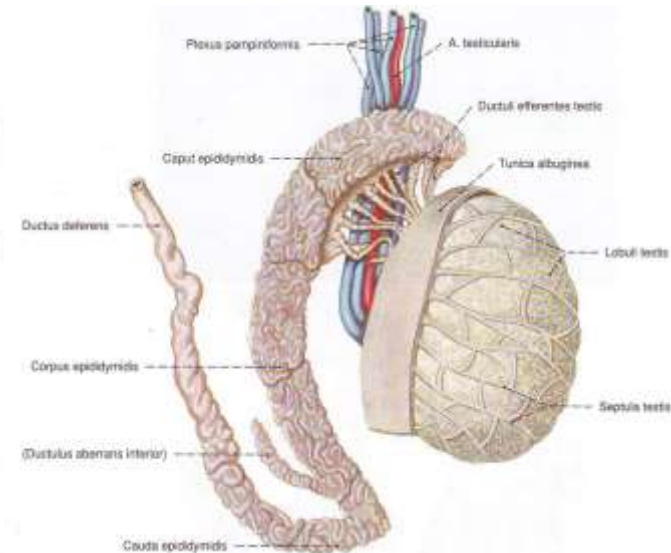
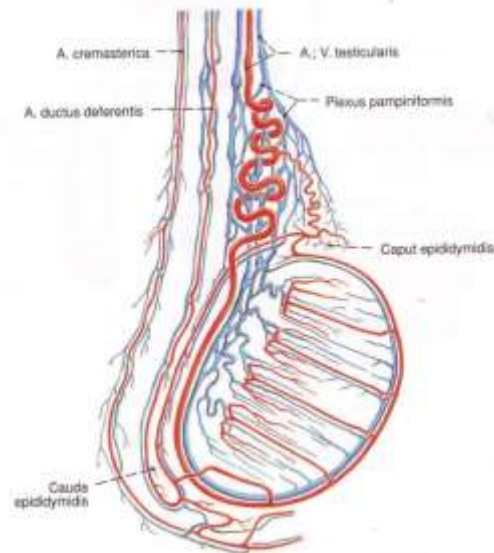
■ обвивки:

- ✓ *fascia spermatica interna*
- ✓ *fascia cremasterica*
- ✓ *m. cremaster*
- ✓ *fascia spermatica externa*



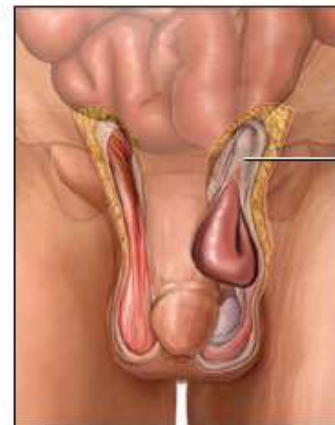
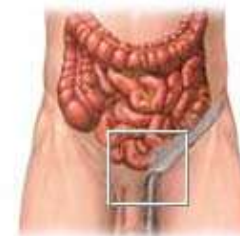
Funiculus spermaticus: съдържание

- *ductus deferens*
- артериални съдове:
 - ✓ *a. ductus deferentis*
 - ✓ *a. cremasterica*
 - ✓ *a. testicularis*
- ВЕНОЗНИ СЪДОВЕ:
 - ✓ *plexus pampiniformis*
- лимфни съдове:
 - ✓ по хода на *v. testicularis*
до поясни лимфни възли
- нервни сплетения:
 - ✓ сетивни и вегетативни
нервни влакна (*plexus testicularis et differentialis*)
- *lig. vaginale* – остатък от
proc. vaginalis peritonei



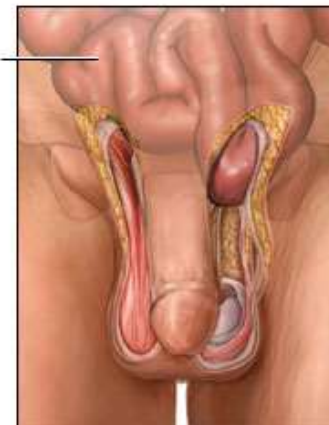
Клинично значение

- ингвинални хернии:
 - ✓ външни (коси, индиректни)
 - ✓ вътрешни (преки, директни)



Indirect inguinal hernia

Small intestine
Inguinal canal

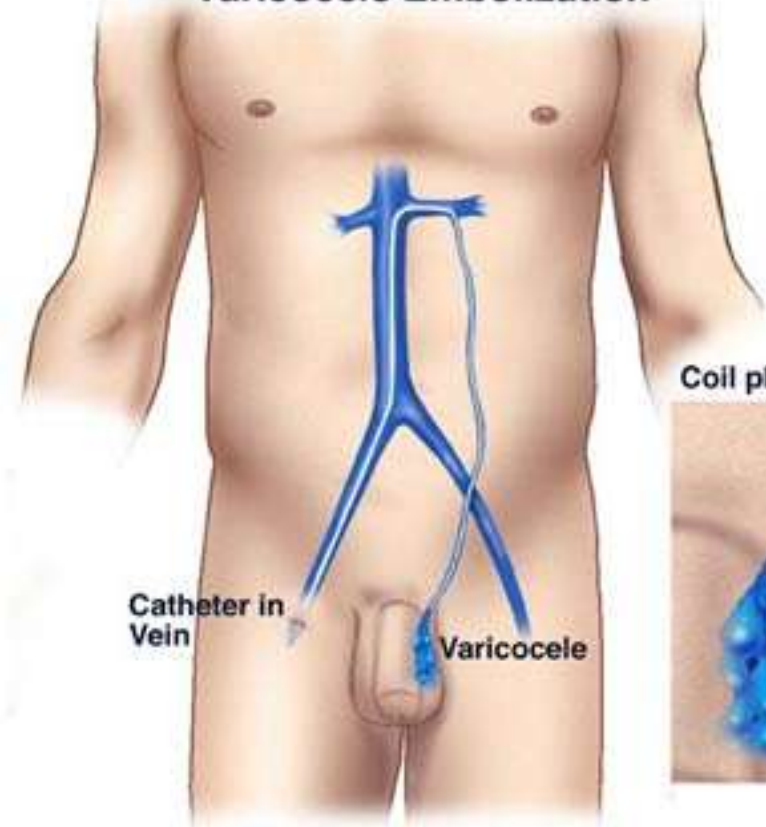


Direct inguinal hernia

Клинично значение

■ *varicocele*

Varicocele Embolization



Coin placed in vein

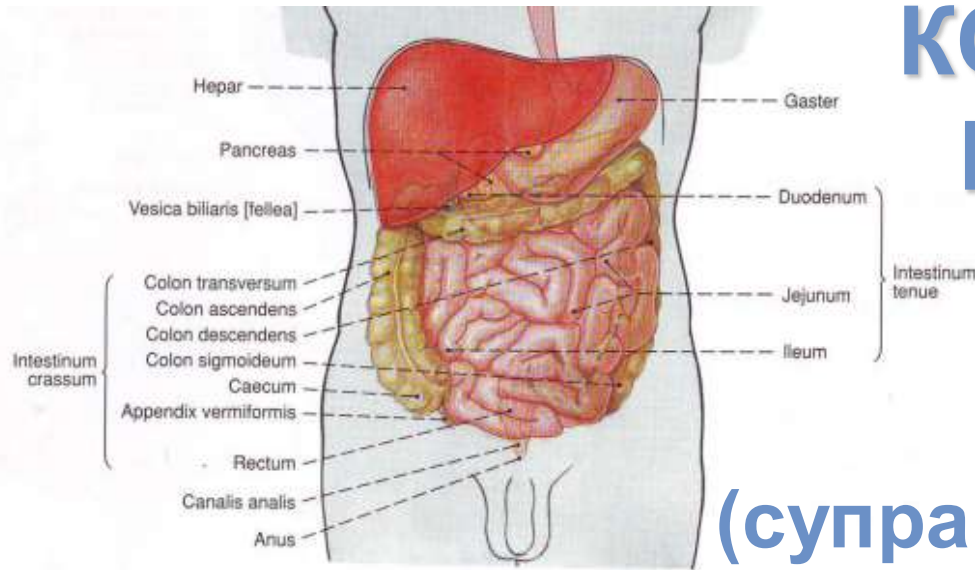


■ *descensus testis*



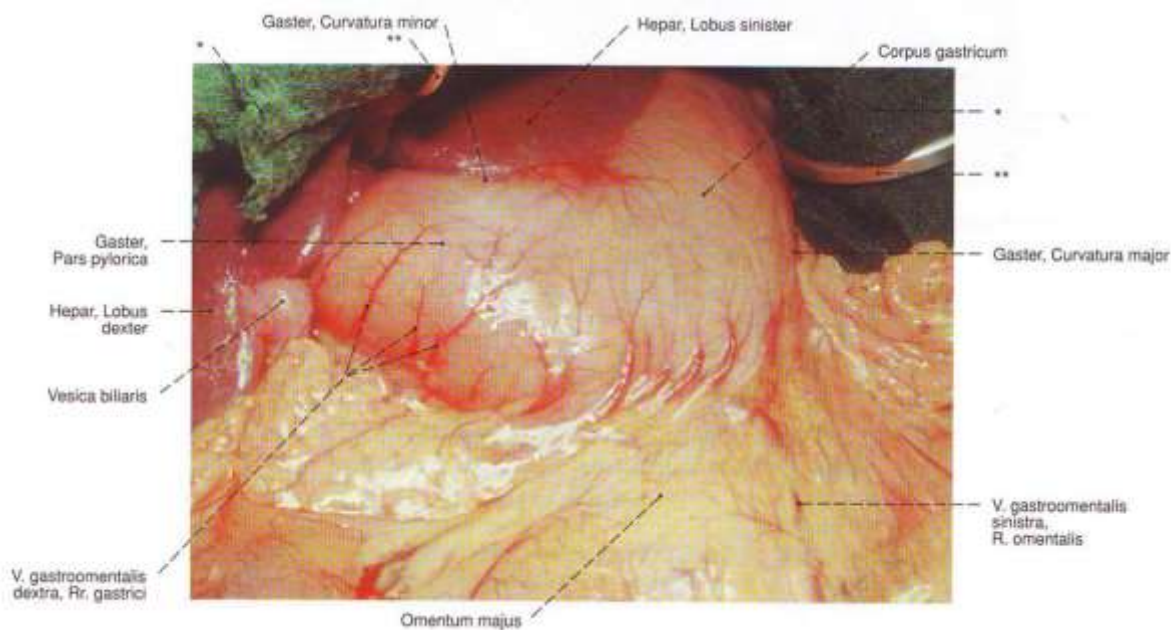
КОРЕМНА КУХИНА: ПЕРИТОНЕАЛНА КУХИНА

Горен отдел (супраколично пространство)



- Коремница, *peritoneum* и Перитонеални образувания
- Скелето- и синтопия на органите и съдово-нервните сплетения





Горен отдел: перитонеални образувания

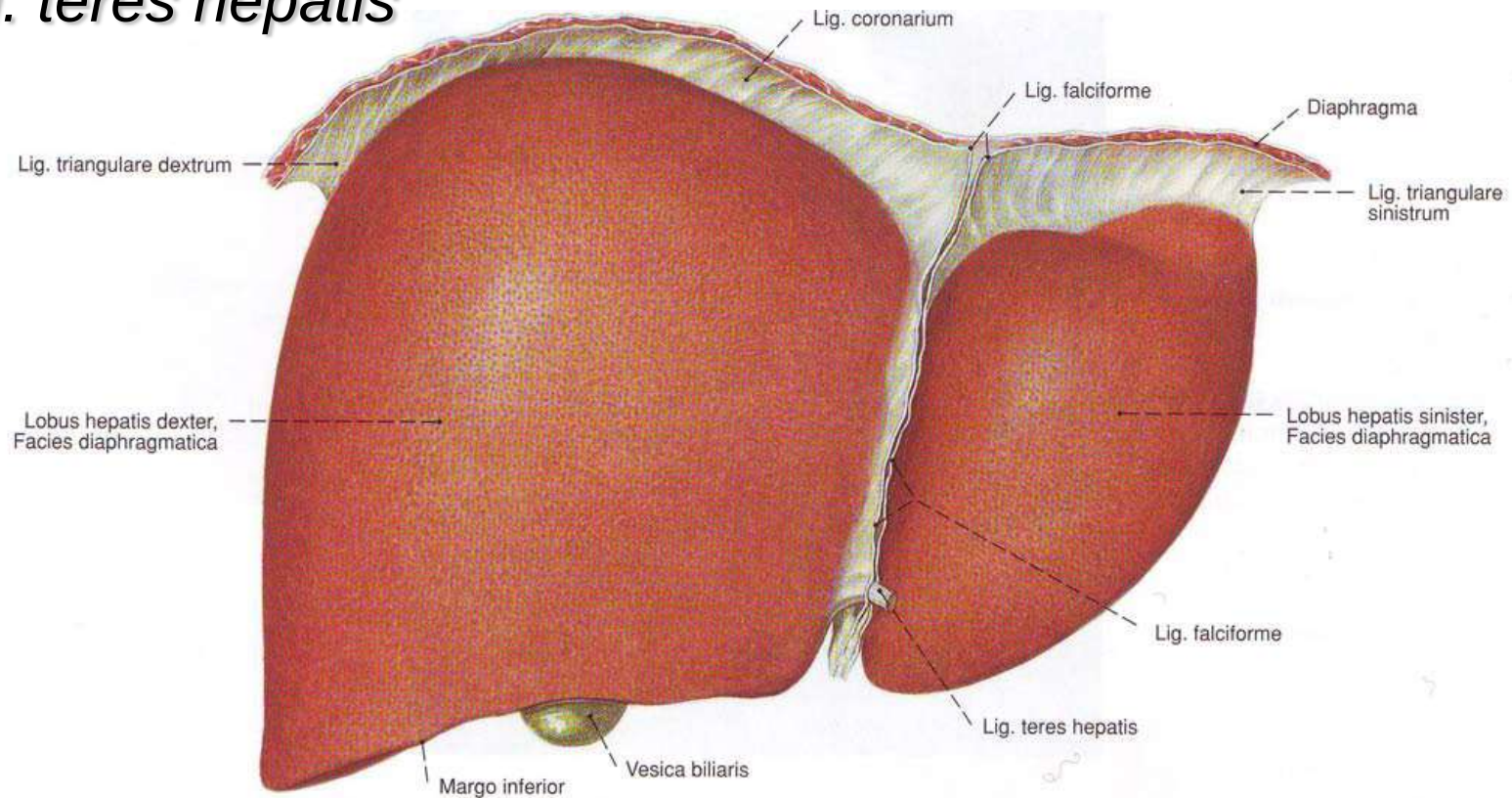


- перитонеални връзки (дубликатури)
- перитонеални пространства (улеи и торбички)



Горен отдел: перитонеални образувания

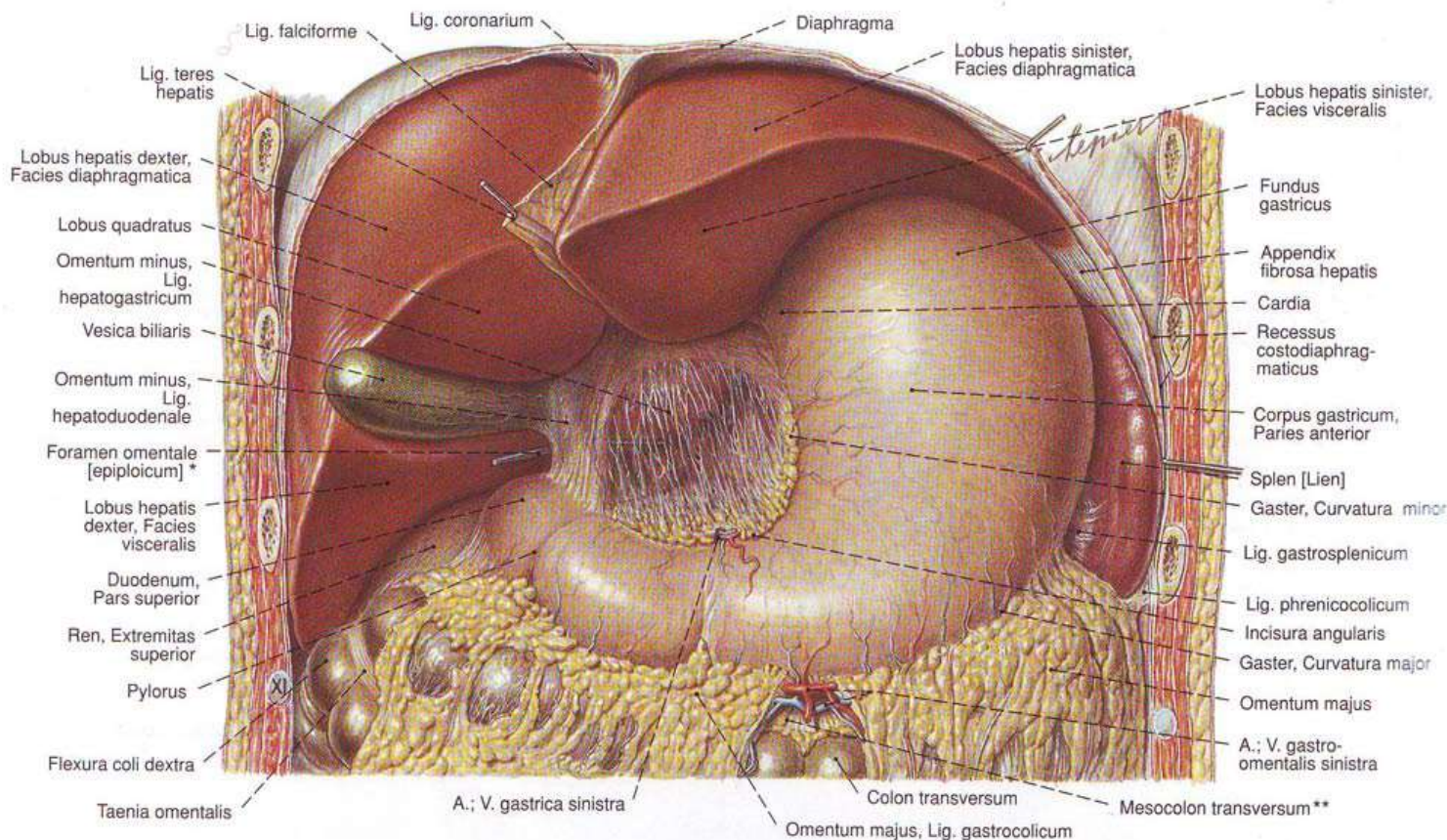
- *lig. coronarium hepatis* $\Rightarrow$ *ligg. triangularia*
- *lig. falciforme hepatis*
- *lig. teres hepatis*



Горен отдел: перитонеални образувания

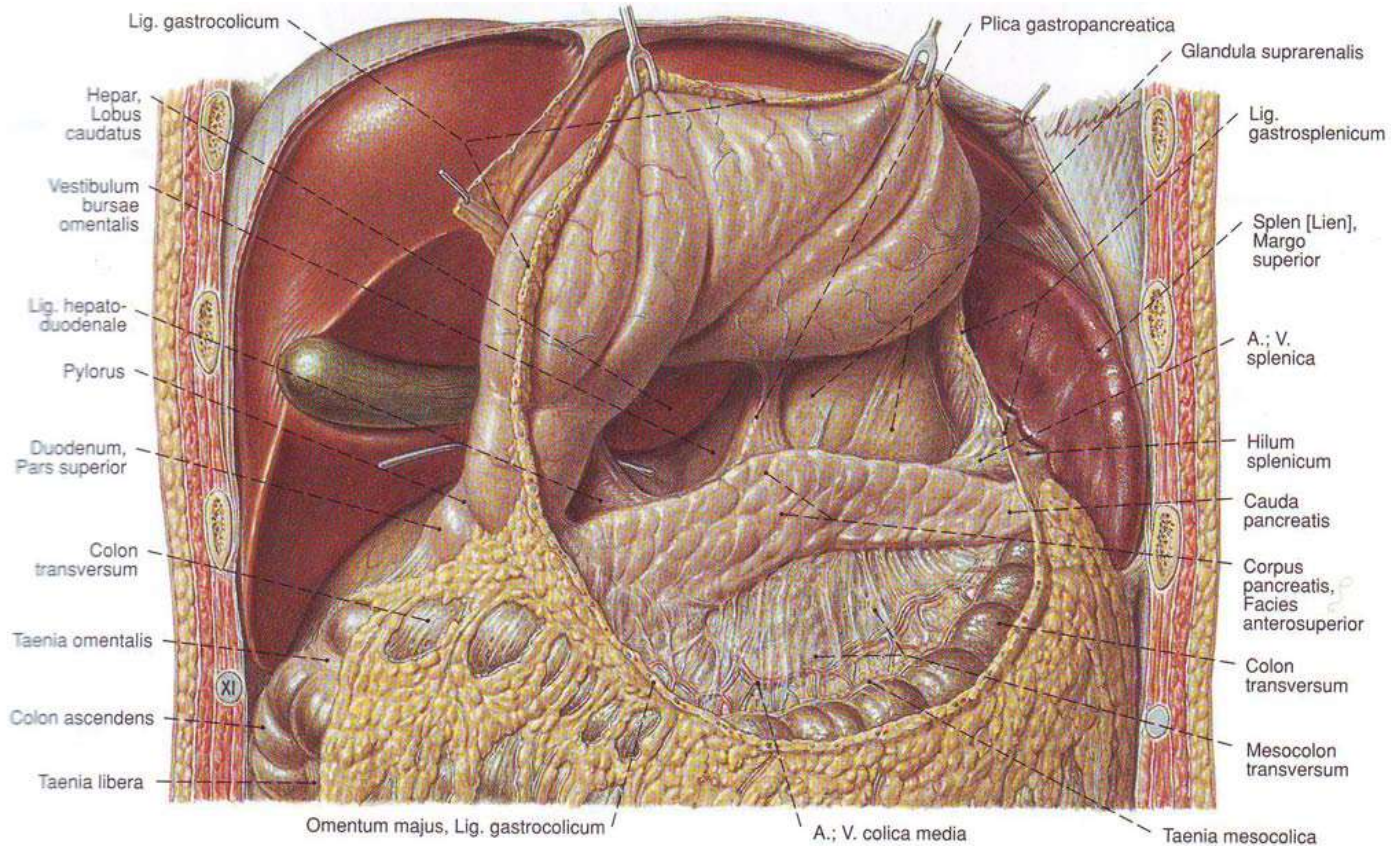
■ *omentum minus*:

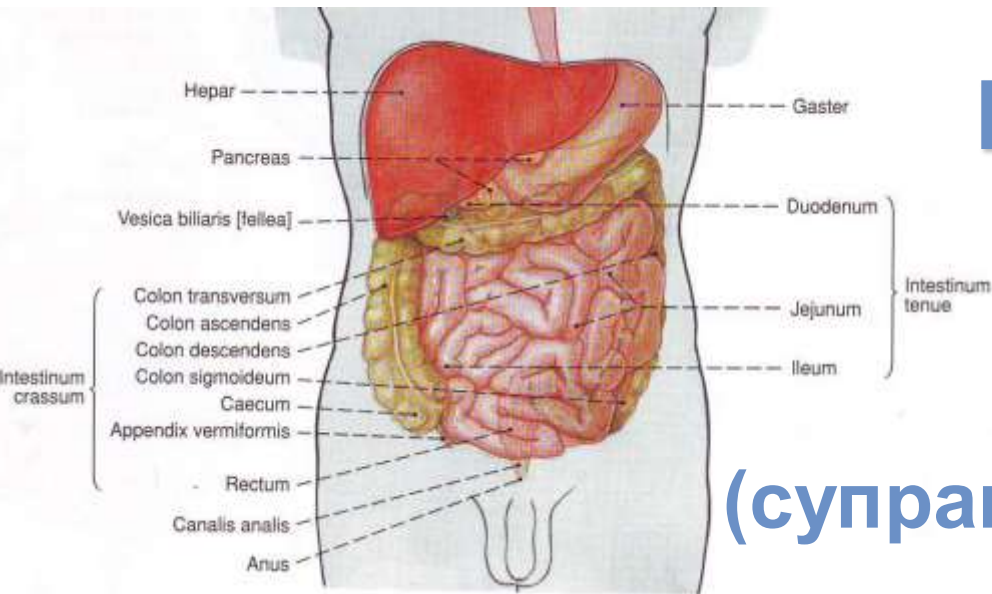
- ✓ *lig. hepatogastricum* – aa. et vv. gastricae, trunci vagales, лимфни съдове и възли
- ✓ *lig. hepatoduodenale* – ductus cysticus et hepaticus comm., a. hepatica propria, v. portae



Горен отдел: перитонеални образувания

- *omentum majus:*
 - ✓ *lig. gastrophrenicum*
 - ✓ *lig. gastrocolicum*
- *pediculus lienis:*
 - ✓ *lig. gastrolienale*
 - ✓ *lig. phrenicolienale*
(*lig. lienorenale*)
- *bursa hepatica*
(*recessus subphrenicus dexter*)
- *bursa pregastrica*
(*recessus subphrenicus sinister*)
- *bursa omentalis*





ПЕРИТОНЕАЛНА КУХИНА:

Горен отдел
(супраколично пространство)



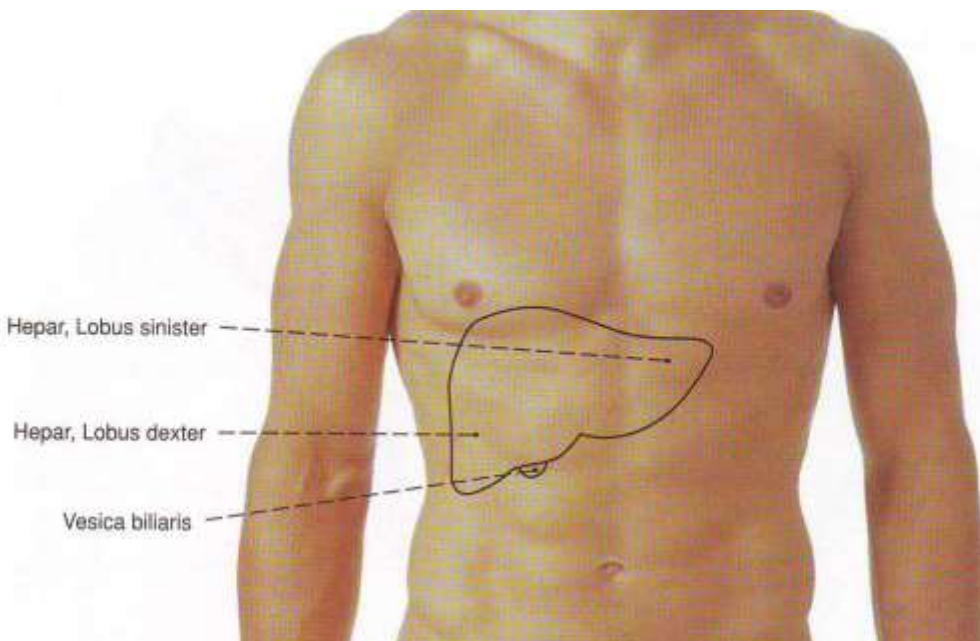
- Перитонеални образувания
- Скелето- и синтопия на органите и съдово-нервните сплетения



Черен дроб и жлъчен мехур

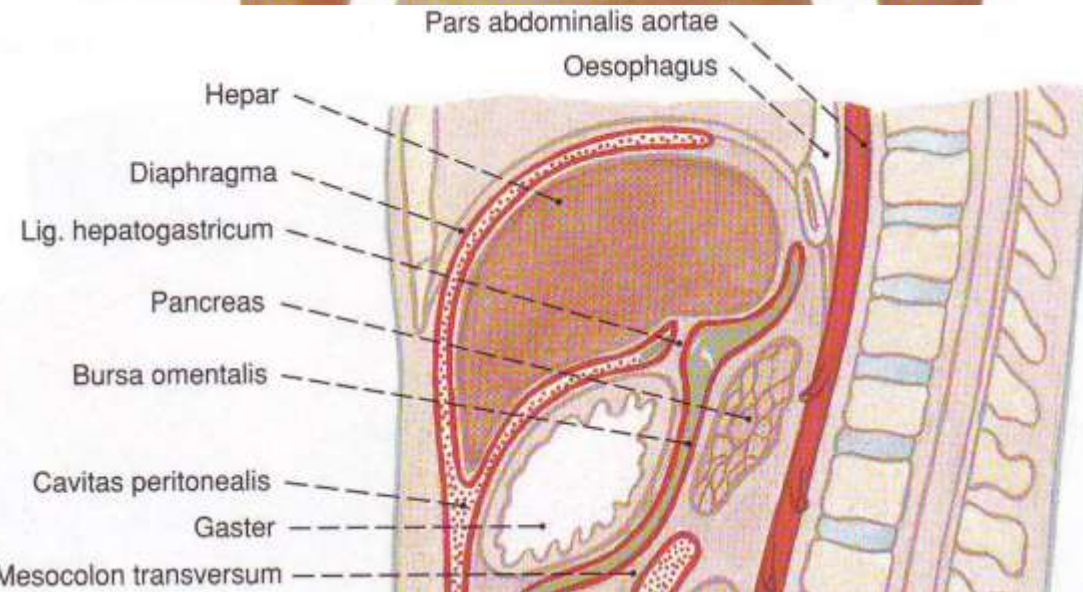
■ скелетотопия:

- ✓ горна граница — десен купол на диафрагмата
- ✓ долна граница — преден ръб



■ СИНТОПИЯ:

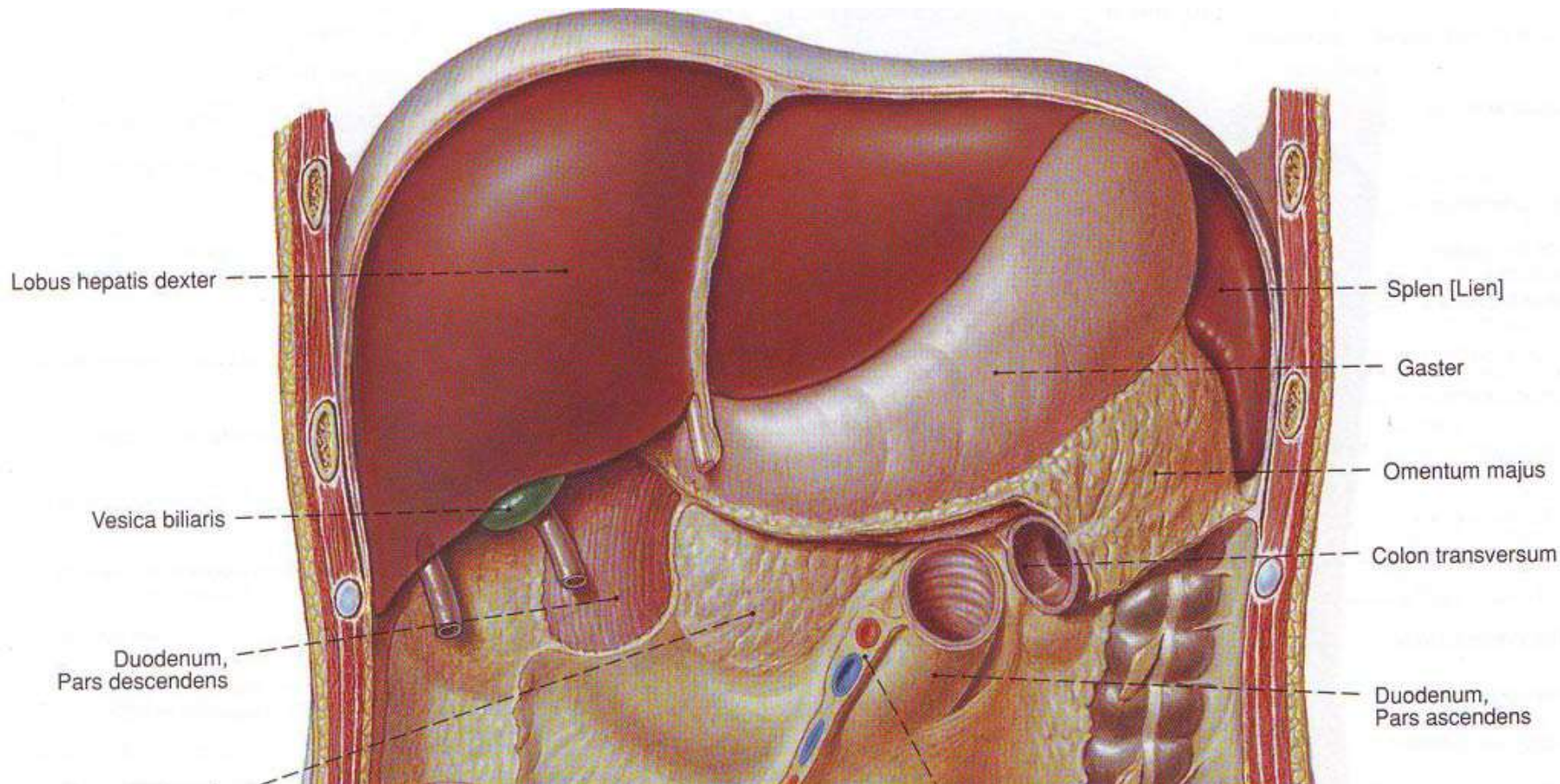
- ✓ интраперитонеално
- ✓ мезоперитонеално (*area nuda, pars affixa*)



Клинично значение



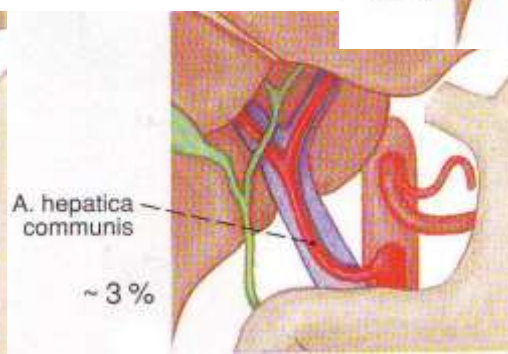
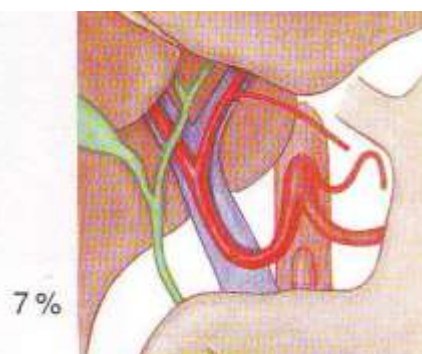
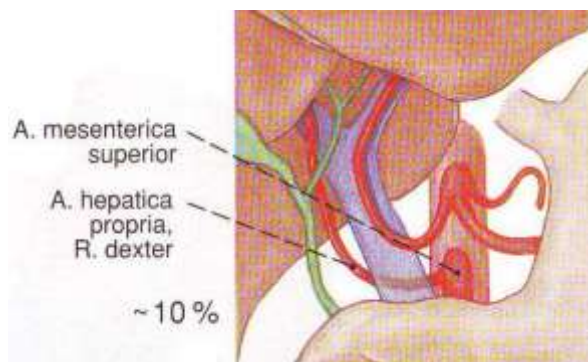
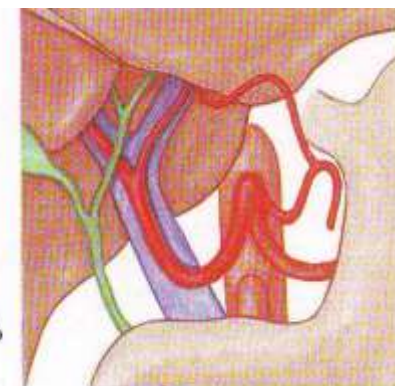
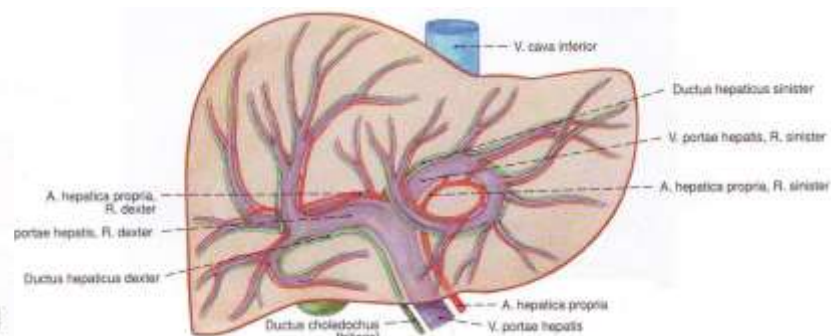
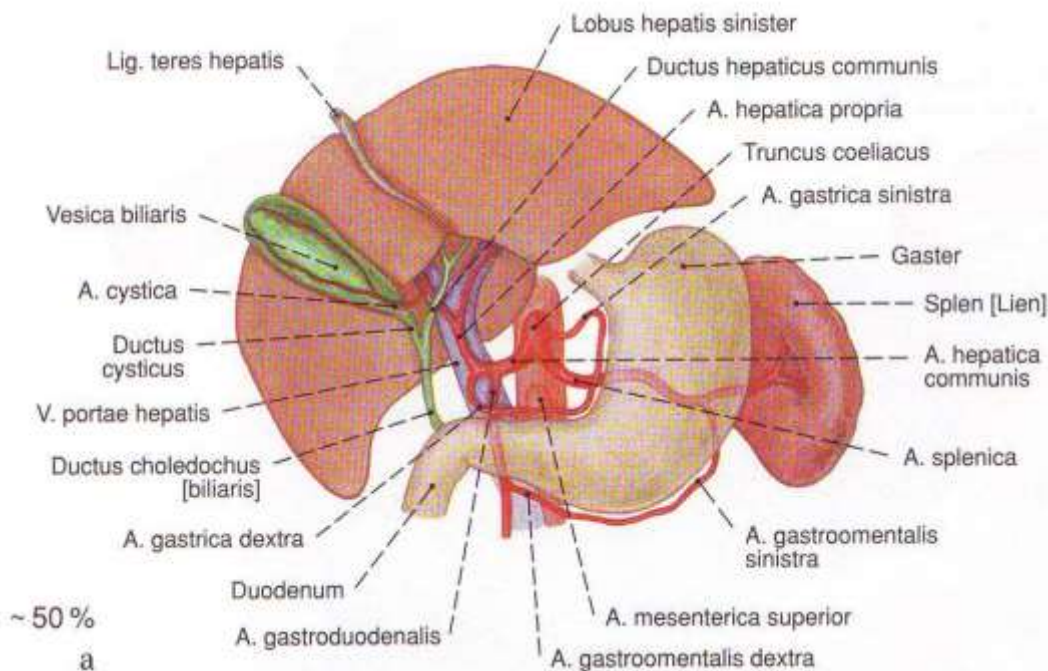
Черен дроб и жлъчен мехур



- горно (чернодробно) поле
- *fundus vesicae felleae* – IX ребро
- долно (стомашно) поле



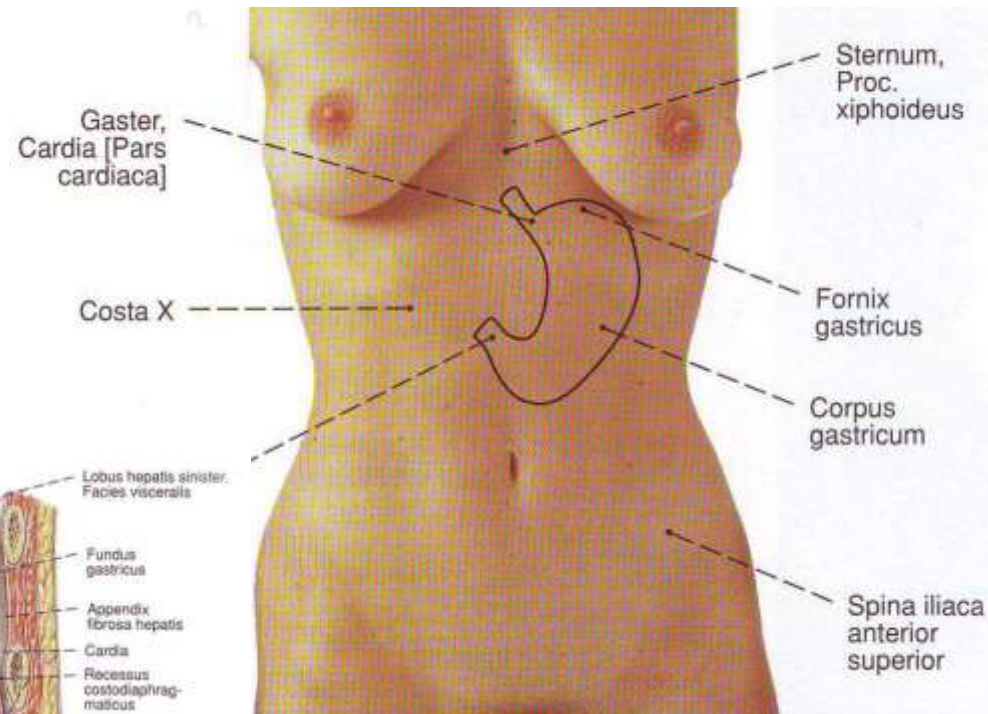
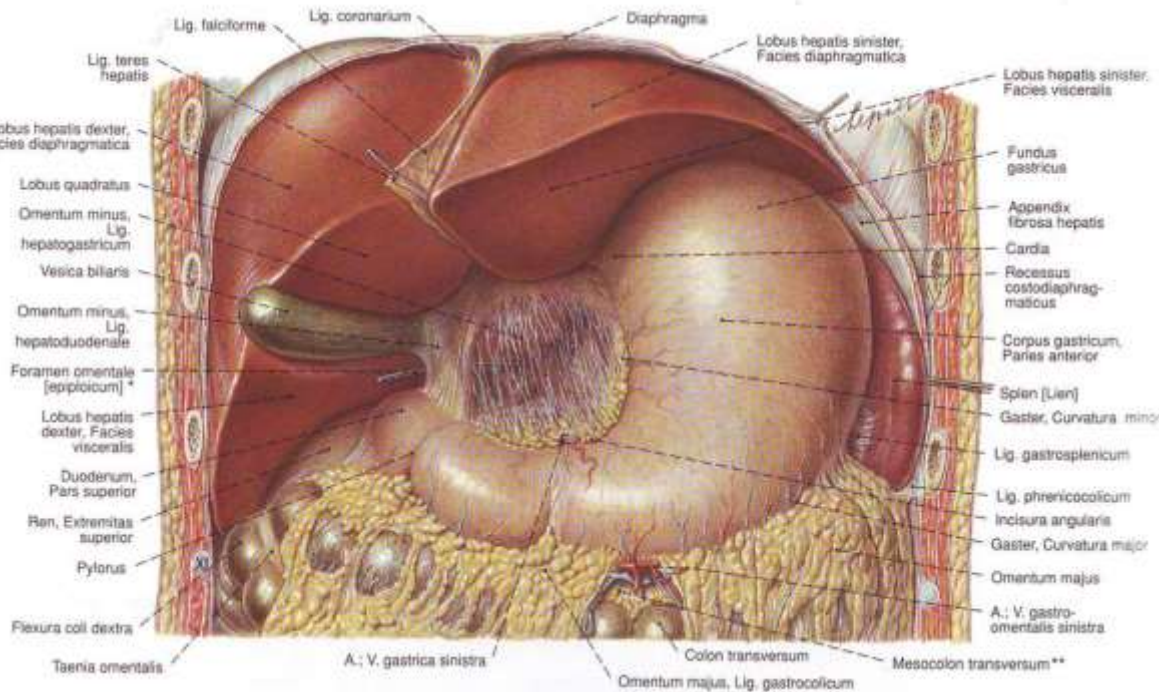
Черен дроб и жлъчен мехур: съдове



Стомах, *ventriculus*

■ скелетотопия:

- ✓ кардия – Th₁₀
(хрущяла на VII ляво ребро)
- ✓ пилор – L₁



- ## ■ СИНТОПИЯ:
- интраперитонеално
- ✓ стомашна камера
 - ✓ стомашно поле
(пространство на *Traube*)



Стомах: рентгенова анатомия



■ *Saccus digestorius:*

- ✓ *fornix gastricus*
- ✓ *corpus gastricum*
- ✓ *sinus ventriculi*

■ *Canalis egestorius:*

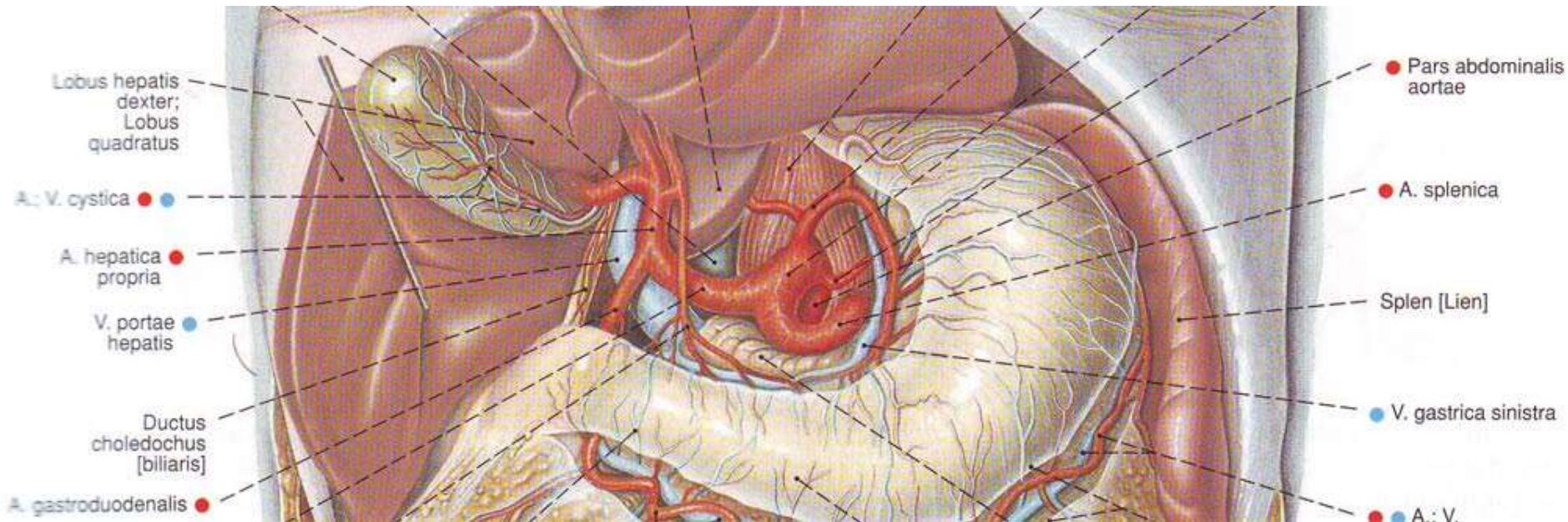
- ✓ *pars pylorica*
- ✓ *pylorus*

- 1 = Oesophagus mit Kontrastbrei.
Am Übergang (1a) in den Fundus gastricus sind die Rinnen zwischen den Falten als dunkle Streifen sichtbar.
- 2 = Fundus gastricus mit Luftblase
- 3 = Corpus gastricum
- 3a = Curvatura minor
- 3b = Curvatura major.
In der Begrenzung der letzteren werden Aussparungen entsprechend dem Relief der Schleimhautfalten sichtbar.
- 4 = peristaltische Einschnürung an der Incisura angularis
- 5 = Pars pylorica vor der Weitergabe einer Portion Mageninhalts
- 6 = Ampulla duodeni
- 7 = Pars descendens duodeni mit Plicae circulares
- 8 = Jejunum
- 9 = linke Zwerchfellkuppel
- 10 = Flexura coli sinistra (luftgefüllt)



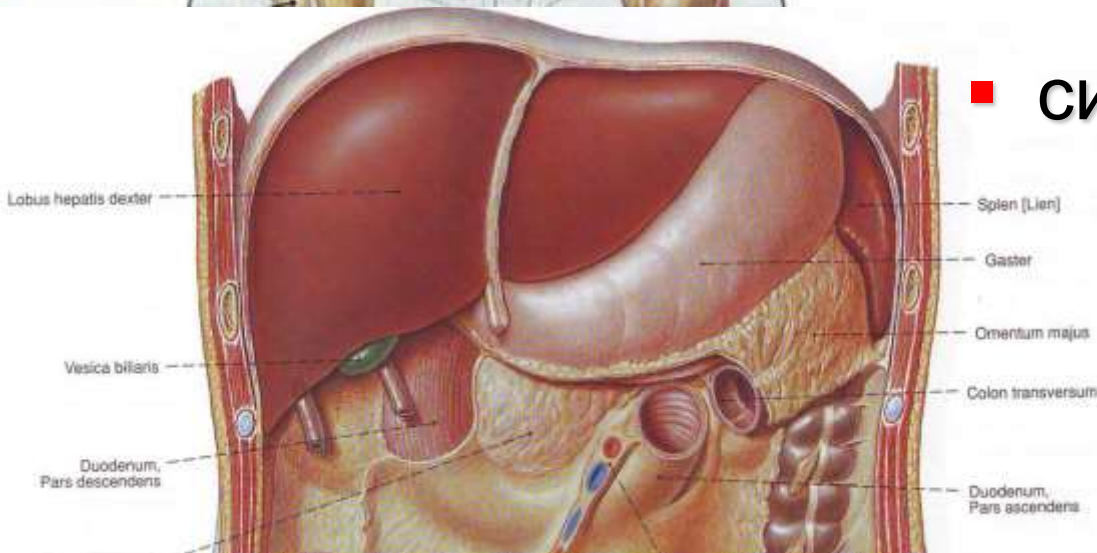
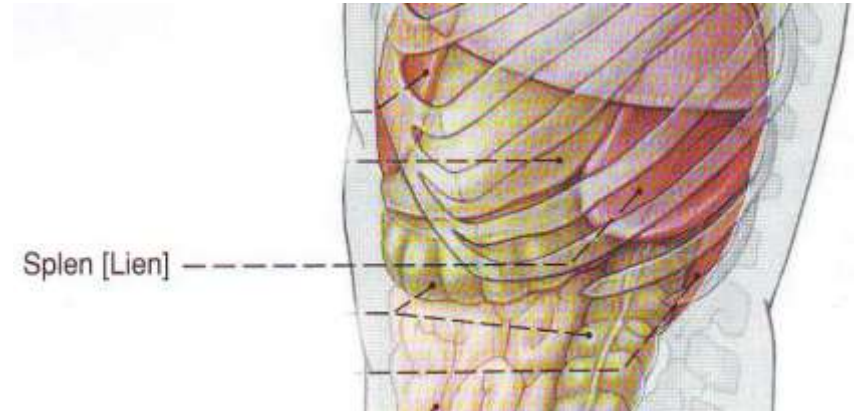
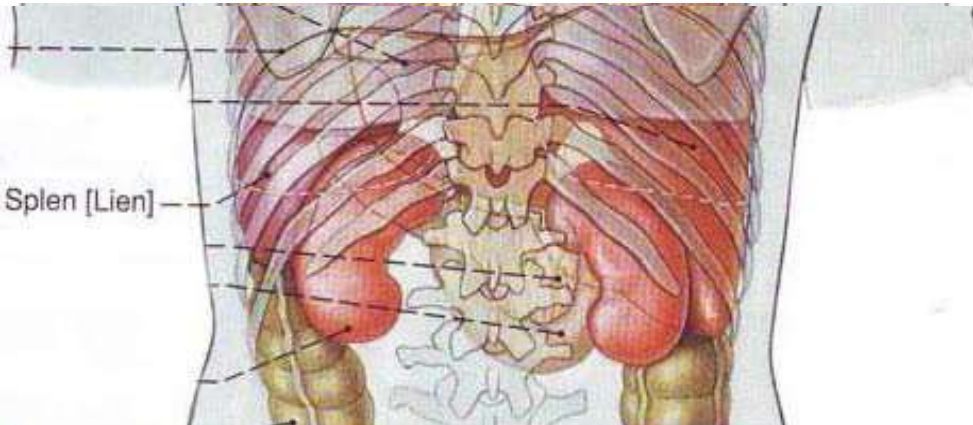
Стомах: съдове

- Малка кривина:
 - ✓ *aa. et vv. gastricae (dextri et sinistri)*
 - ✓ *nodi lymphatici gastrici dextri*
- Голяма кривина:
 - ✓ *aa. et vv. gastroepiploicae (dextri et sinistri)*
 - ✓ *nodi lymphatici gastroepiploicae*



Слезка, *lien*

- **СКЕЛЕТОТОПИЯ** – ляво подребрие:
 - ✓ гръдна стена – между IX и XI ребро
 - ✓ надлъжна ос – по X ребро



- **СИНТОПИЯ** – интраперитонеално

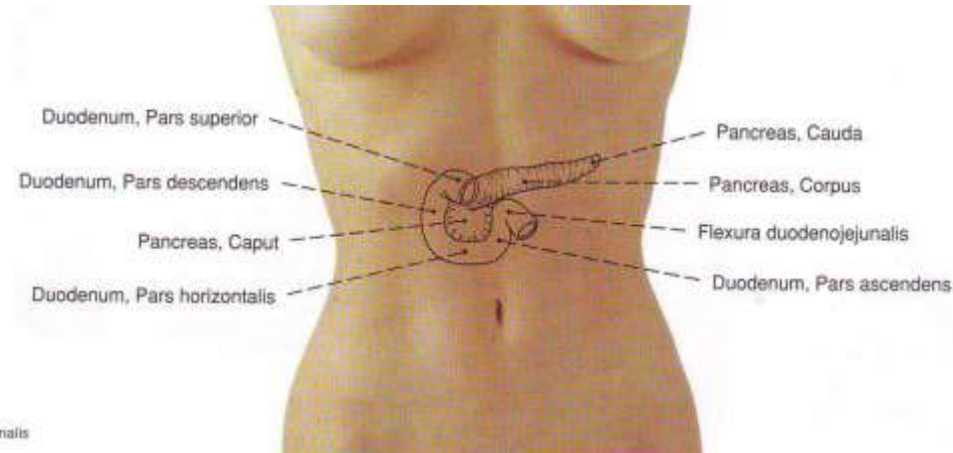
- ✓ *lig. gastrolienale*
- ✓ *lig. phrenicolienale*
- ✓ *lig. phrenicocolicum*



Панкреас и дуоденум

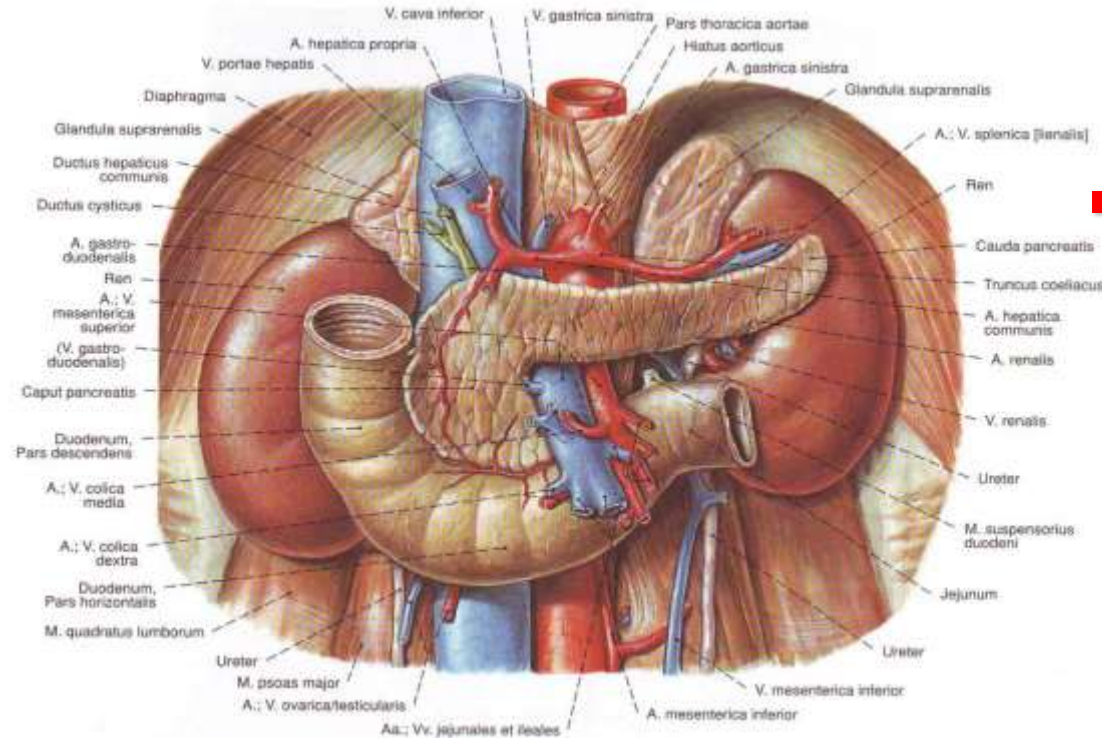
■ скелетотопия:

- ✓ глава – L₂
- ✓ тяло – L₁
- ✓ опашка – Th₁₂

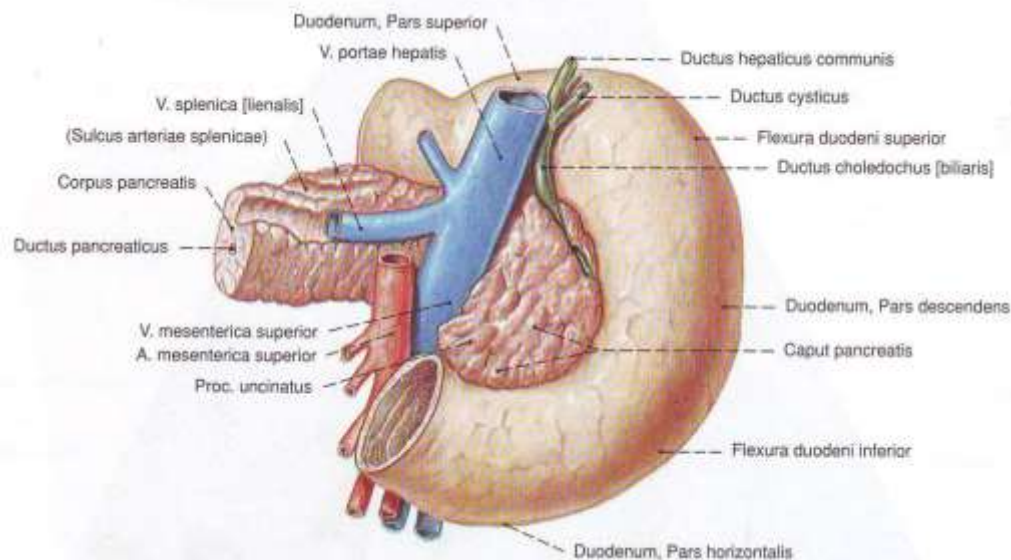
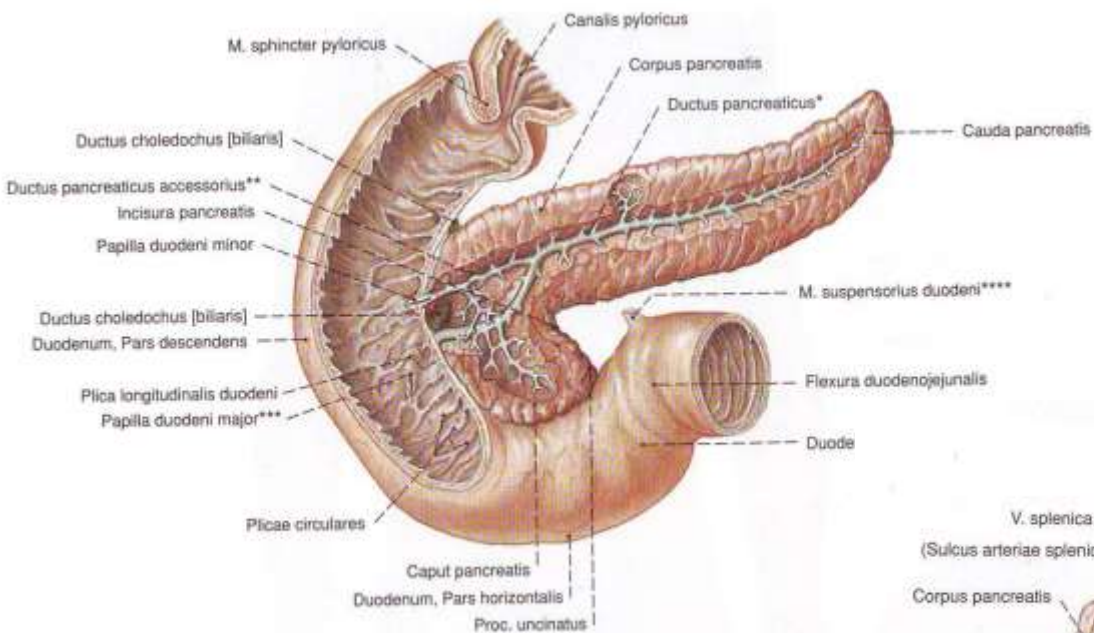


■ СИНТОПИЯ:

- ✓ интраперитонеално:
pars superior duodeni,
cauda pancreatis
- ✓ ретроперитонеално:
останалите части на двата
органа

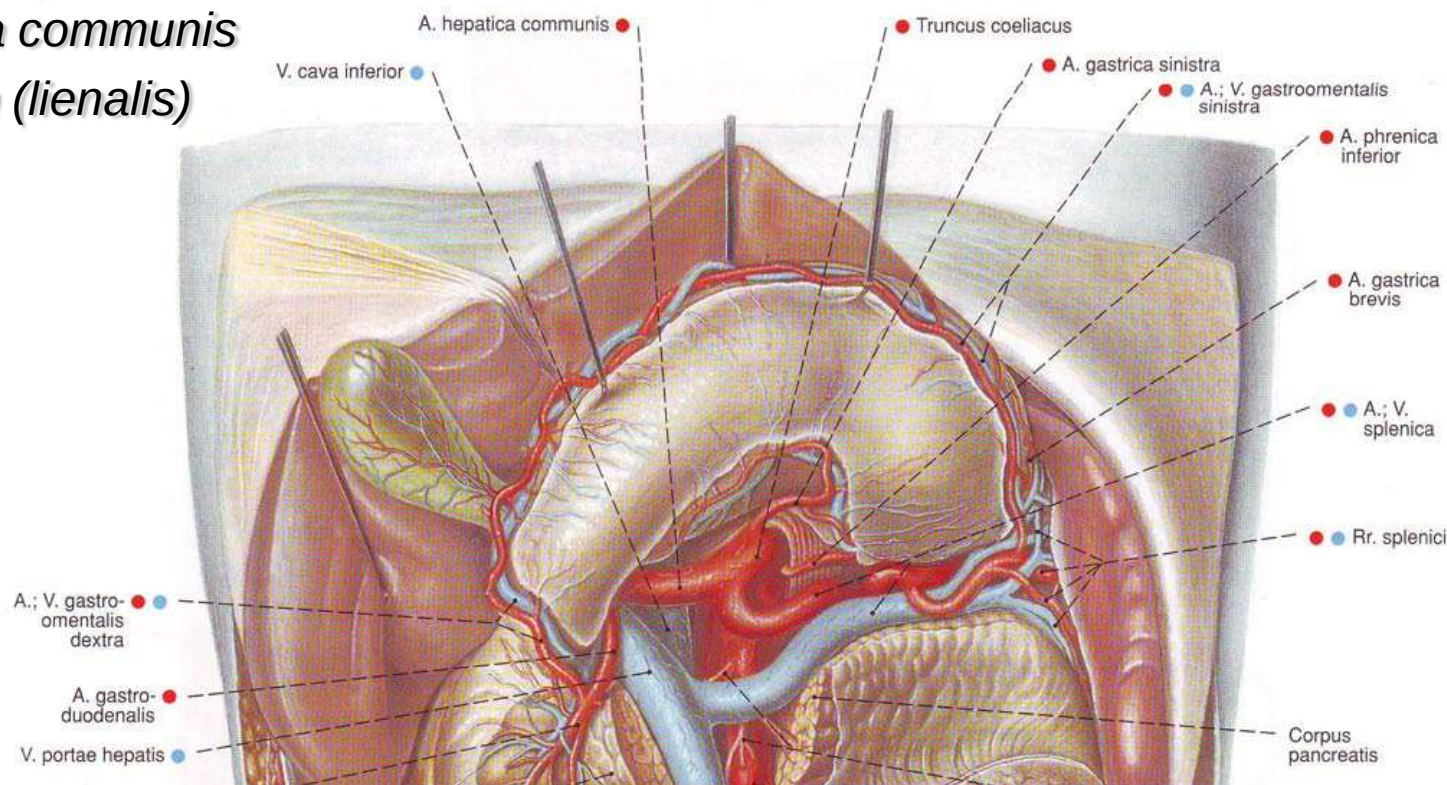


Панкреас и дуоденум: съдове

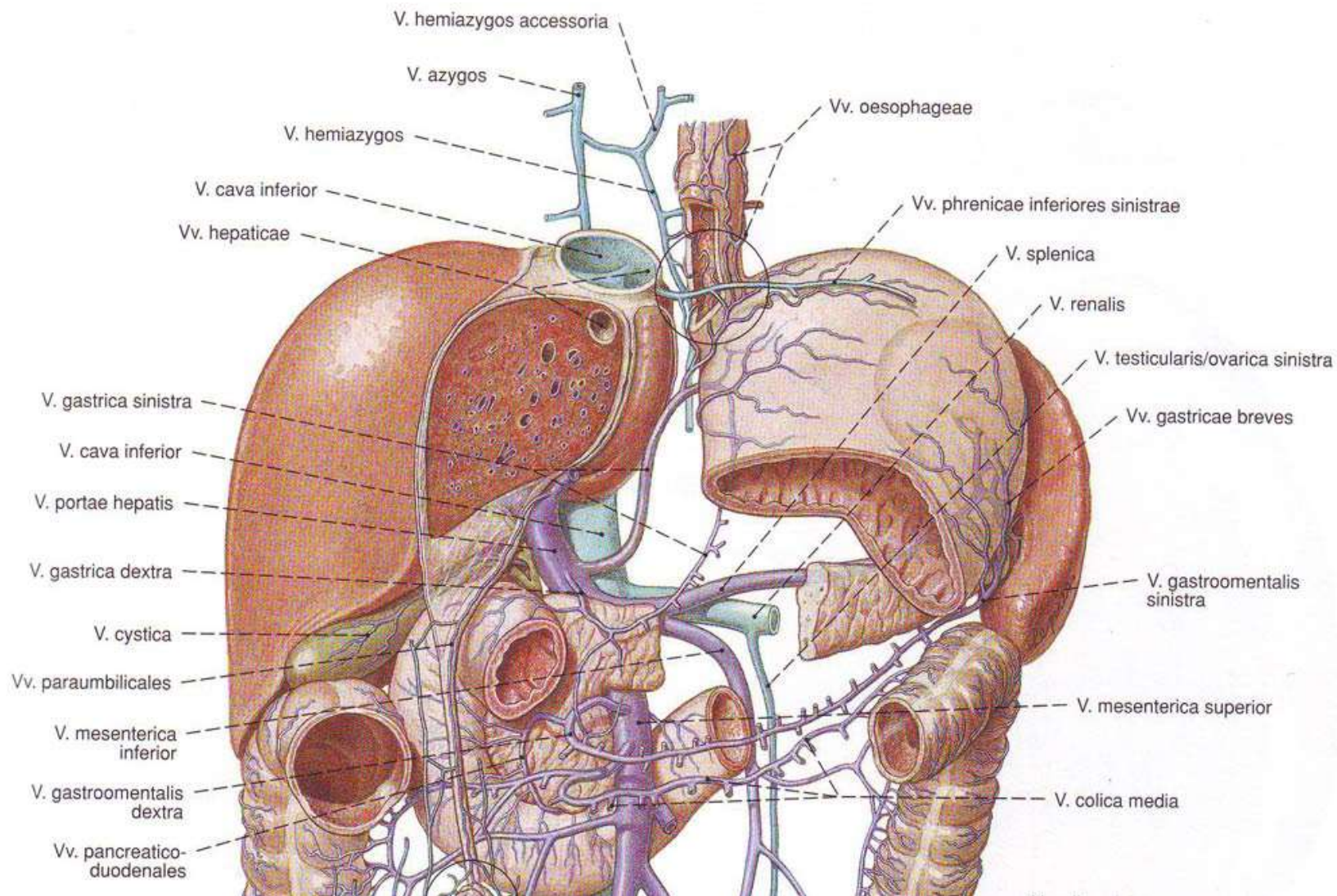


Чревен ствол, *truncus celiacus*

- на ниво XII гръден прешлен
- дължина 1-2 cm
- над тялото на панкреаса се дели на:
 - ✓ *a. gastrica sinistra*
 - ✓ *a. hepatica communis*
 - ✓ *a. splenica (lienalis)*



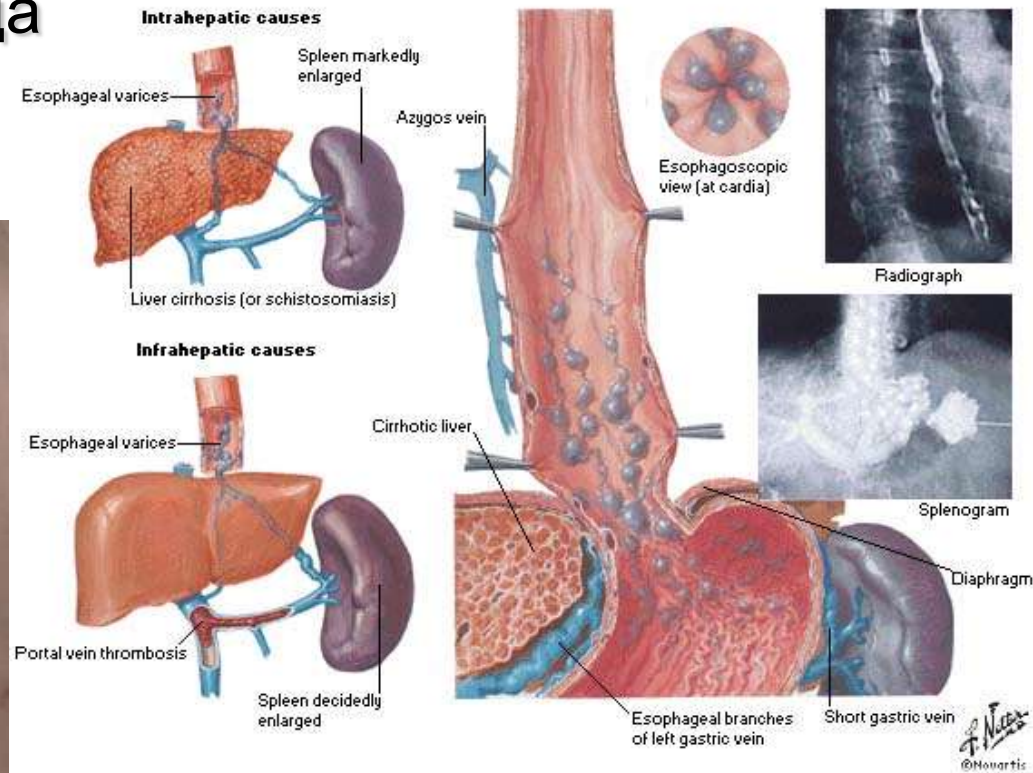
Портна вена, *vena portae*



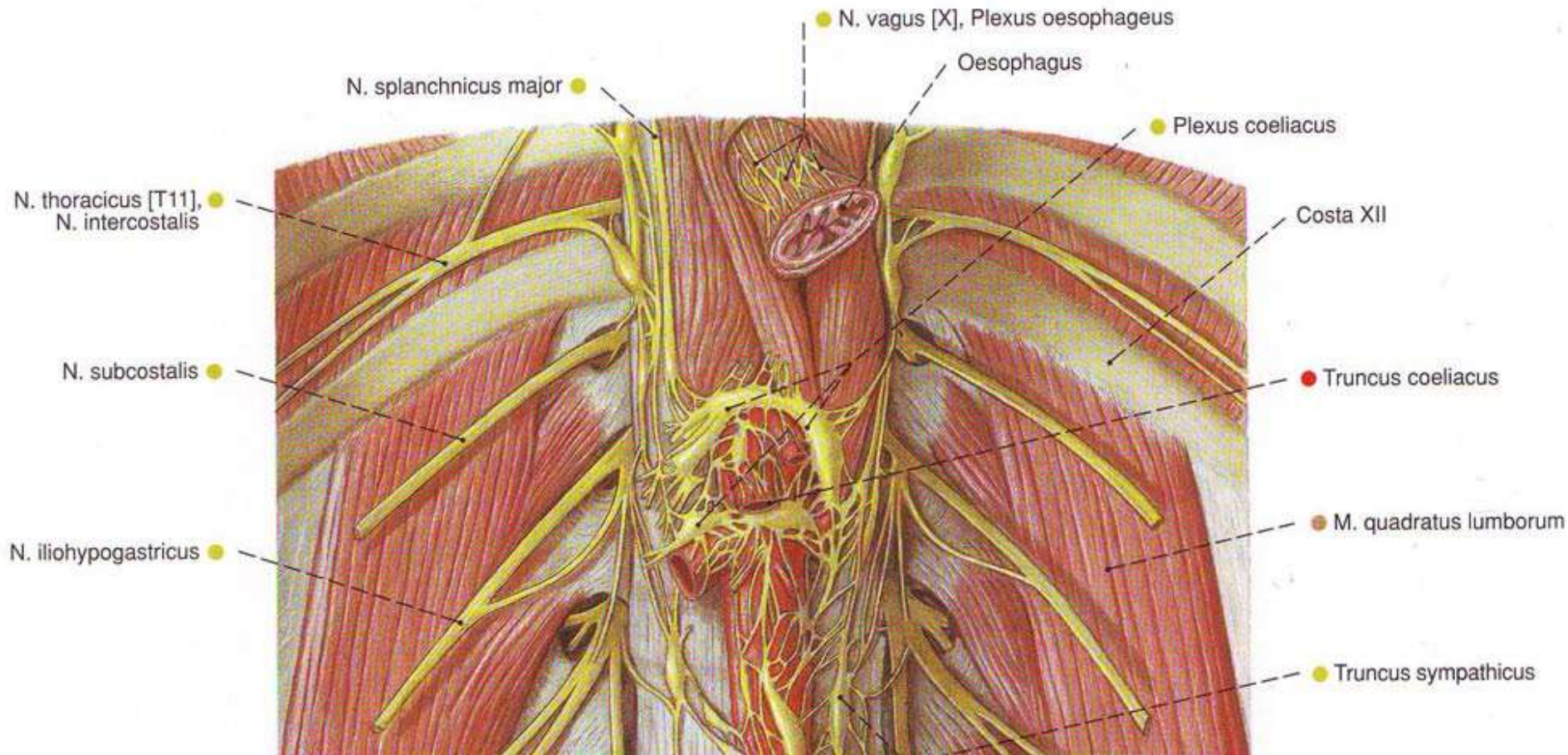
Клинично значение

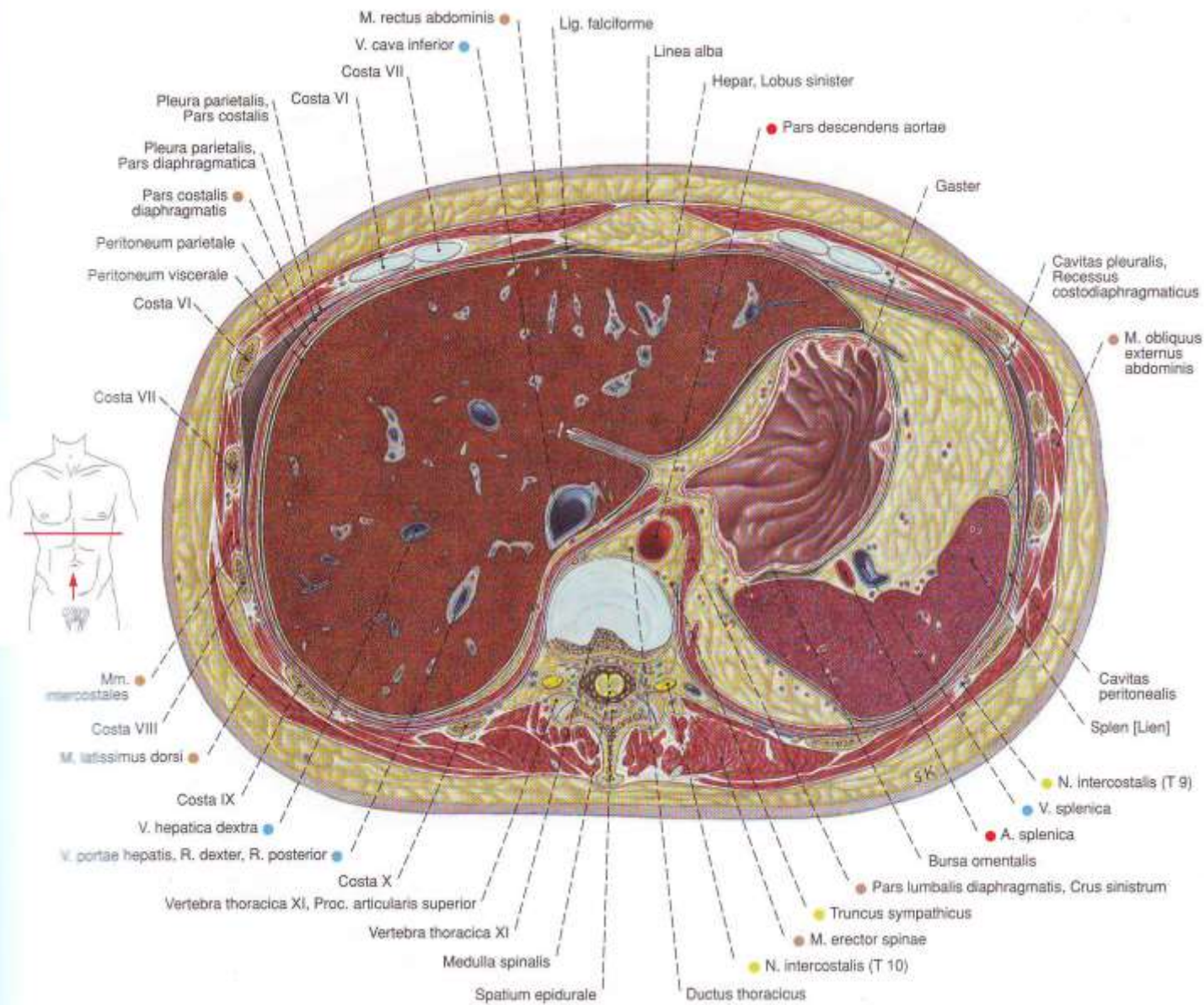
■ Застой в системата на *v. portae* при чернодробна цирроза:

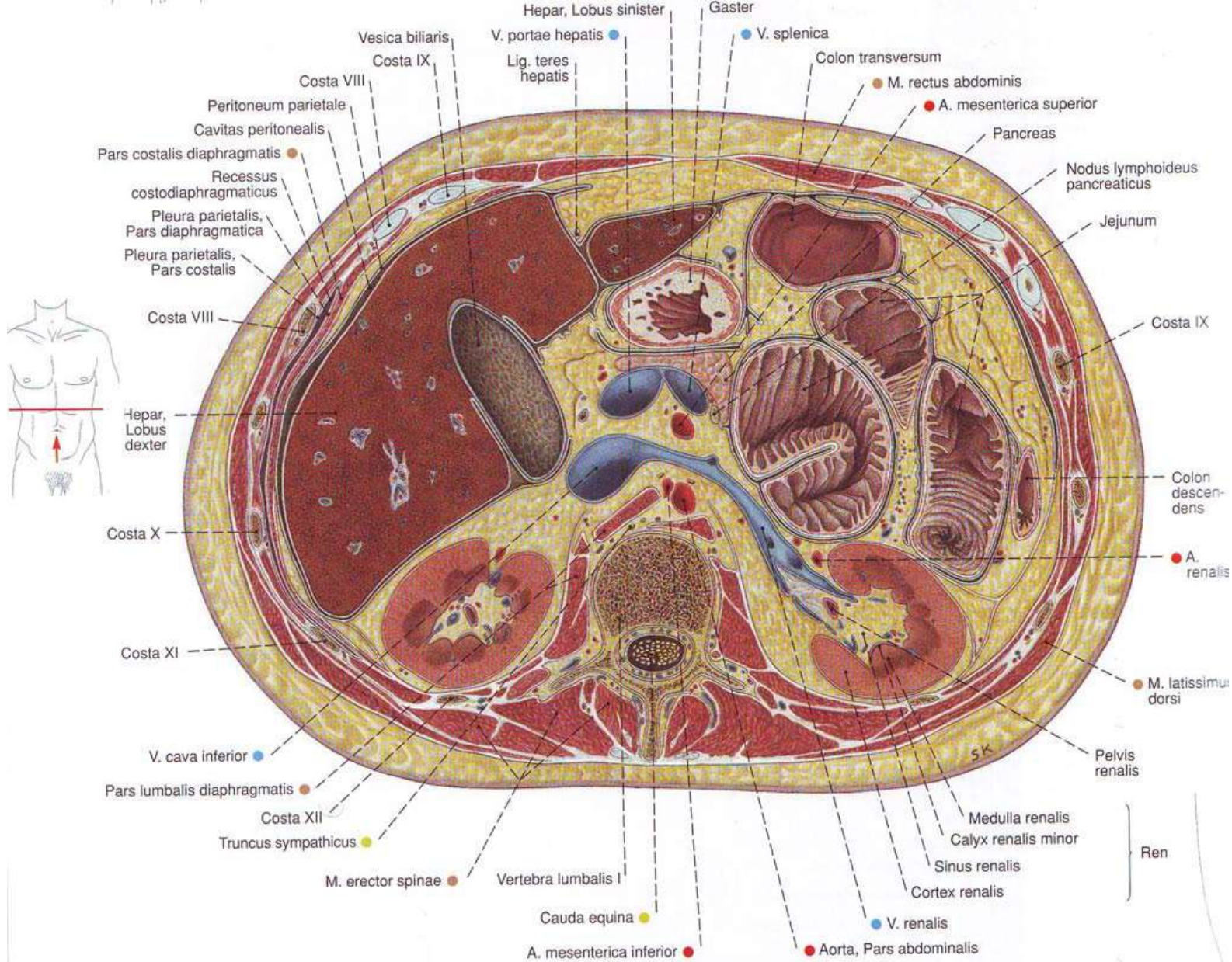
- ✓ варици на хранопровода
- ✓ *caput medusae*



Нервни образувания: *trunci vagales, plexus celiacus*

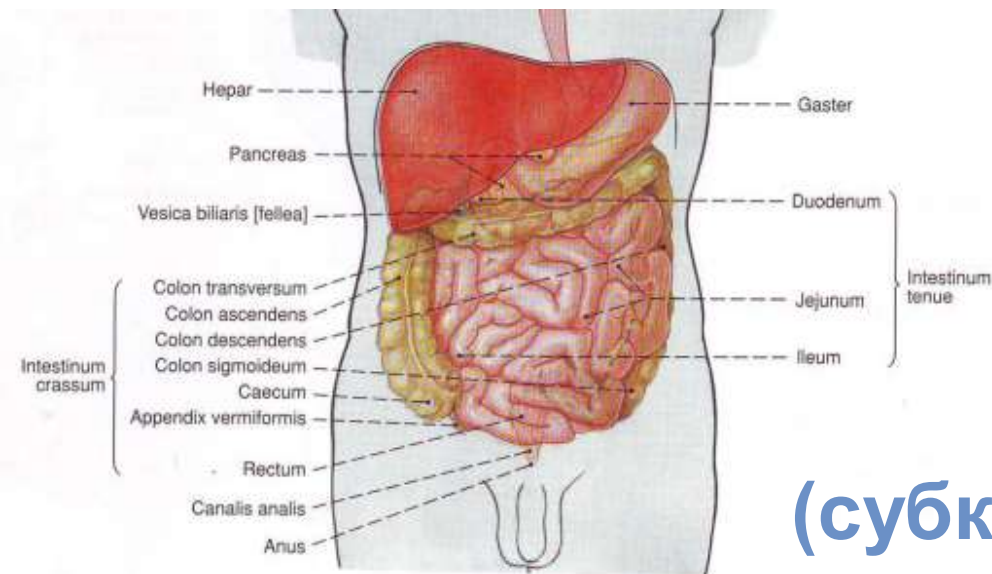






ПЕРИТОНЕАЛНА КУХИНА:

Долен отдел (субколично пространство)

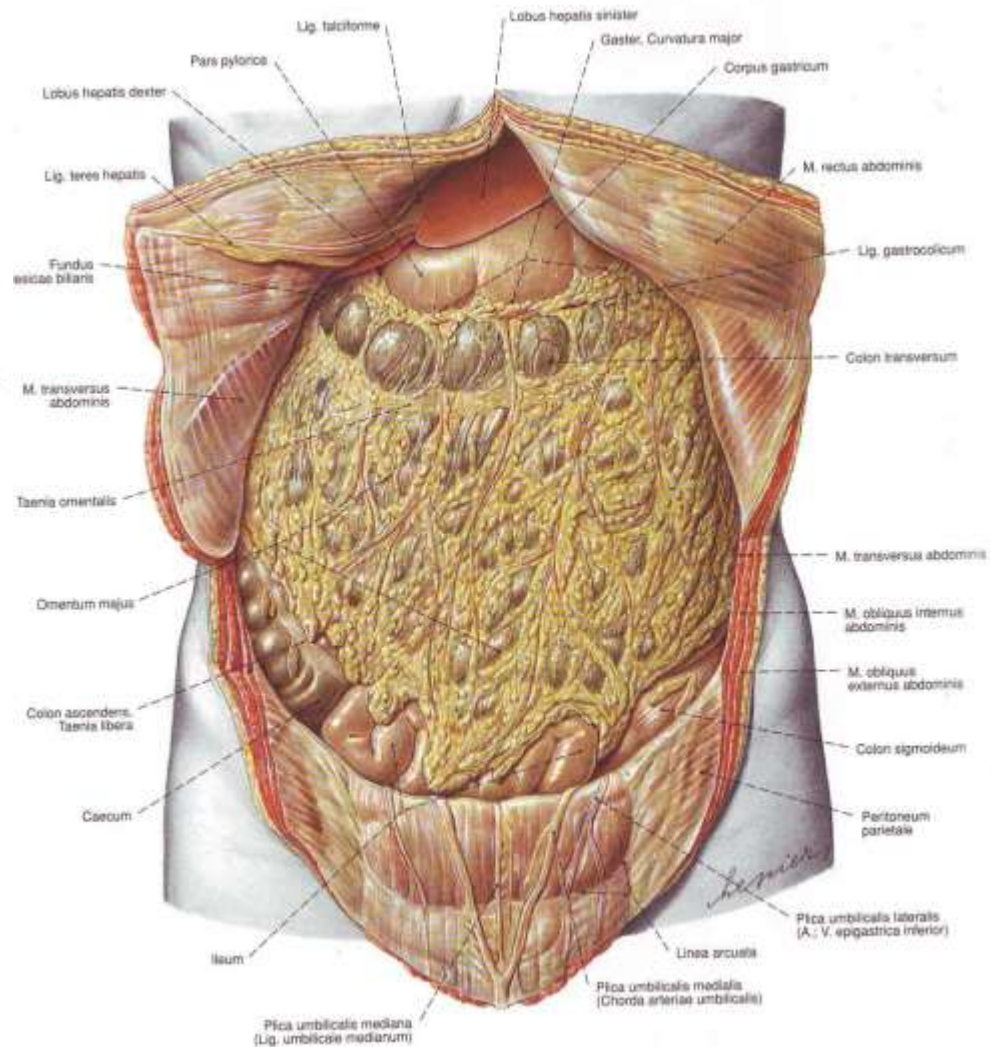
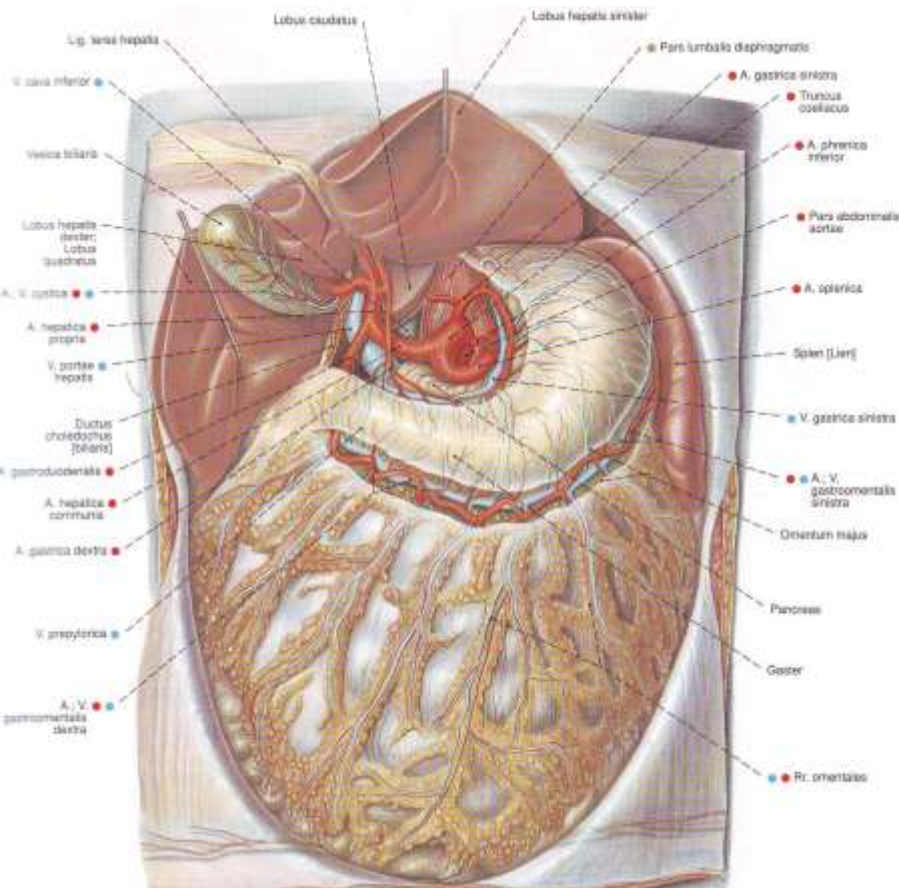


- Перитонеални образувания
- Скелето- и синтопия на органите и съдово-нервните сплетения



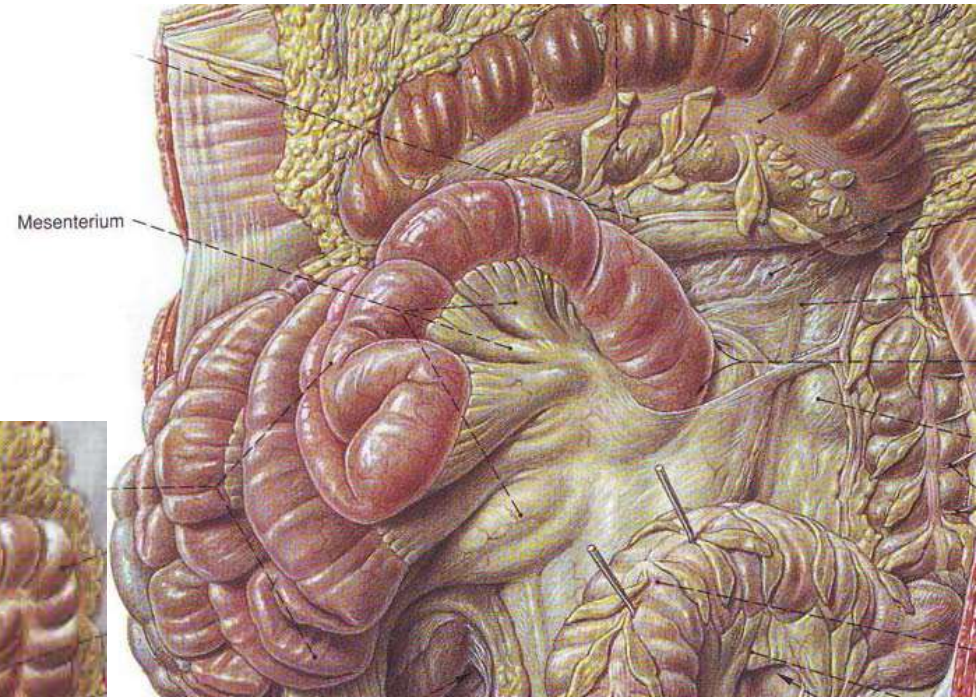
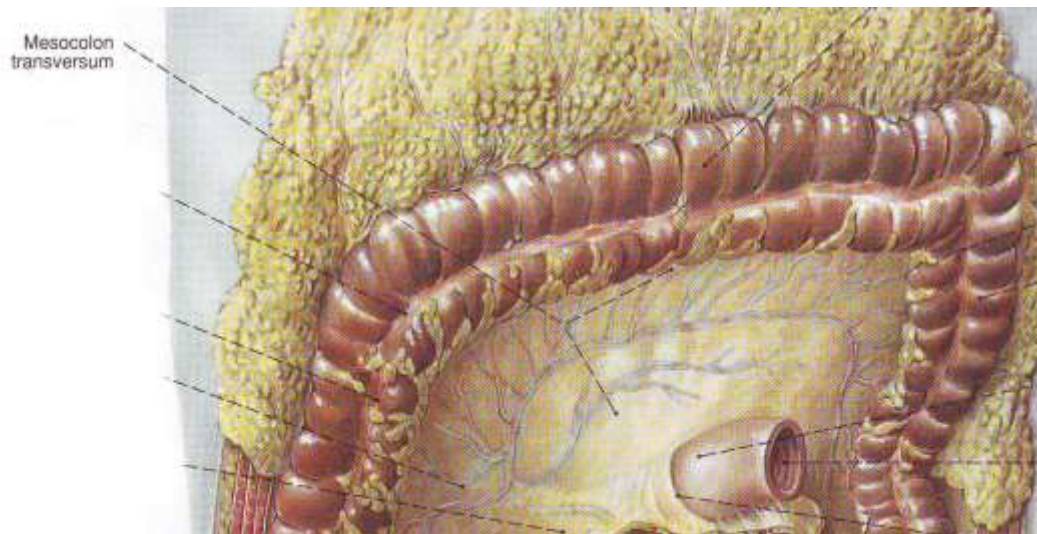
Долен отдел: перитонеални образувания

■ *omentum majus*



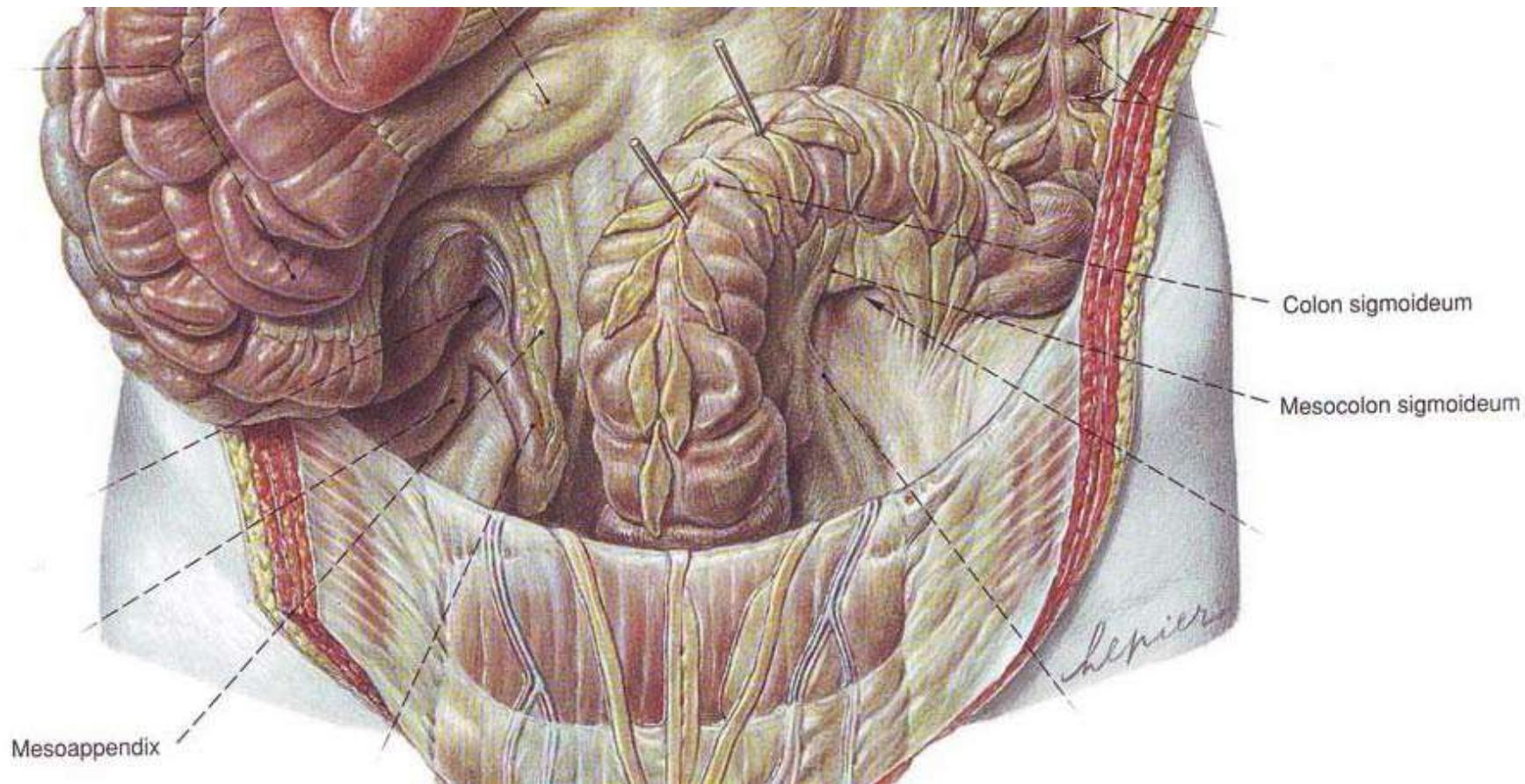
Долен отдел: перитонеални образувания

- *mesenterium*
- *mesocolon transversum*



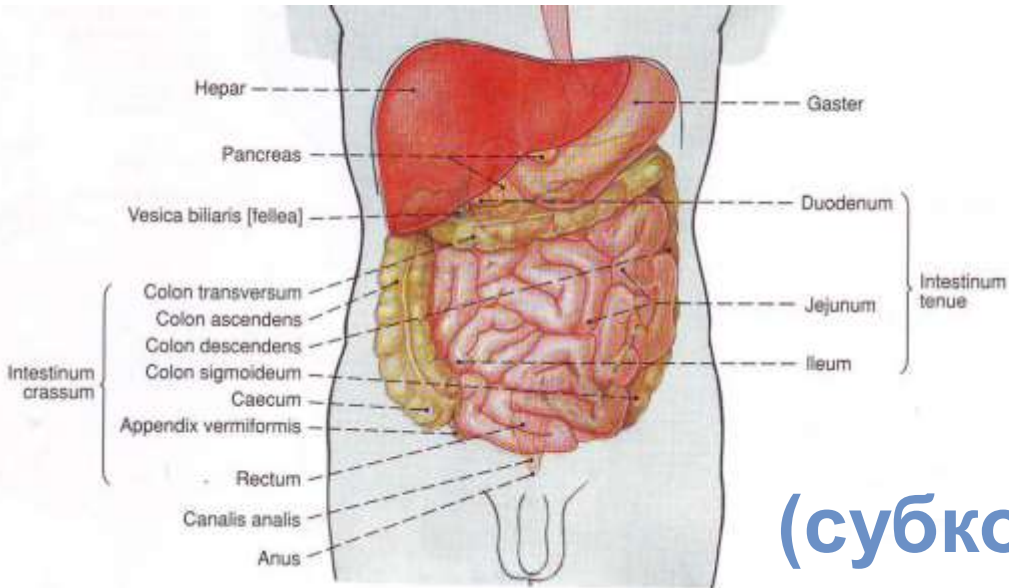
Долен отдел: перитонеални образувания

- *mesocolon sigmoideum*
- *mesoappendix*



ПЕРИТОНЕАЛНА КУХИНА:

Долен отдел (субколично пространство)

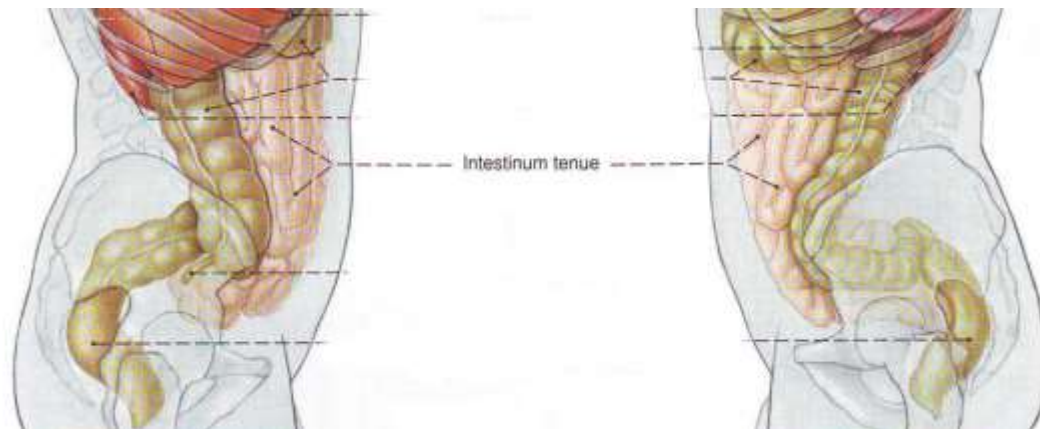
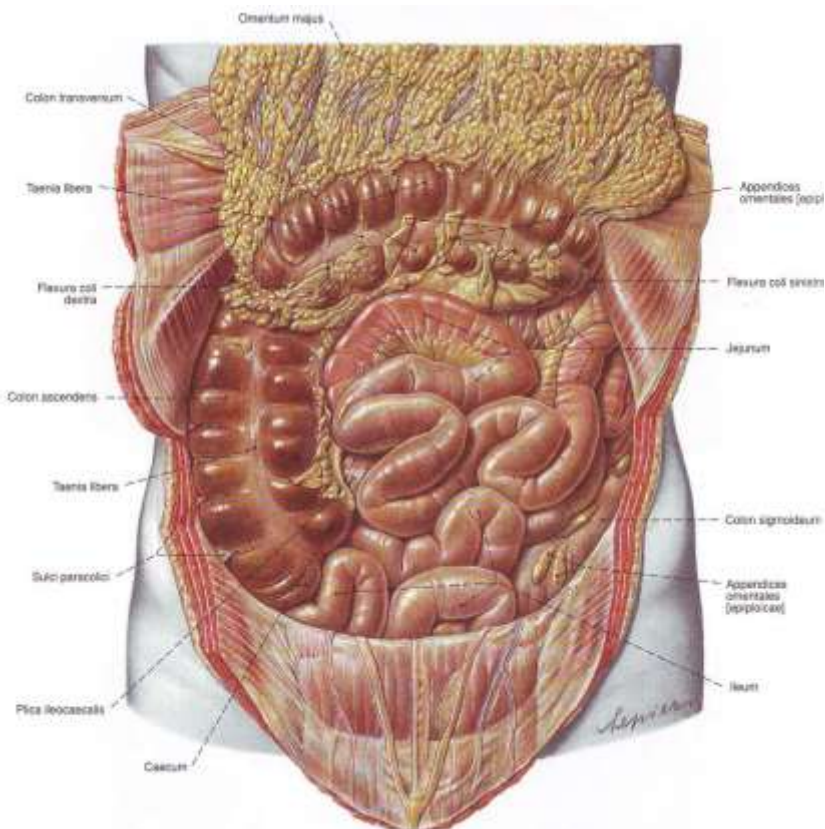


- Перитонеални образувания
- Скелето- и синтопия на органите и съдово-нервните сплетения



Мезентериално тънко черво *intestinum tenue mesenteriale*

- скелетотопия: L₂-L₄

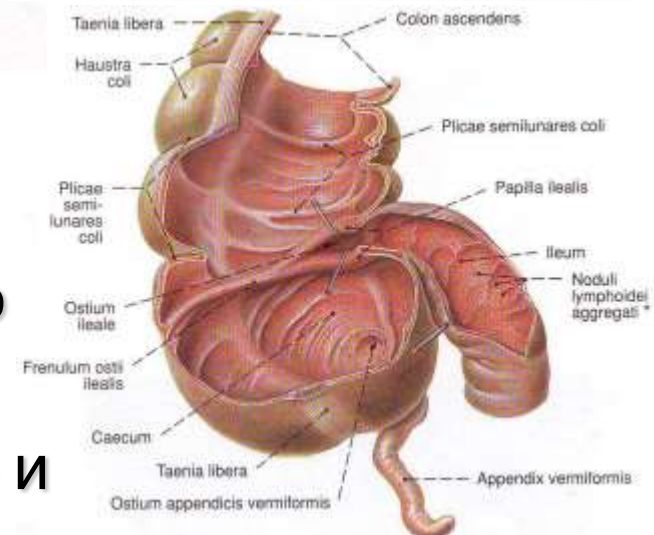
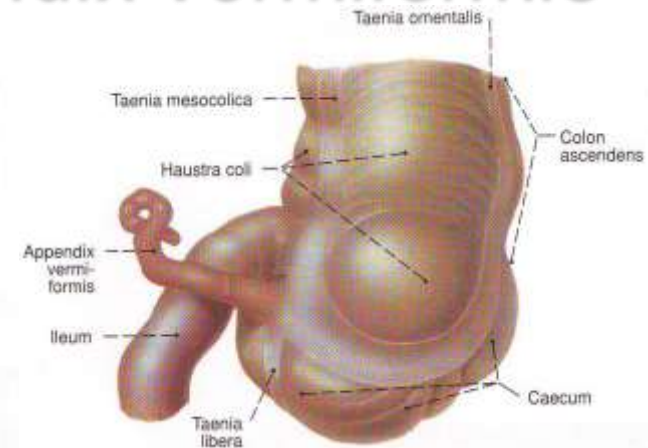
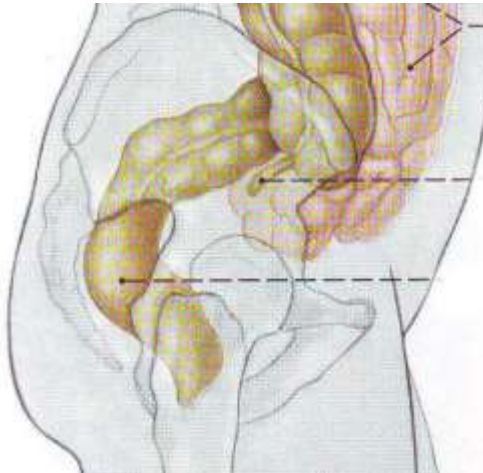
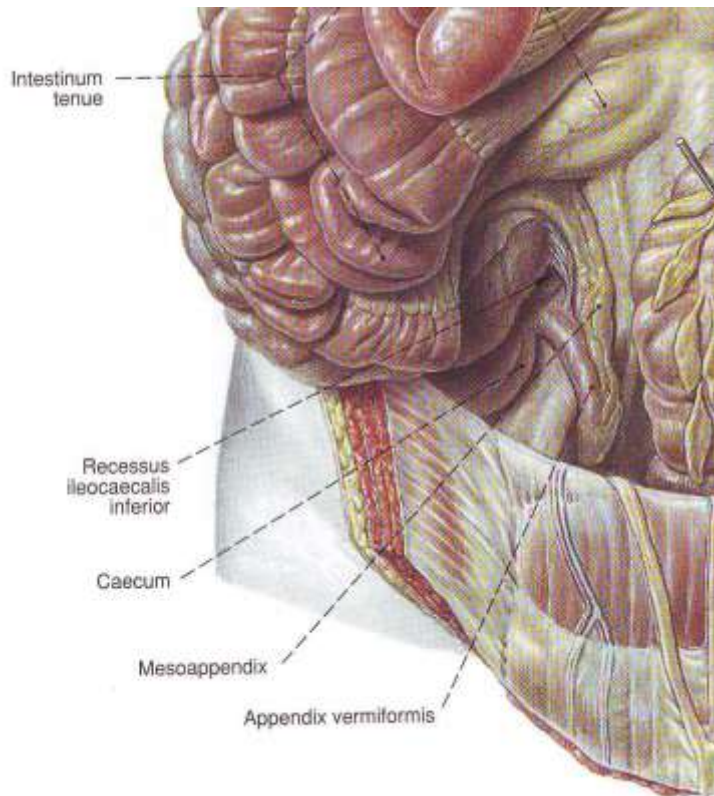


- синтопия: два слоя примки, интраперитонеално



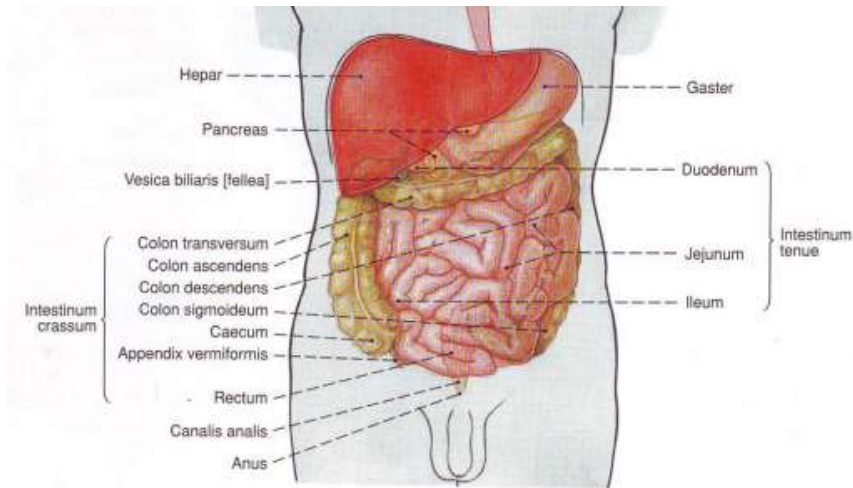
Сляпо черво и апендикс *cecum, appendix vermiformis*

- **СКЕЛЕТОТОПИЯ:**
дясна хълбочна яма



- **СИНТОПИЯ:**
 - ✓ НИЗХОДЯЩО
 - ✓ МЕДИАЛНО
 - ✓ ЛАТЕРАЛНО И
 - ✓ ЗАДНО ВЪЗХОДЯЩО ПОЛОЖЕНИЕ





Ободно черво *Colon*



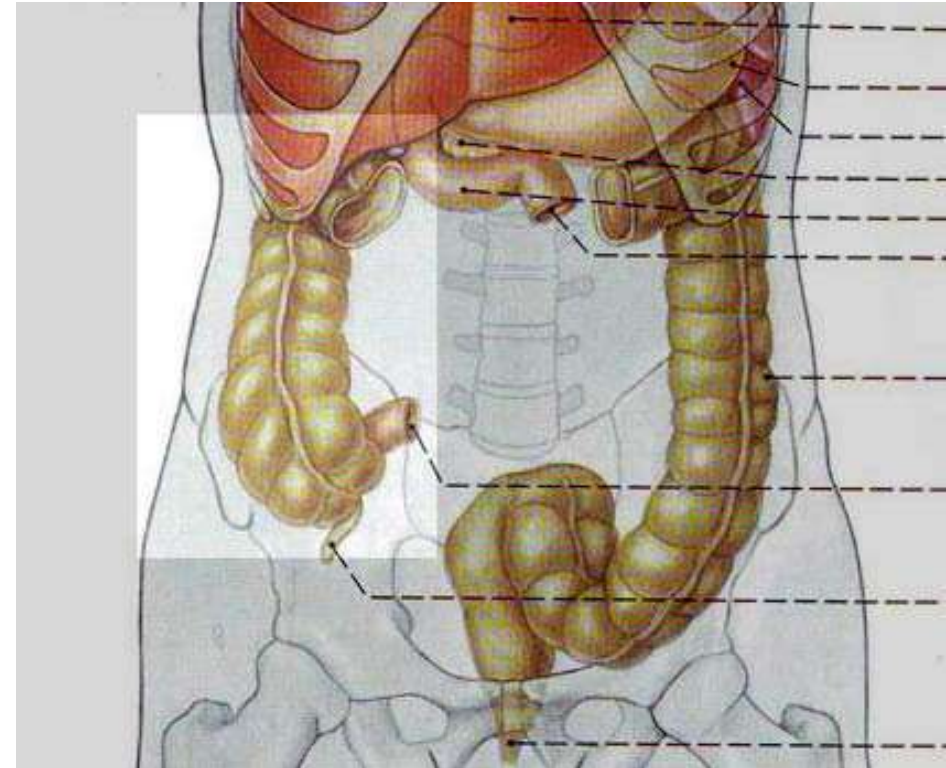
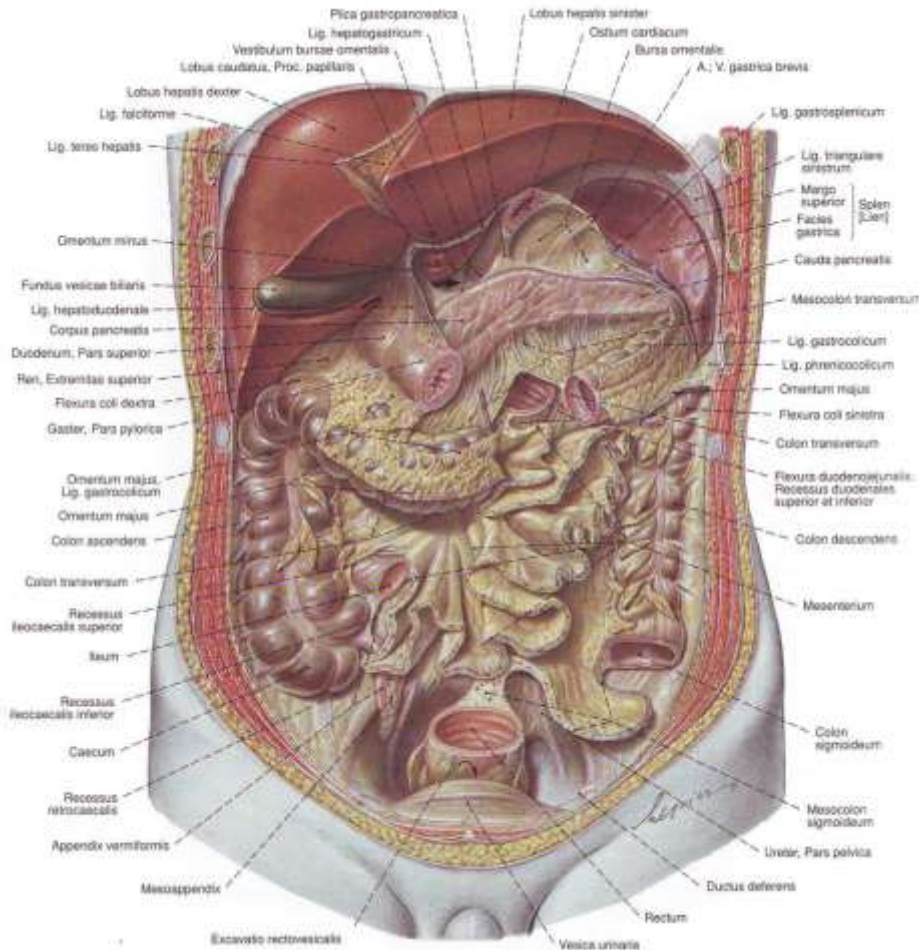
1. *Colon ascendens*
2. *Colon transversum*
3. *Colon descendens*
4. *Colon sigmoideum*



Colon ascendens

■ СКЕЛЕТОТОПИЯ:

- ✓ *fossa iliaca dextra*
- ✓ *canalis lateralis dexter*



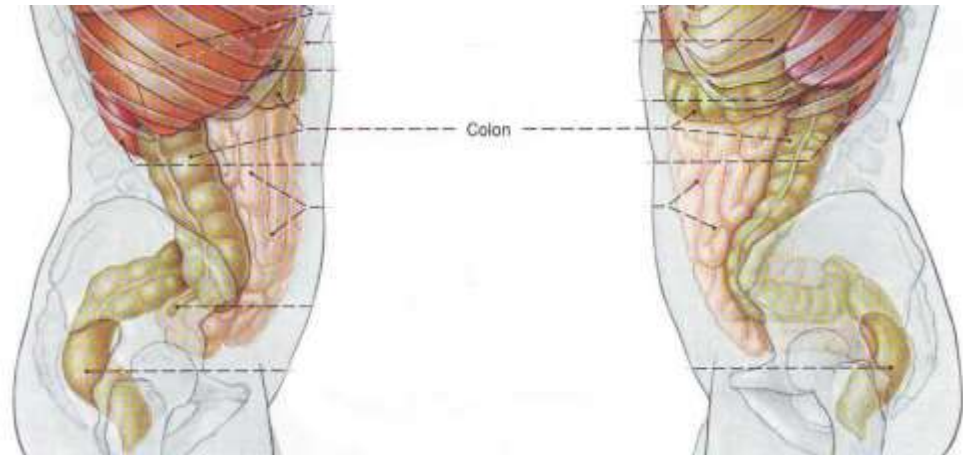
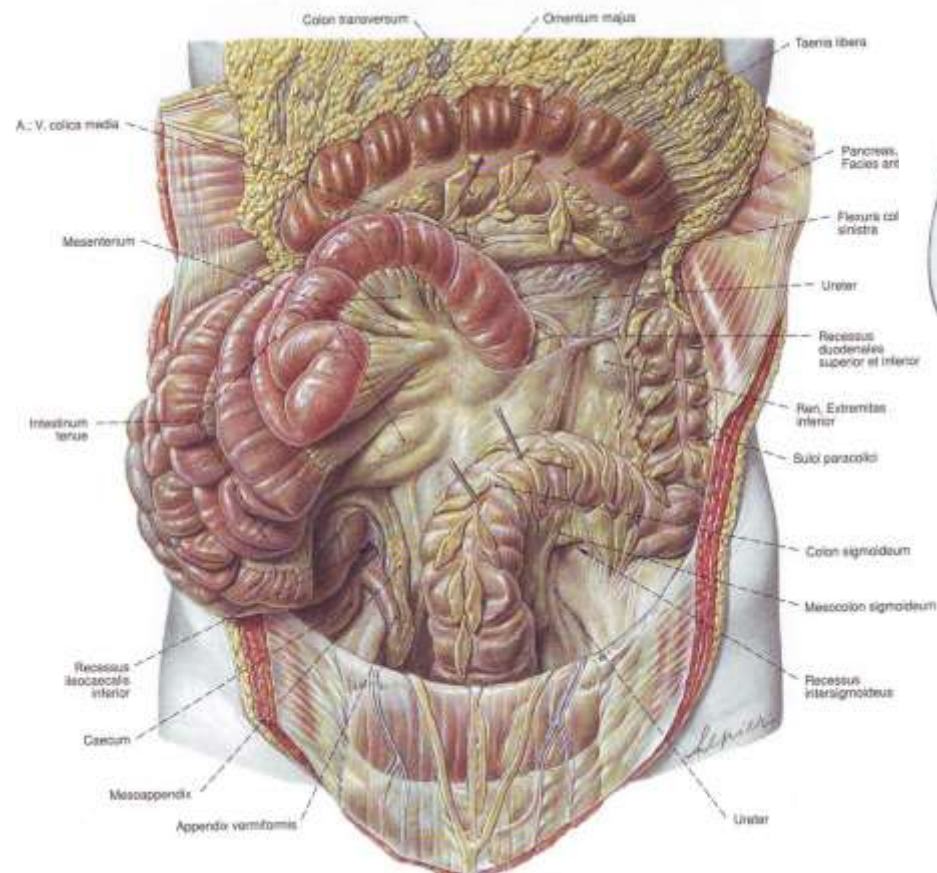
■ СИНТОПИЯ:

- ✓ мезоперитонеально



Colon transversum

■ СКЕЛЕТОТОПИЯ



■ СИНТОПИЯ:

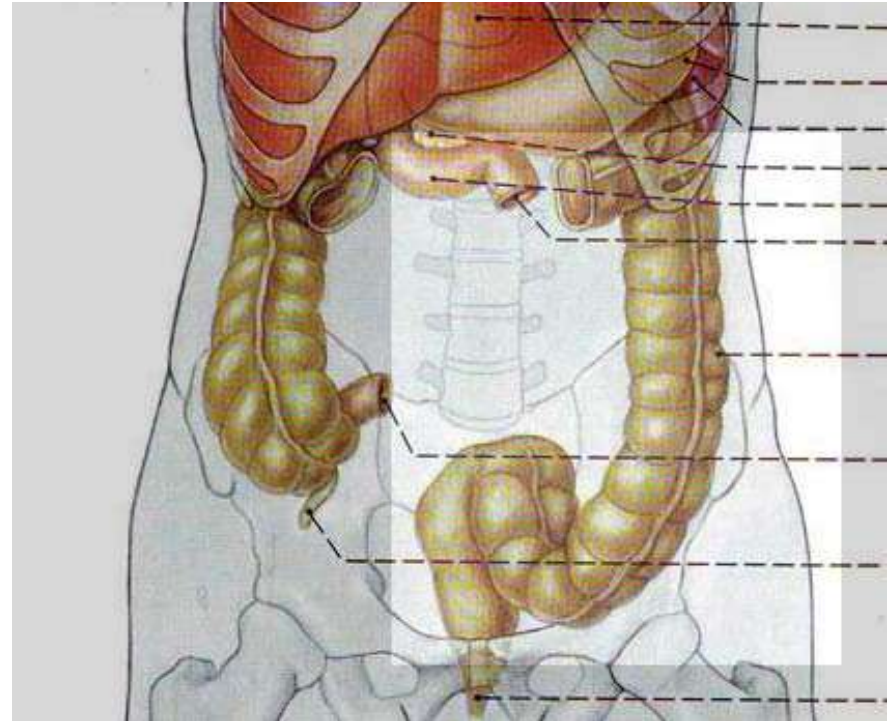
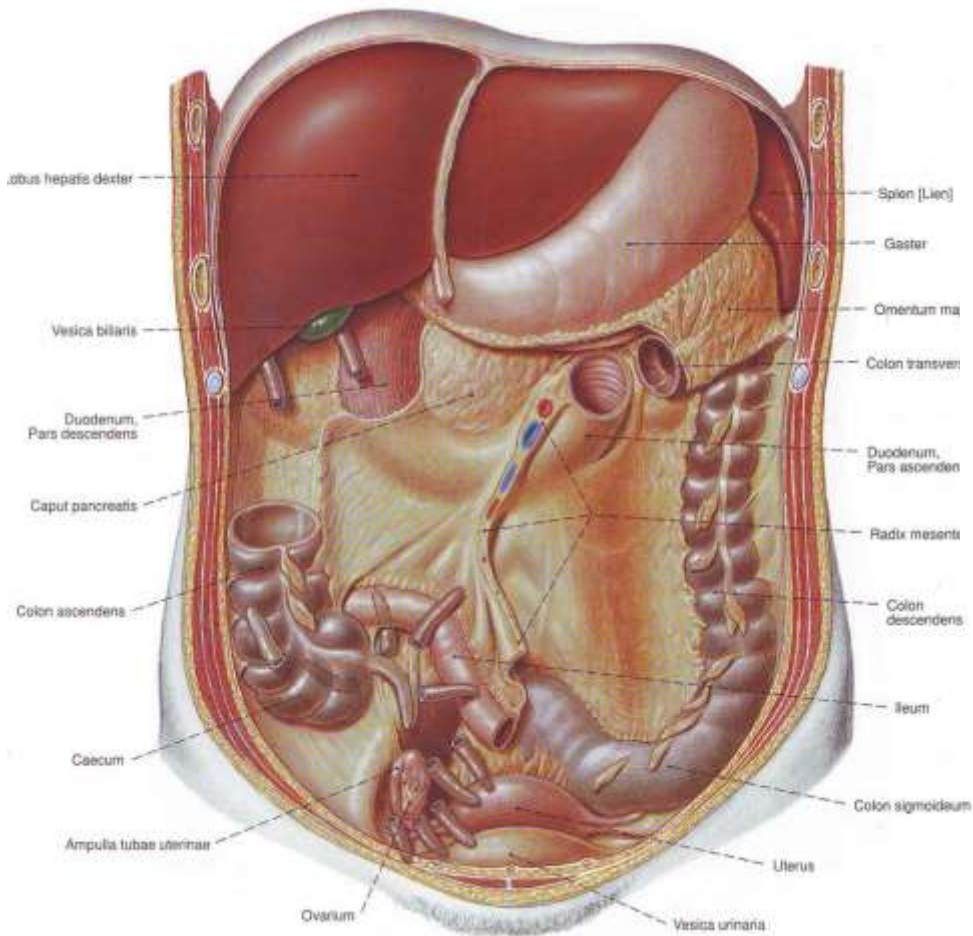
- ✓ интраперитонеально
- ✓ граница между горния и долния отдел



Colon descendens

■ СКЕЛЕТОТОПИЯ:

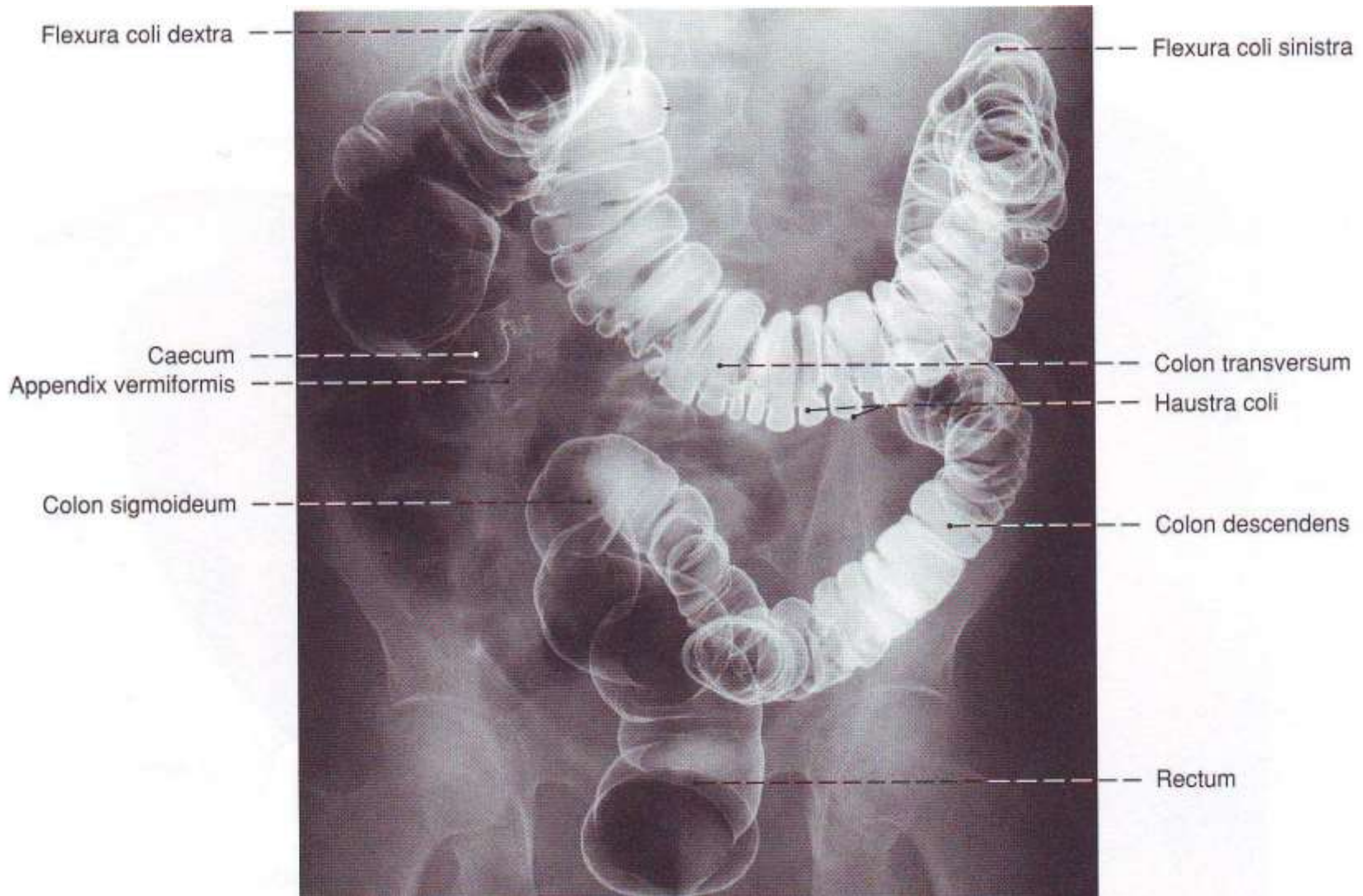
✓ *canalis lateralis sinister*

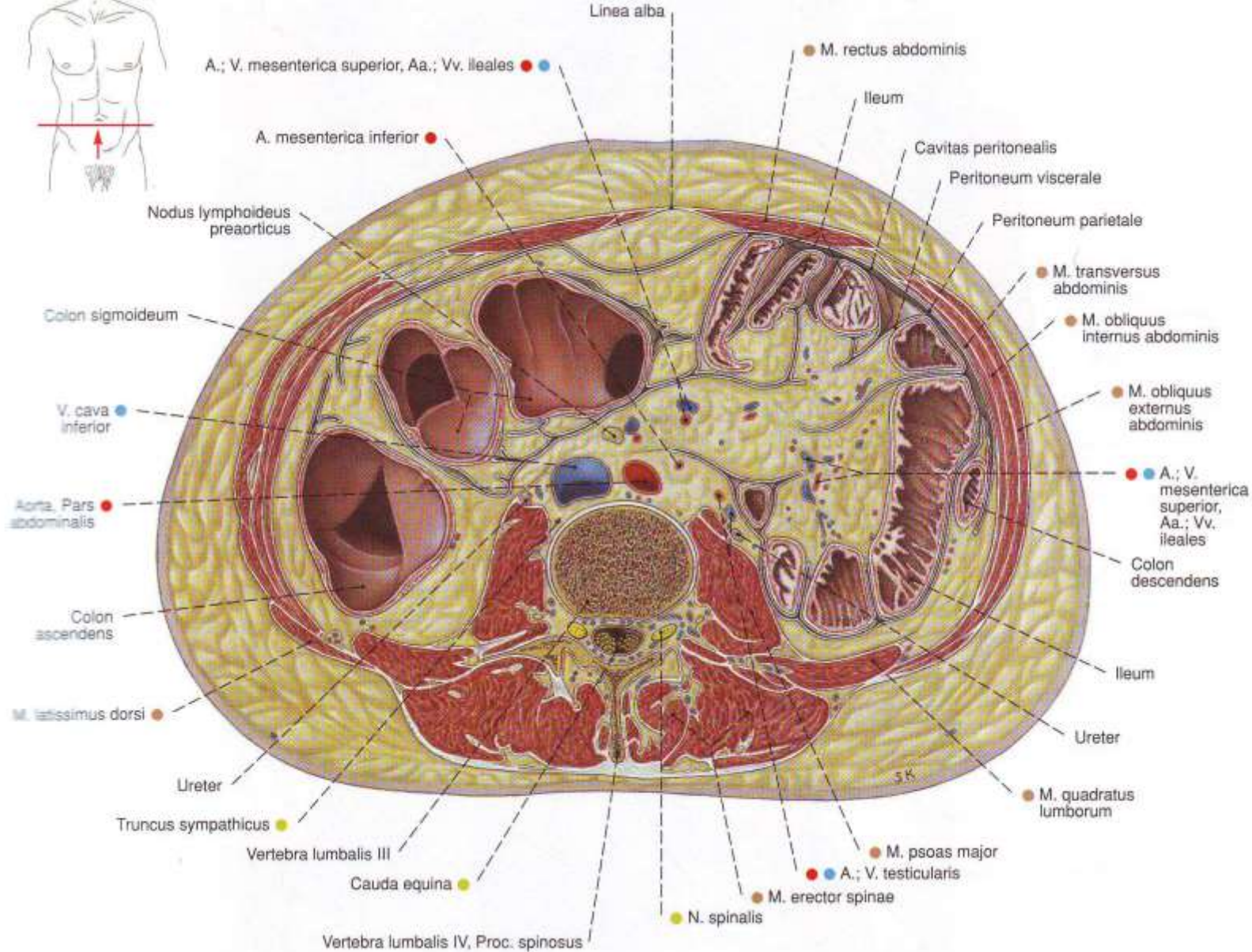


■ СИНТОПИЯ:

✓ мезоперитонеально

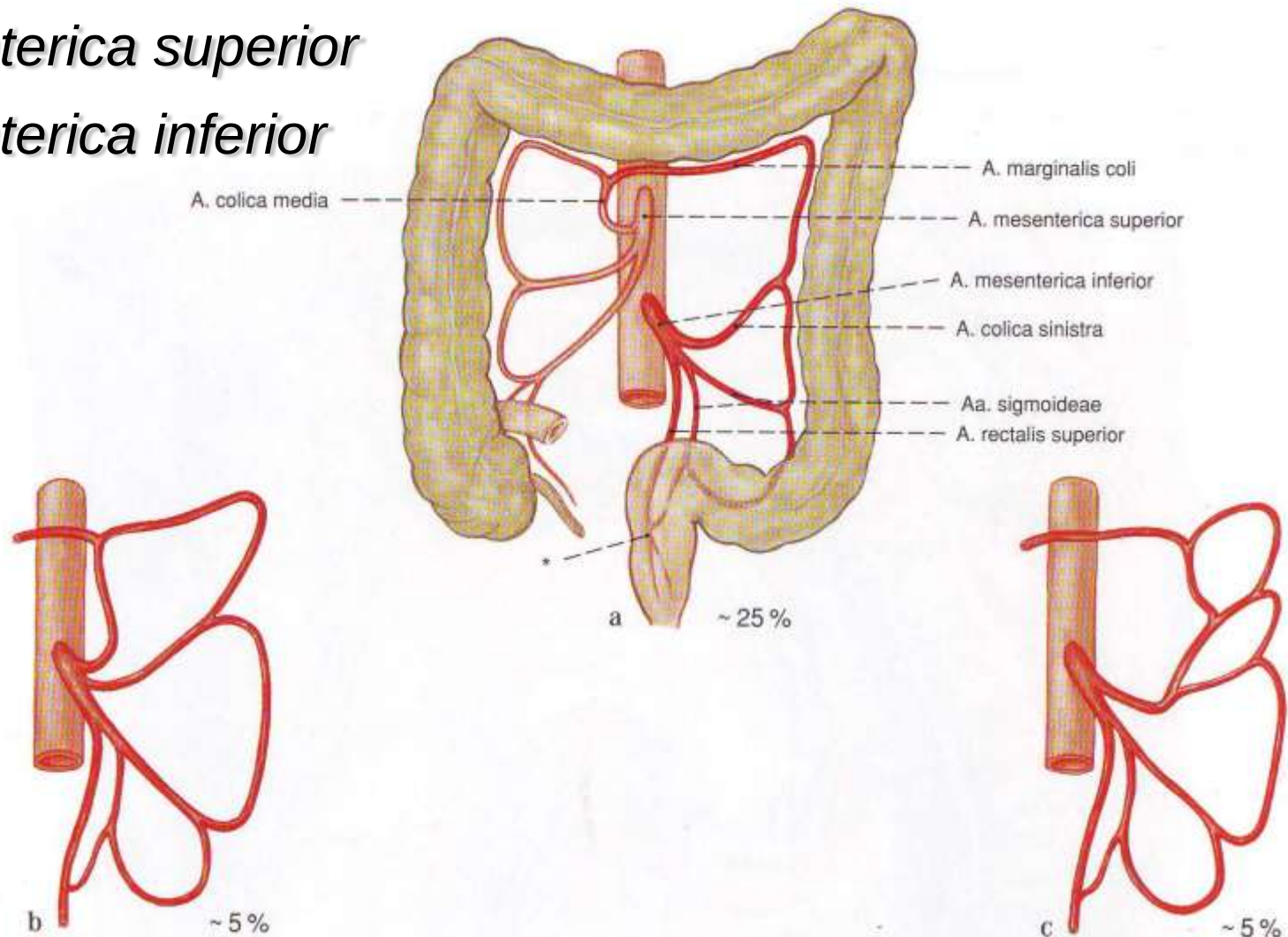
Colon: рентгенография





Colon: кръвоснабдяване

- *a. mesenterica superior*
- *a. mesenterica inferior*



This anatomical diagram illustrates the abdominal cavity, focusing on the abdominal aorta and its extensive network of branches. The aorta is shown in red, descending from the thoracic region and bifurcating into the common iliac arteries. Numerous other arteries and veins are depicted in red and blue, respectively, branching out to supply the abdominal organs. The diagram includes labels for various structures, such as the stomach, liver, spleen, pancreas, kidneys, and intestines, as well as the major blood vessels and nerves. The abdominal cavity is shown in a cross-section, with the abdominal wall and surrounding structures visible. The diagram is signed 'Amico' in the lower right corner.

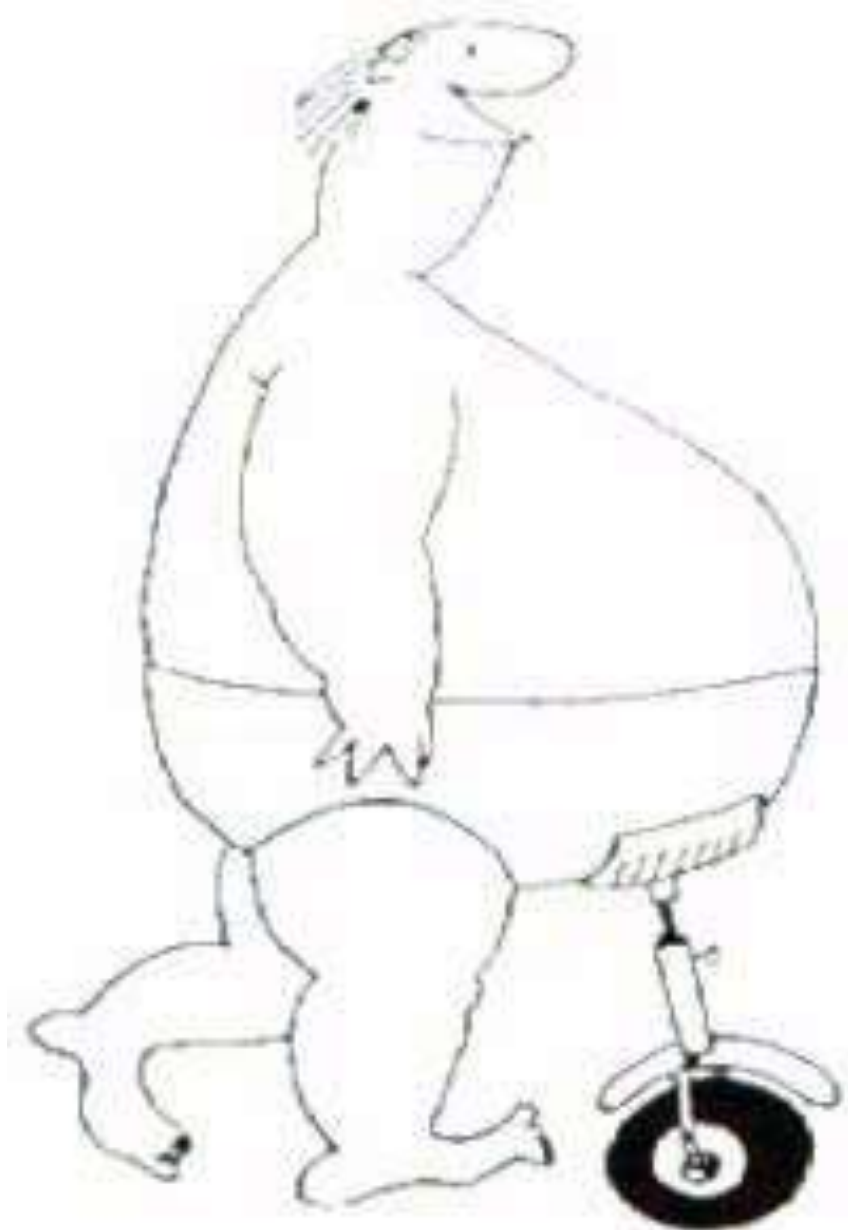
Labels on the left side:

- A. hepatica communis
- V. hepatica
- V. cava inferior
- A. hepatica propria
- V. portae hepatis
- Pars caecae distipnatis
- Glandula suprarenalis
- Ductus hepaticus communis
- Ductus cysticus
- Gallus choleochus (biliary)
- Ren dexter
- Duodenum, Pars superior, Ampulla
- Duodenum, Pars descendens
- Caput pancreatis, Pars uncinata
- Duodenum, Pars horizontalis
- N. iliohypogastricus
- N. ilioinguinalis
- V. cava inferior
- A. V. testicularis
- N. subcutanea femoris lateralis
- (M. psoas minor), Tendo
- A. V. Iliaca communis
- N. femoralis
- Fascia Iliaca
- A. V. circumflexa ilium profunda
- A. V. Iliaca externa
- Ductus deferens
- A. V. epigastrica inferior
- Pertoneum parietale

Labels on the right side:

- Hilus aorticus
- Hiatus aoropharyngeus
- A. V. gastrica sinistra
- Gaster, Pars cardica
- Thymus costalis
- Glandula suprarenalis
- A. V. splenica
- Cauda pancreatis
- V. mesenterica inferior
- A. V. mesenterica superior
- Jejunum
- Ren sinister
- Ureter
- Pars abdominalis aortae
- A. colica sinistra
- Bifurcatio aortae
- A. V. lumbalis IV
- A. V. mesenterica inferior
- A. V. sacralis mediana
- A. rectalis superior
- Mesocolon sigmoideum
- Aa. V. sigmoides
- Colon sigmoideum, Appendix orientalis
- Velva anterior

Sixpack vs. Bierbauch



Благодаря ...

Проф. д-р Николай Лазаров

