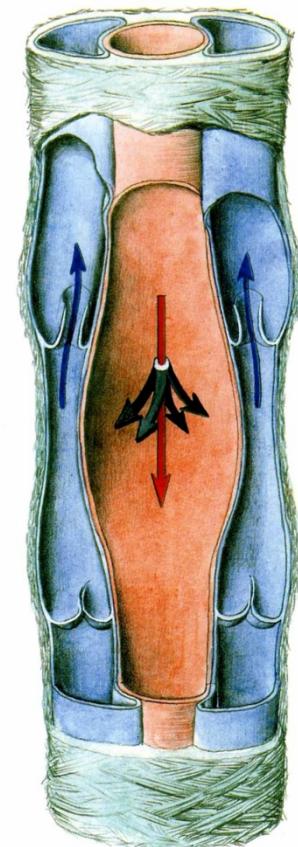
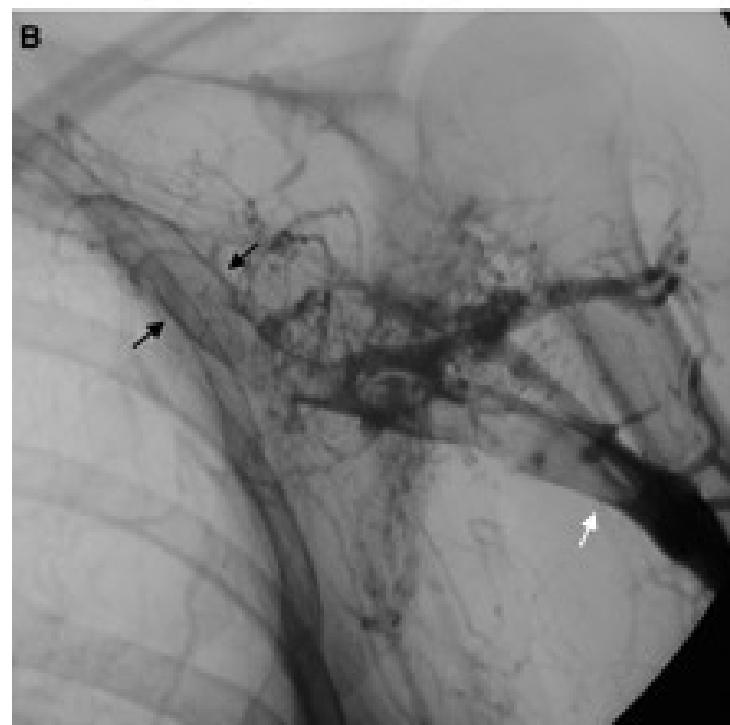


**VEINS**

- CAPILLARIES, SINUSOIDS,  
POSTCAPILLARY VENULES
- VENULES, VEINS
- TUNICA INTIMA, MEDIA, ADVENTITIA
- VASA, VASORUM, SYMPATHETIC AND  
AFFERENT NERVES
- VALVES, SINUS, PHLEBOGRAPHY
- VENAE COMITANTES

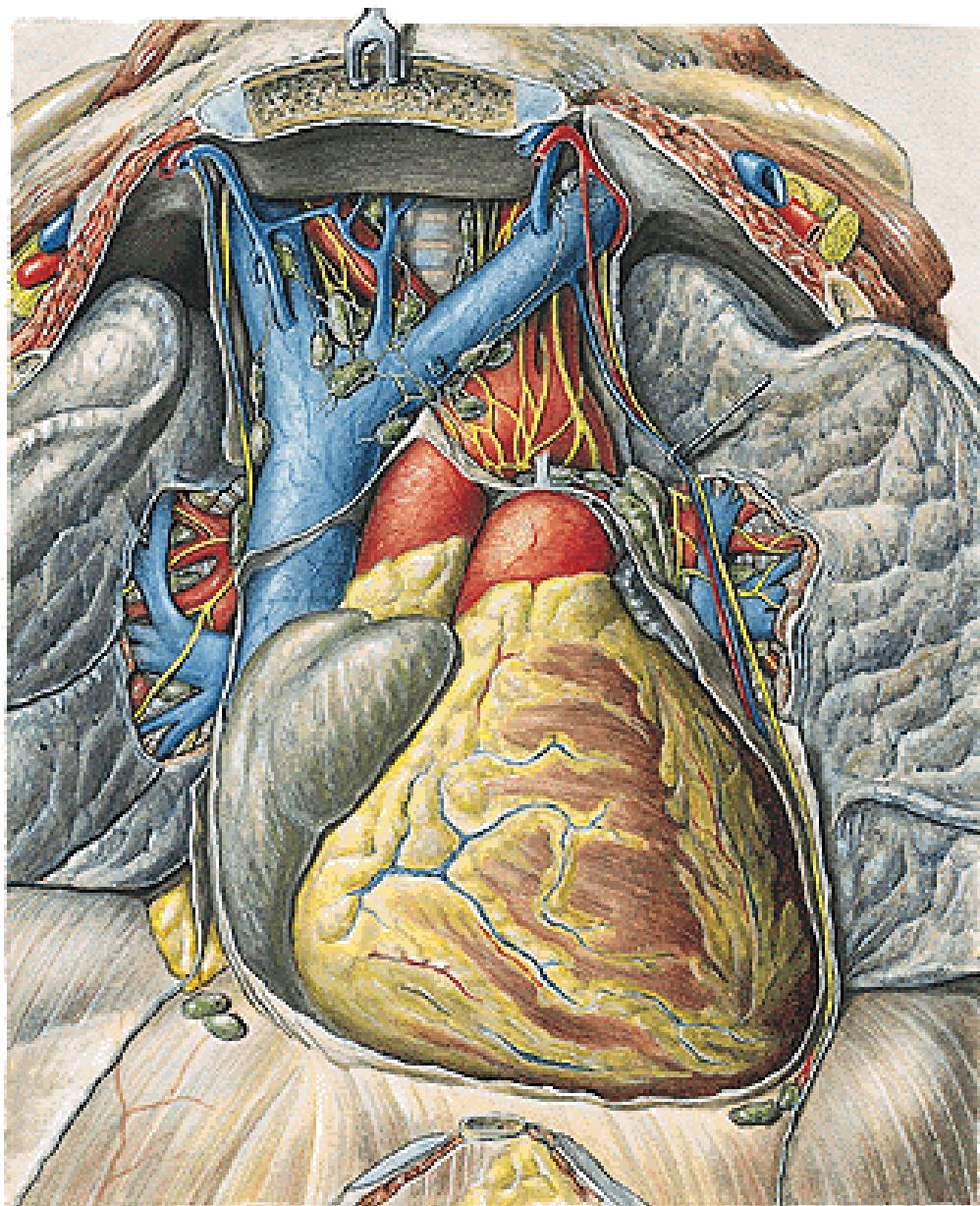


# PHLEBOGRAPHY (VENOGRAPHY)



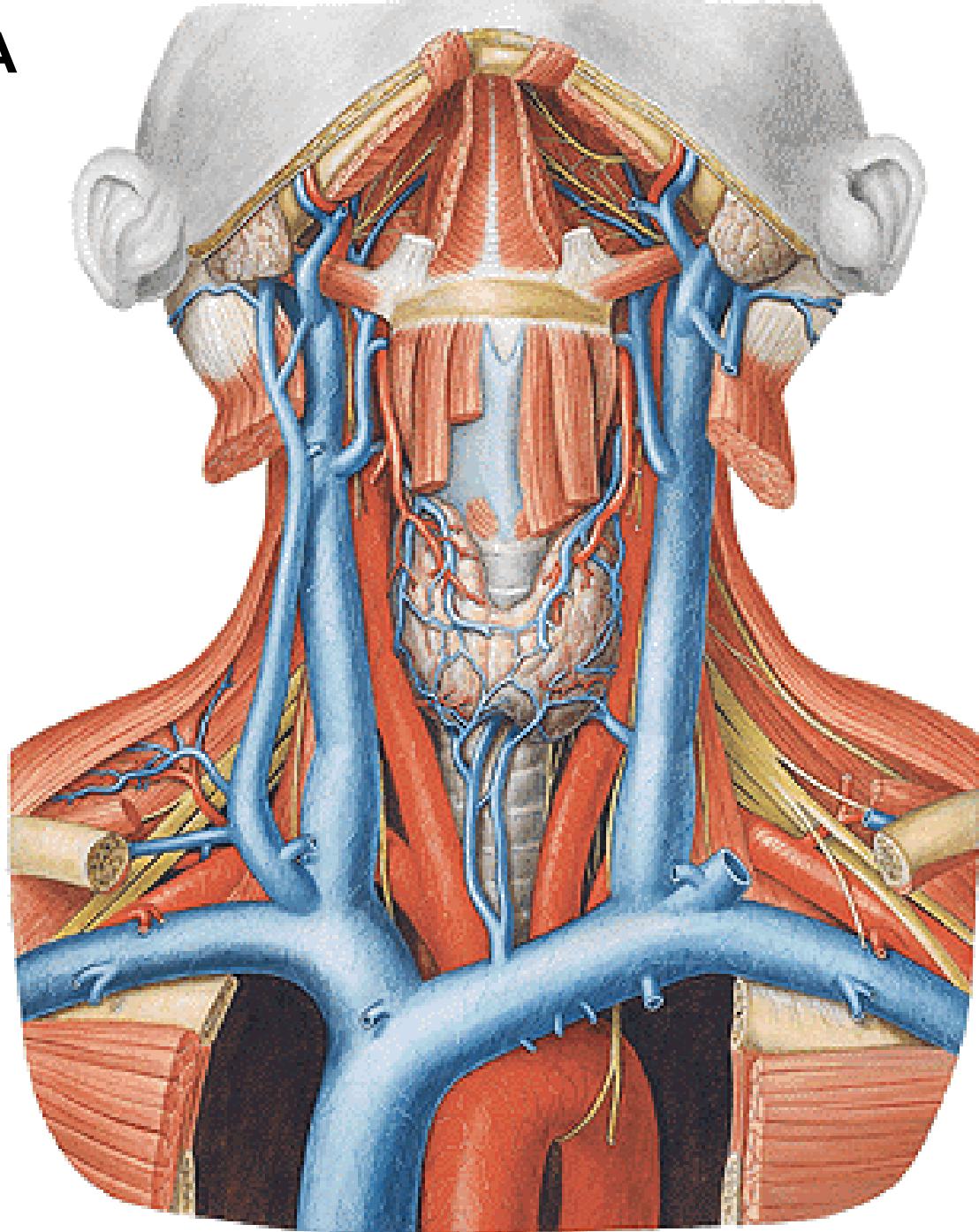
# V. CAVA SUP.

- v. brachiocephalica dx. et sin.



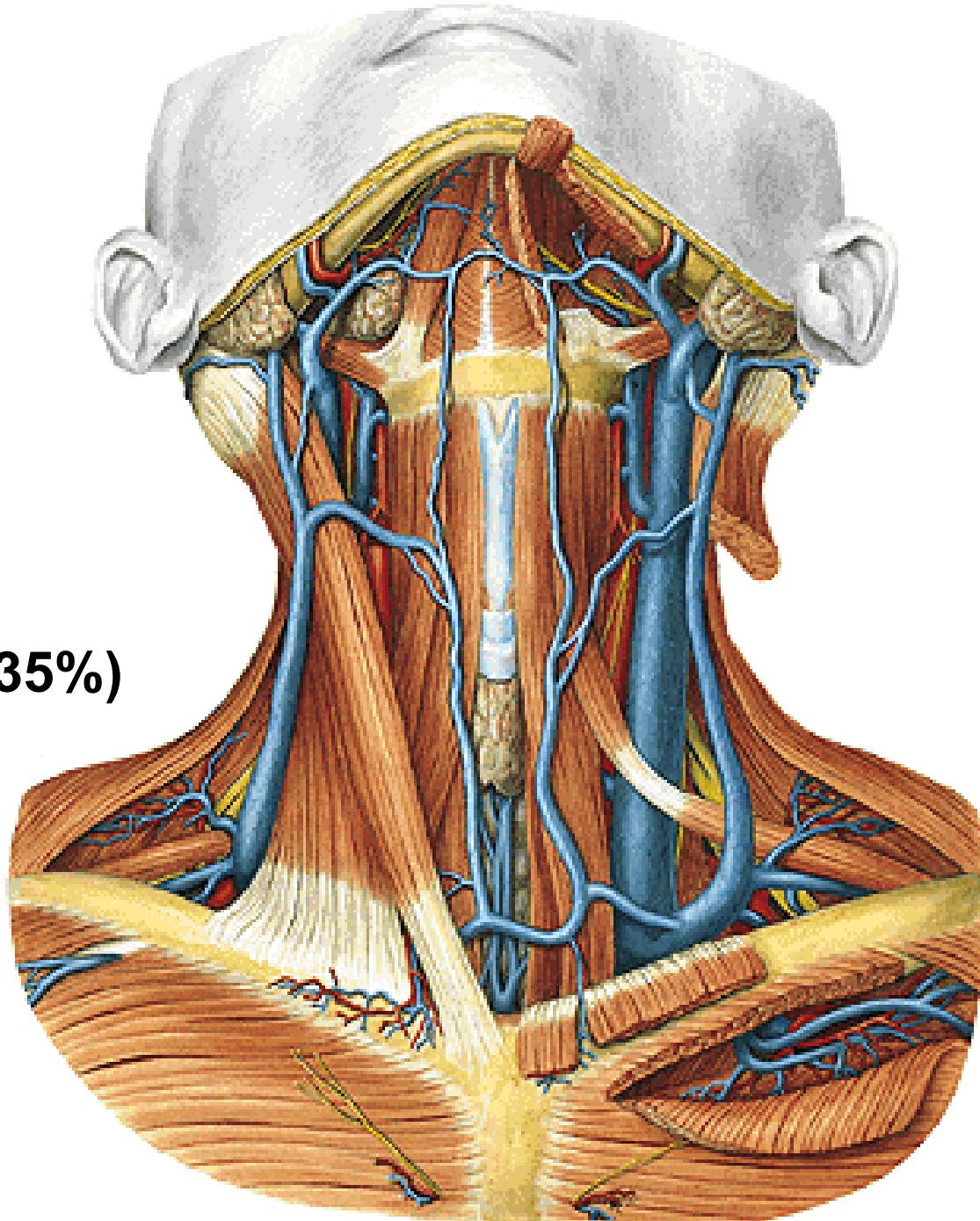
## V. BRACHIOCEPHALICA

- v. jugularis int.
- v. subclavia
- (angulus venosus)
- v. jugularis ext.
- vv. thyroideae inf.  
(v. thyroidea ima)
- vv. thymicae
- vv. tracheales
- vv. mediastinales
- vv. bronchiales
- vv. pericardiaceae
- v. vertebralis
- v. thoracica int.



## V. JUGULARIS INT.

- sinus durae matris
- vv. pharyngeae
- v. facialis
- v. lingualis
- v. thyroidea sup.  
(tr. thyrolingualis,  
tr. thyrolinguofacialis)
- v. thyroidea media
- v. retromandibularis (35%)

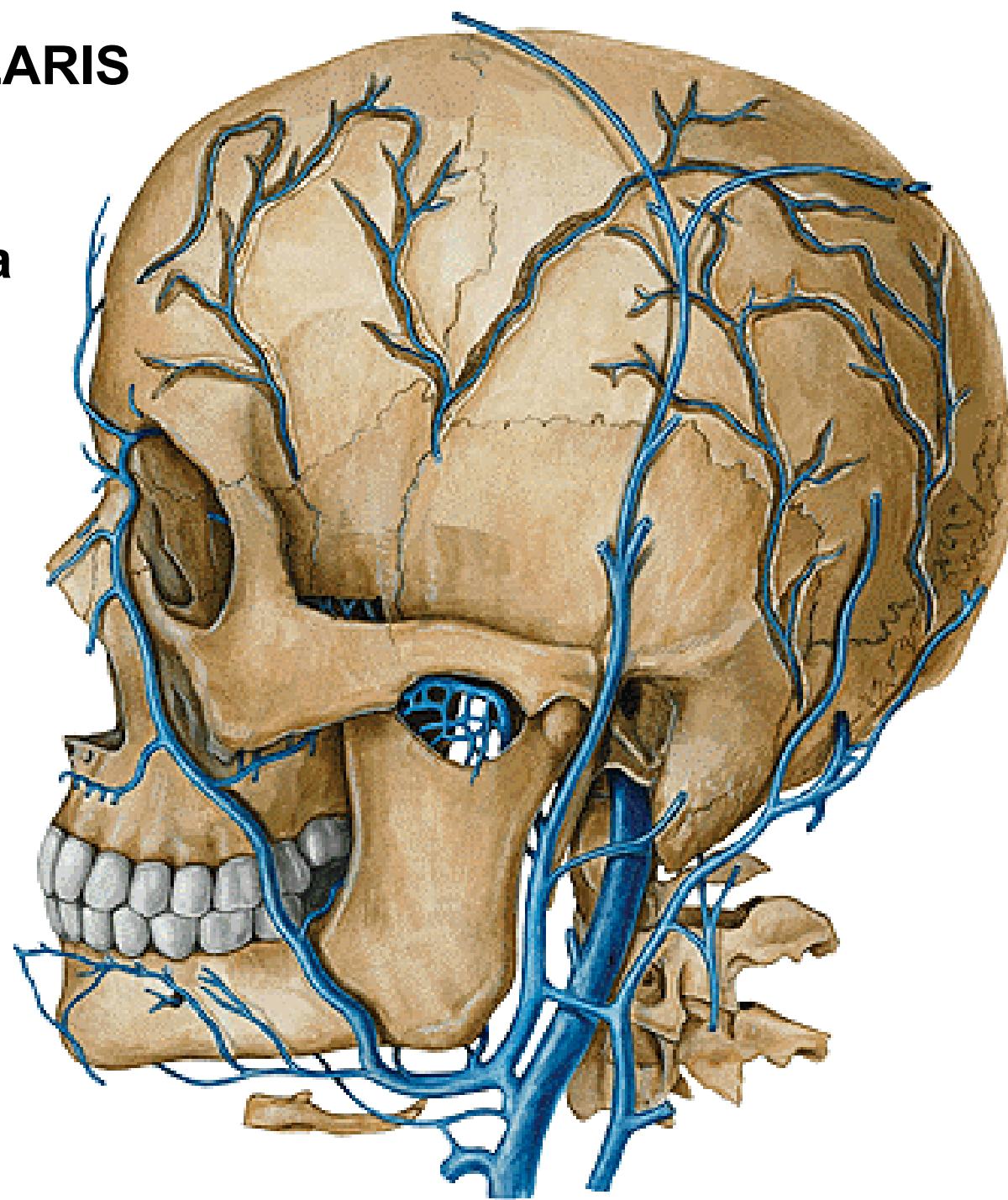


## **V. RETROMANDIBULARIS**

- v. temporalis spf.
- v. maxillaris
- v. temporalis media
- v. transversa faciei

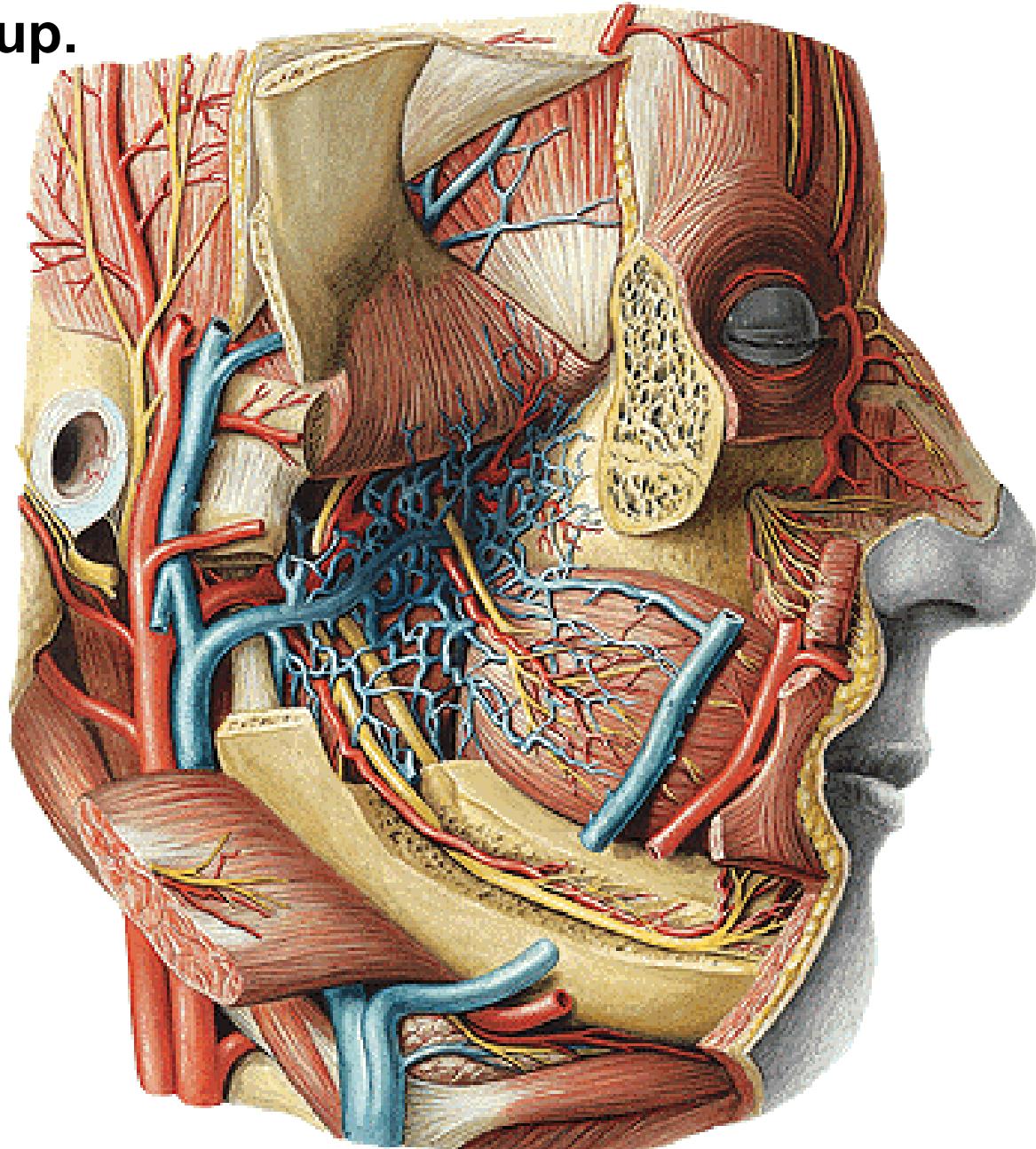
## **V. FACIALIS**

- v. angularis
- v. prof. faciei
- v. palatina ext.



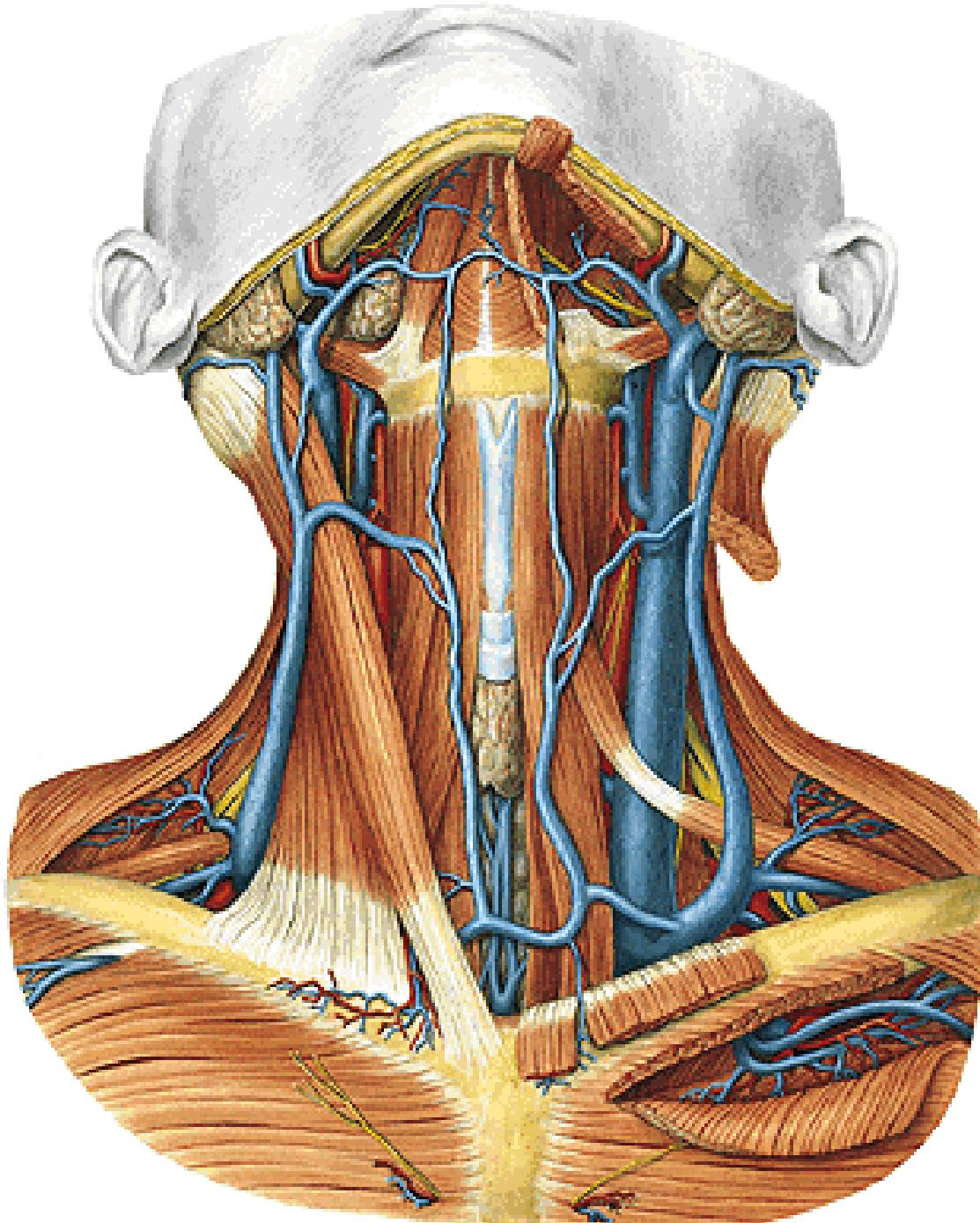
# PLEXUS PTERYGOIDEUS

- v. alveolaris inf. et sup.
- v. sphenopalatina
- vv. palatinae



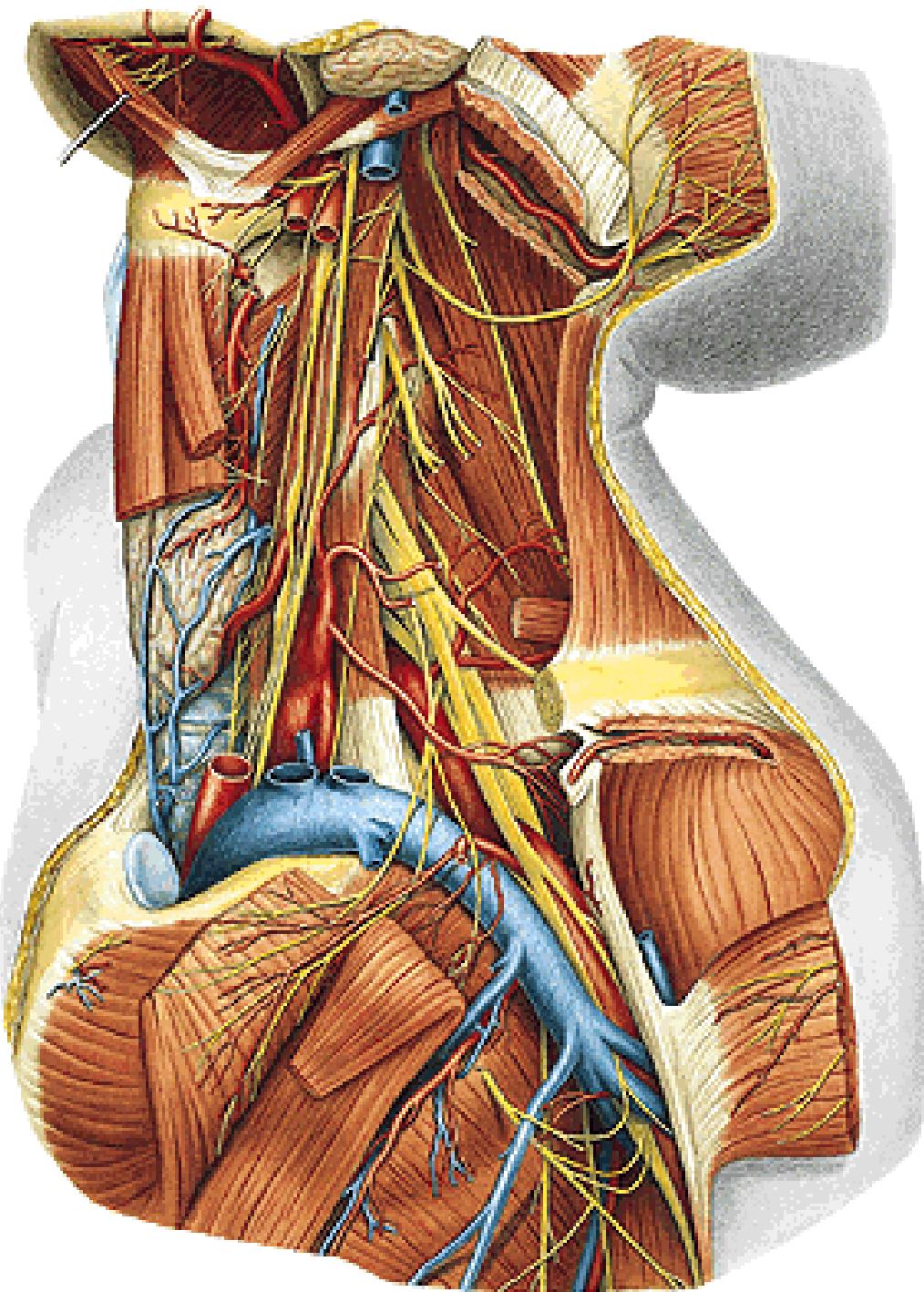
## V. JUGULARIS EXT.

- v. retromandibularis
  - v. auricularis post.
  - v. occipitalis
  - v. jugularis ant.
- arcus venosus juguli**  
(- v. mediana collis)
- v. transversa colli
  - v. suprascapularis



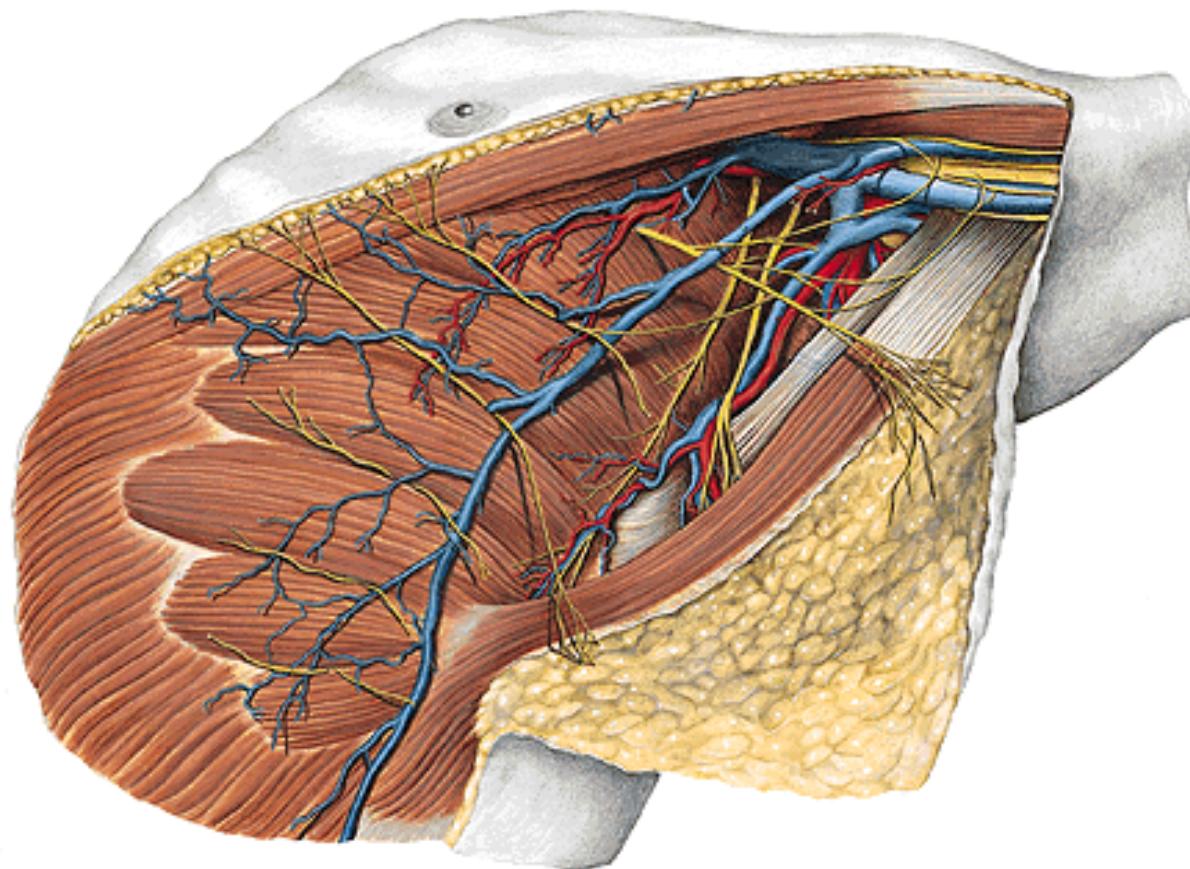
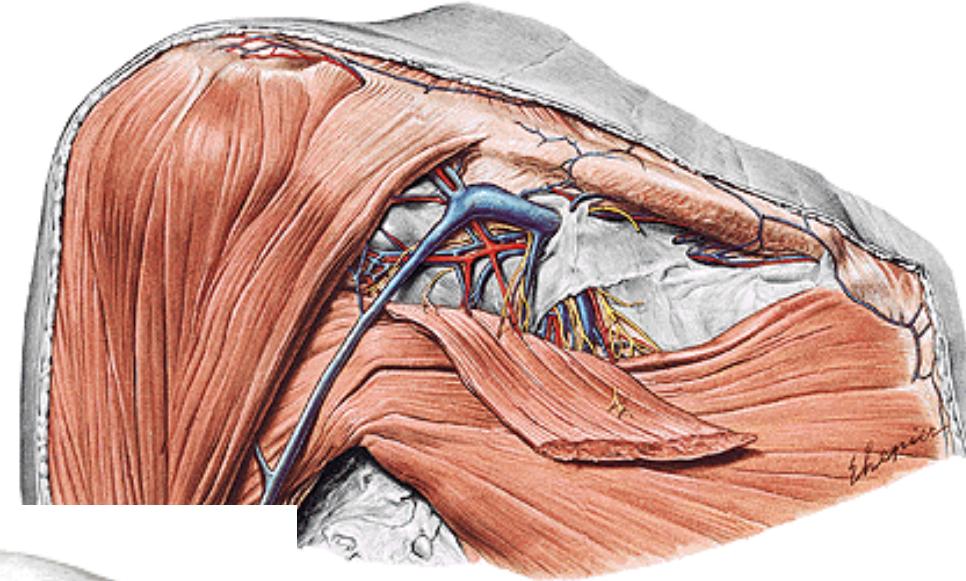
## V. SUBCLAVIA

- v. axillaris
- v. transversa colli
- v. suprascapularis



## V. AXILLARIS

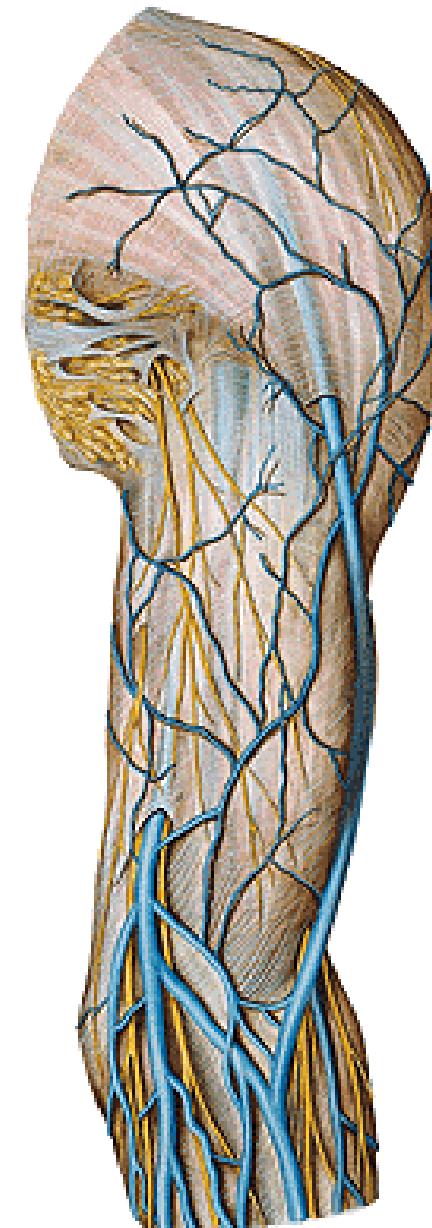
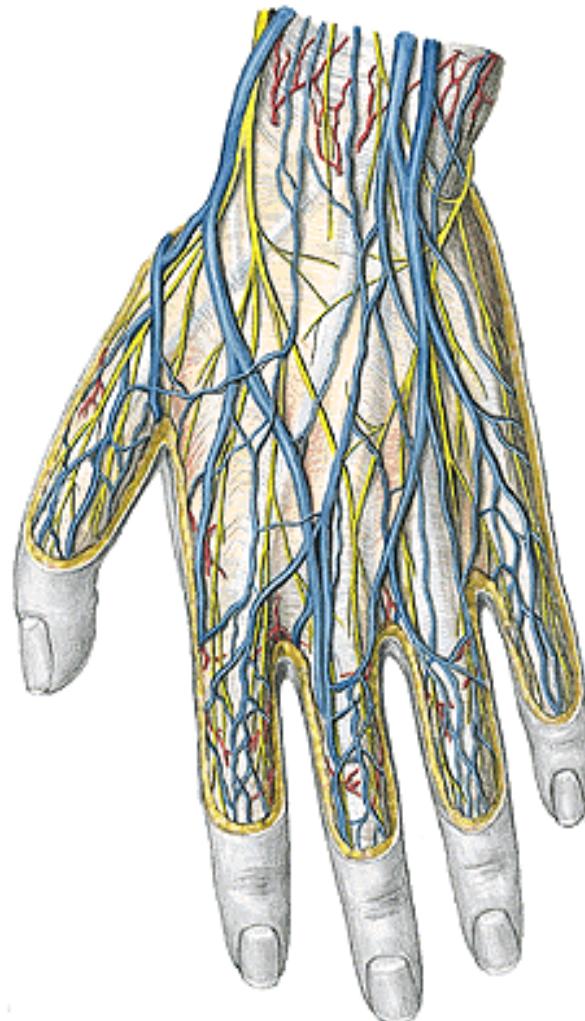
- vv. brachiales
- vv. thoracoepigastricae
- vv. costoaxillares
- v. cephalica



**Rete digitale dorsale – vv. metacarpeae dorsales – rete venosum dorsale manus (rete venosum palmare manus – vv. intercapitulares)**

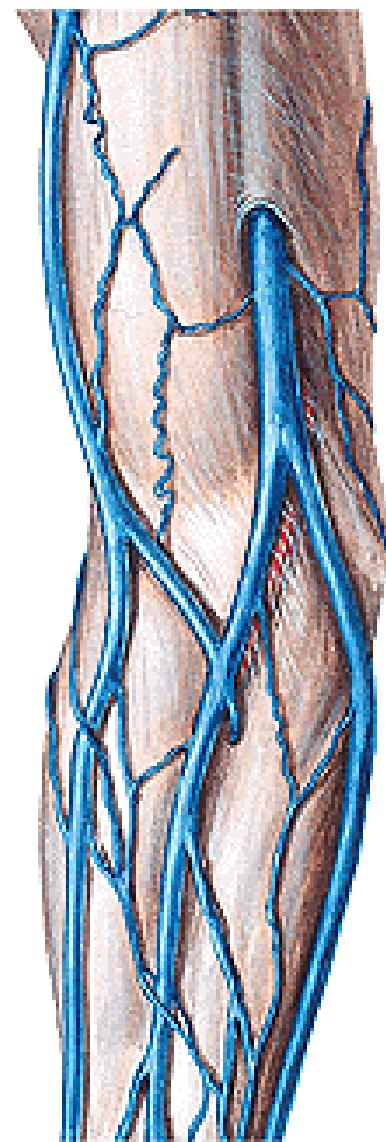
**v. basilica (hiatus basilicus)**

**v. cephalica pollicis – v. cephalica**



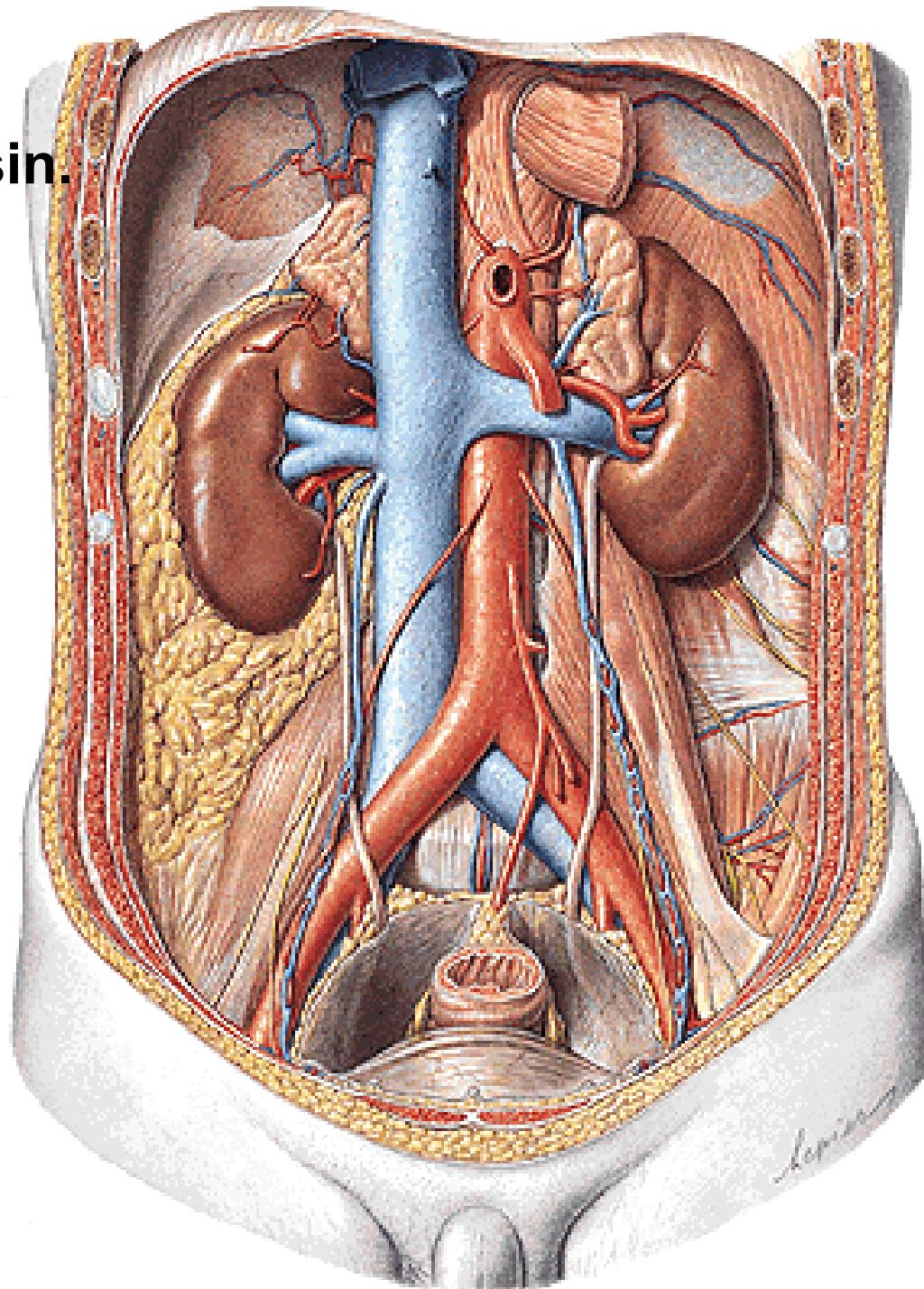
**V. mediana cubiti**

**V. mediana antebrachii – v. mediana cephalica et basilica**



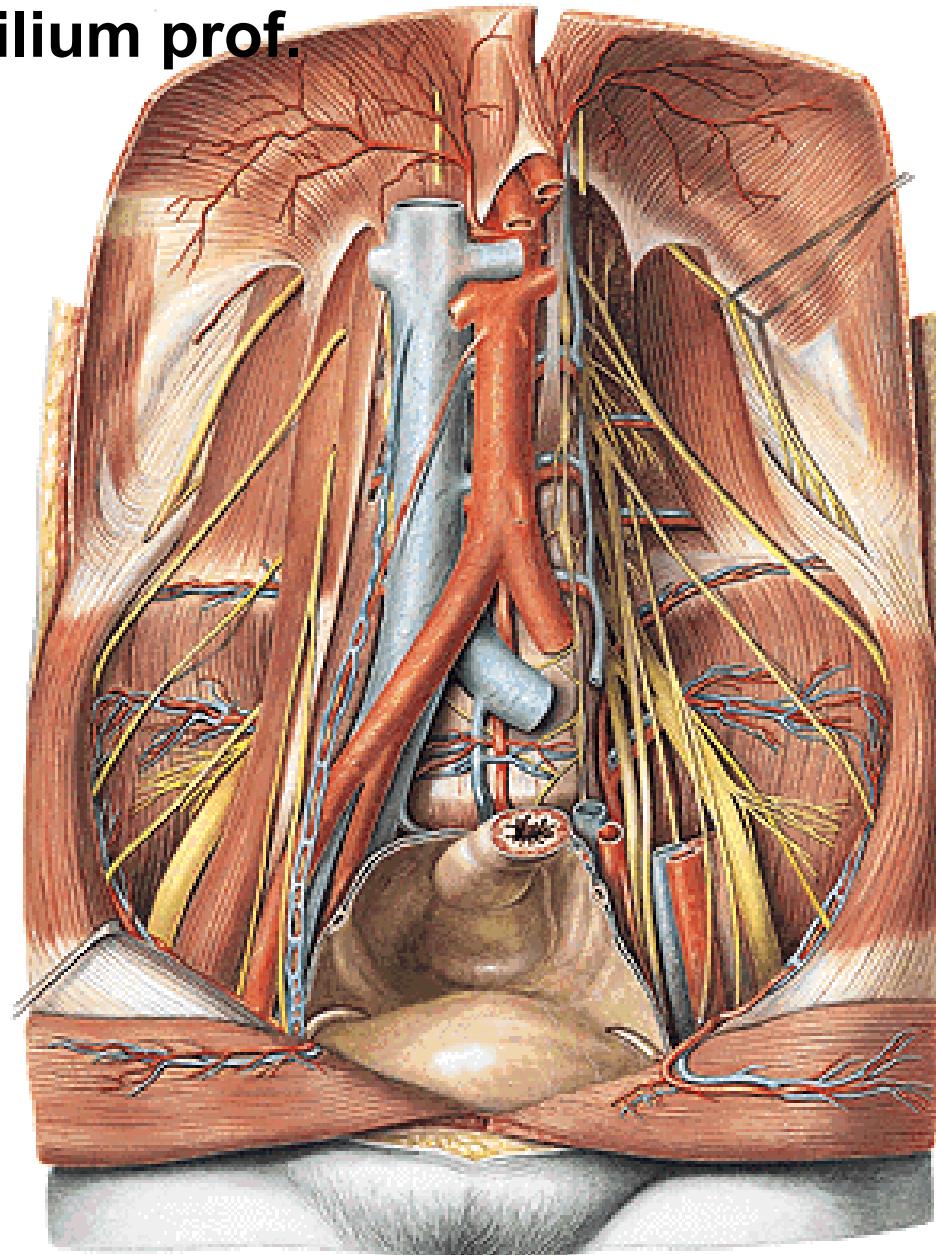
## V. CAVA INF.

- v. iliaca communis dx. et sin.
- vv. lumbales
- vv. phrenicae inf.
- v. sacralis mediana
- v. testicularis dx.  
(- v. ovarica dx.)
- vv. renales
- v. suprarenalis dx.
- vv. hepaticae



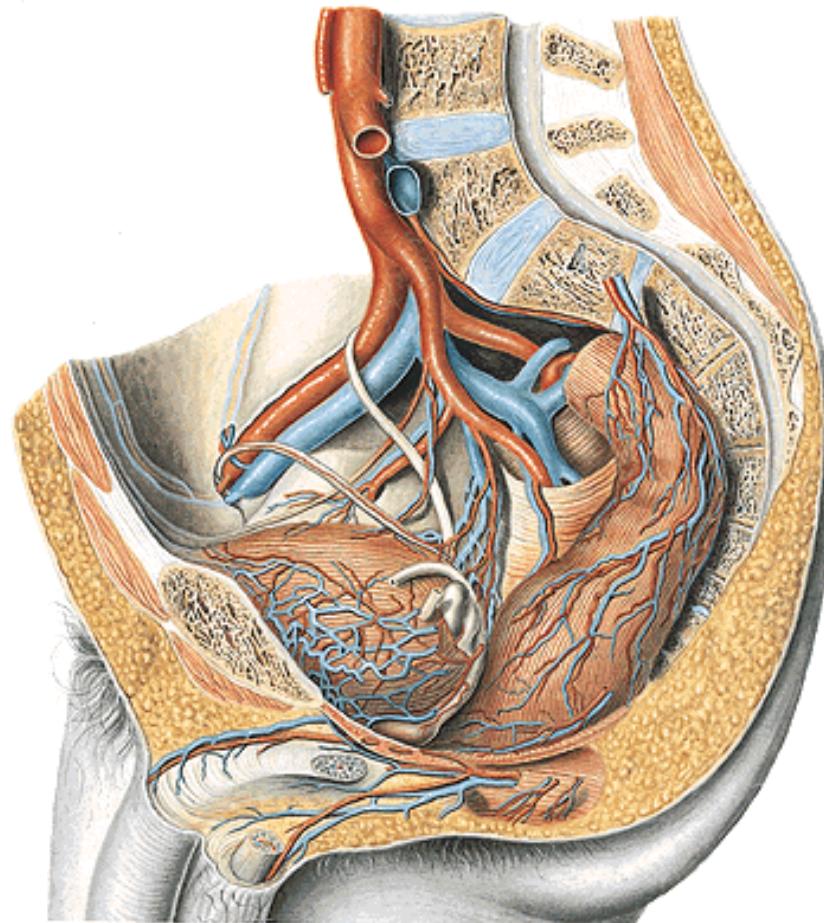
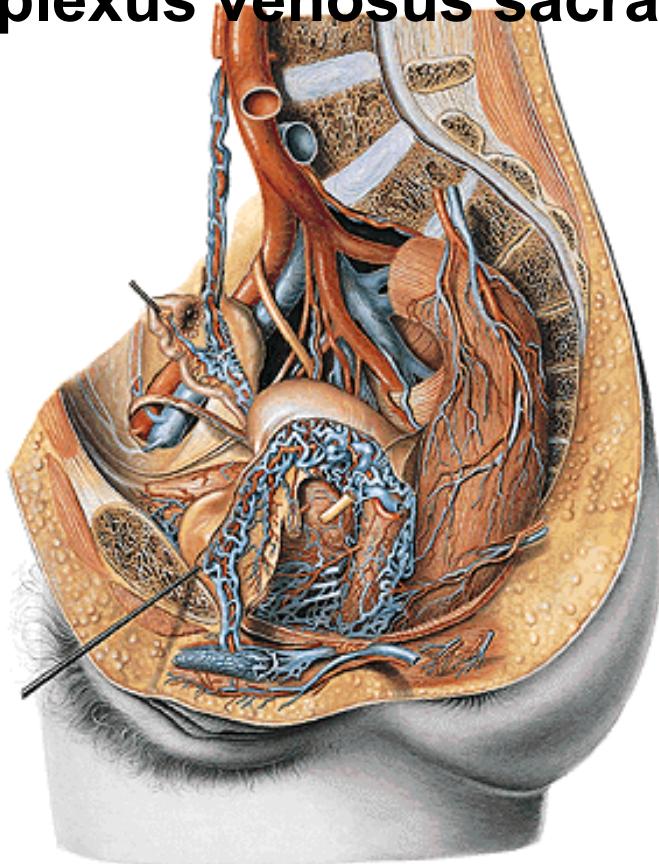
## V. ILIACA COMM.

- v. iliaca ext - v. epigastrica inf.
    - v. circumflexa ilium prof.
  - v. iliaca int.



## V. ILIACA INT.

- plexus venosus vesicalis
- plexus venosus prostaticus – v. dorsalis penis prof.  
( - plexus venosus vaginalis – v. dorsalis clitoridis prof.,  
plexus venosus uterinus)
- plexus venosus rectalis
- plexus venosus sacralis



**Vv. digitales dorsales – vv. metatarsae dorsales – rete venosum dorsale pedis, rete venosum plantare pedis  
– vv. intercapitales**

**v. marginalis med. – v. saphena magna**

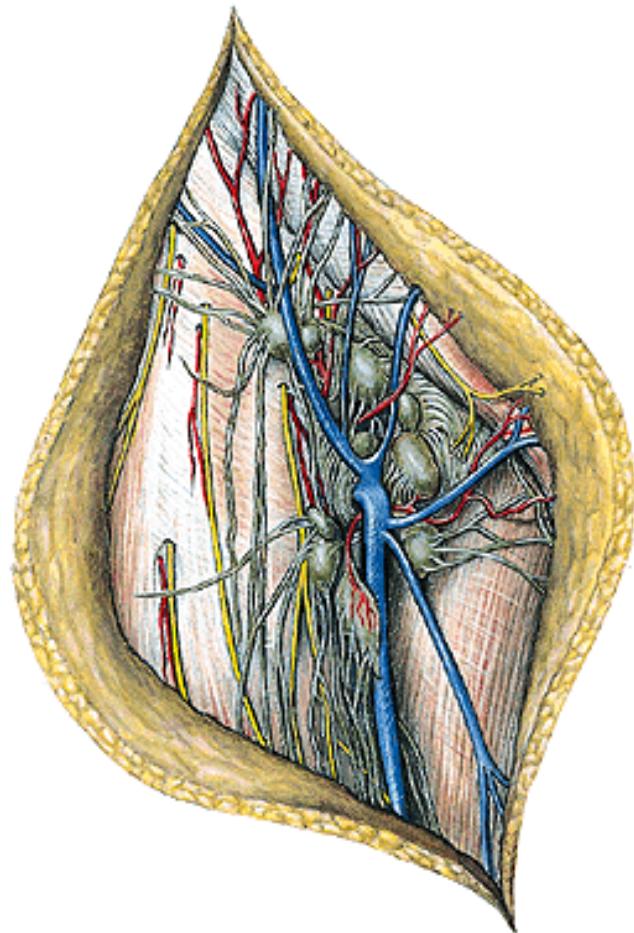
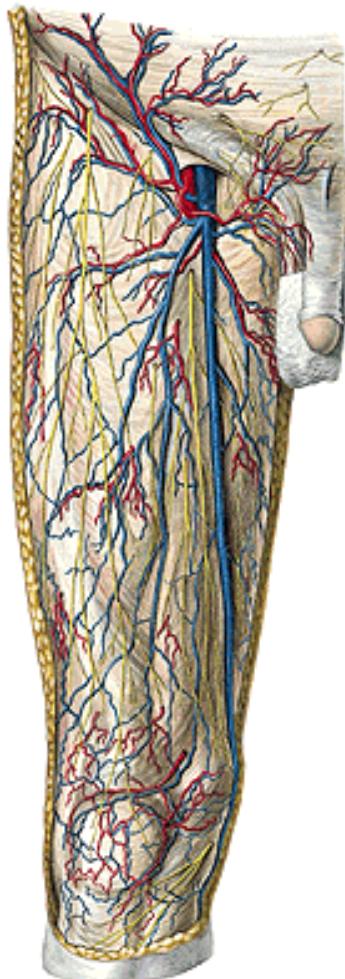
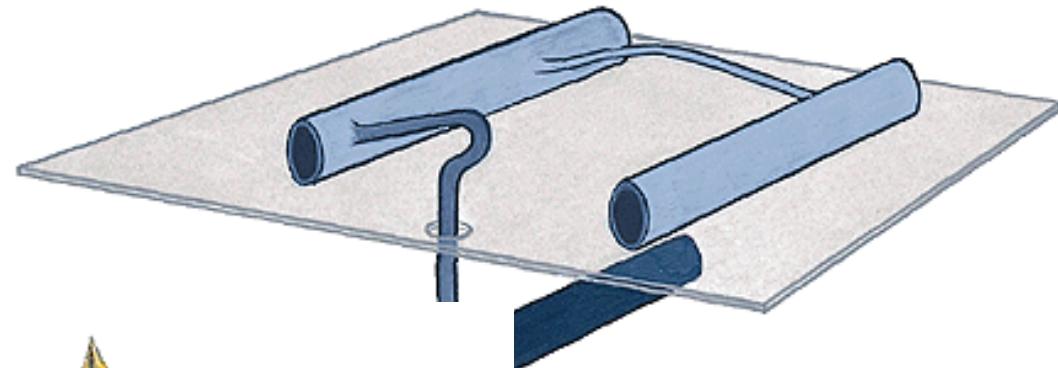
**v. marginalis lat. – v. saphena parva (v. femoropoplitea)**

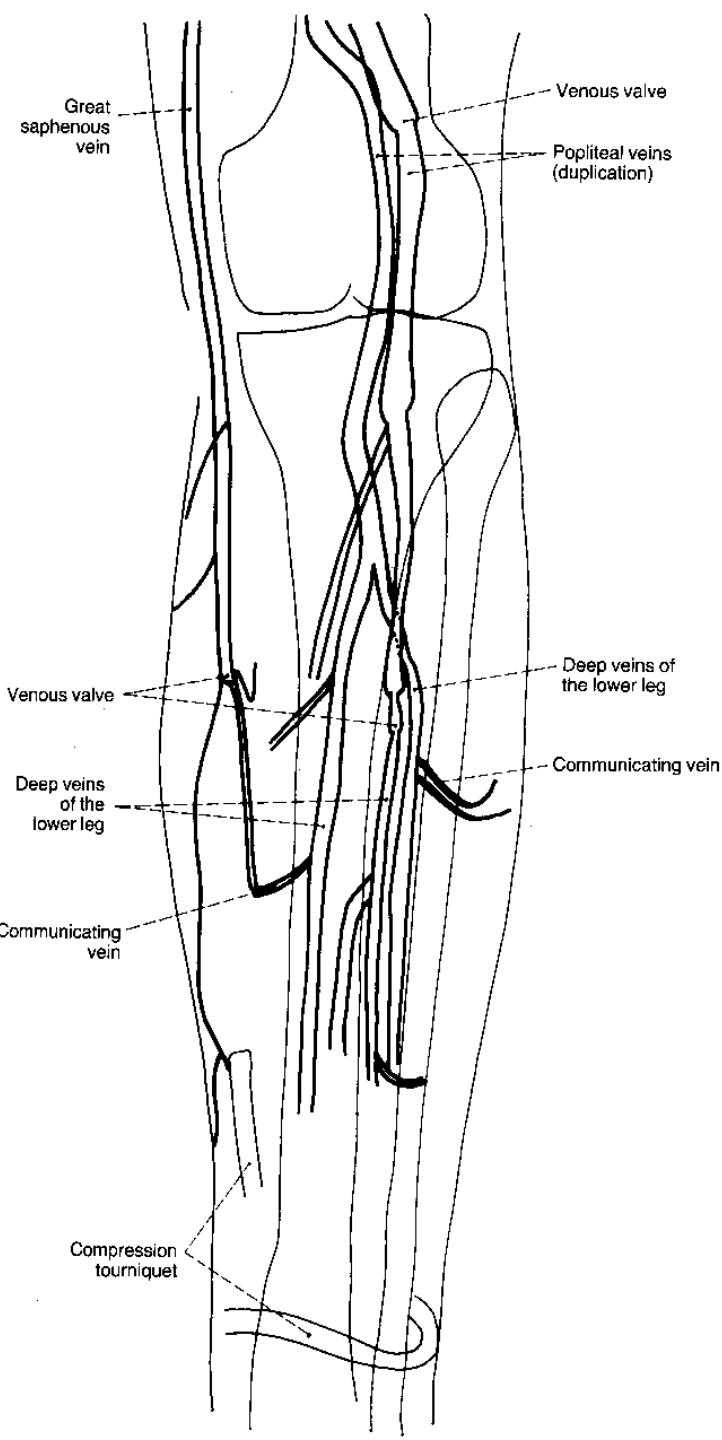
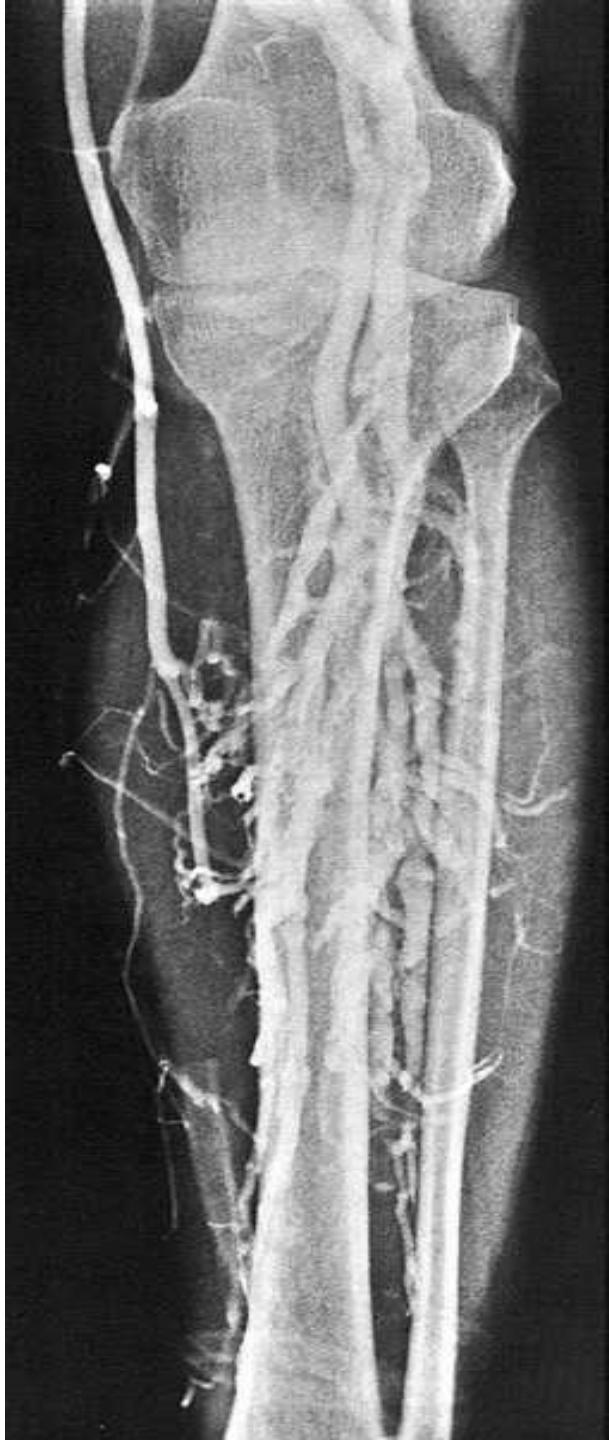


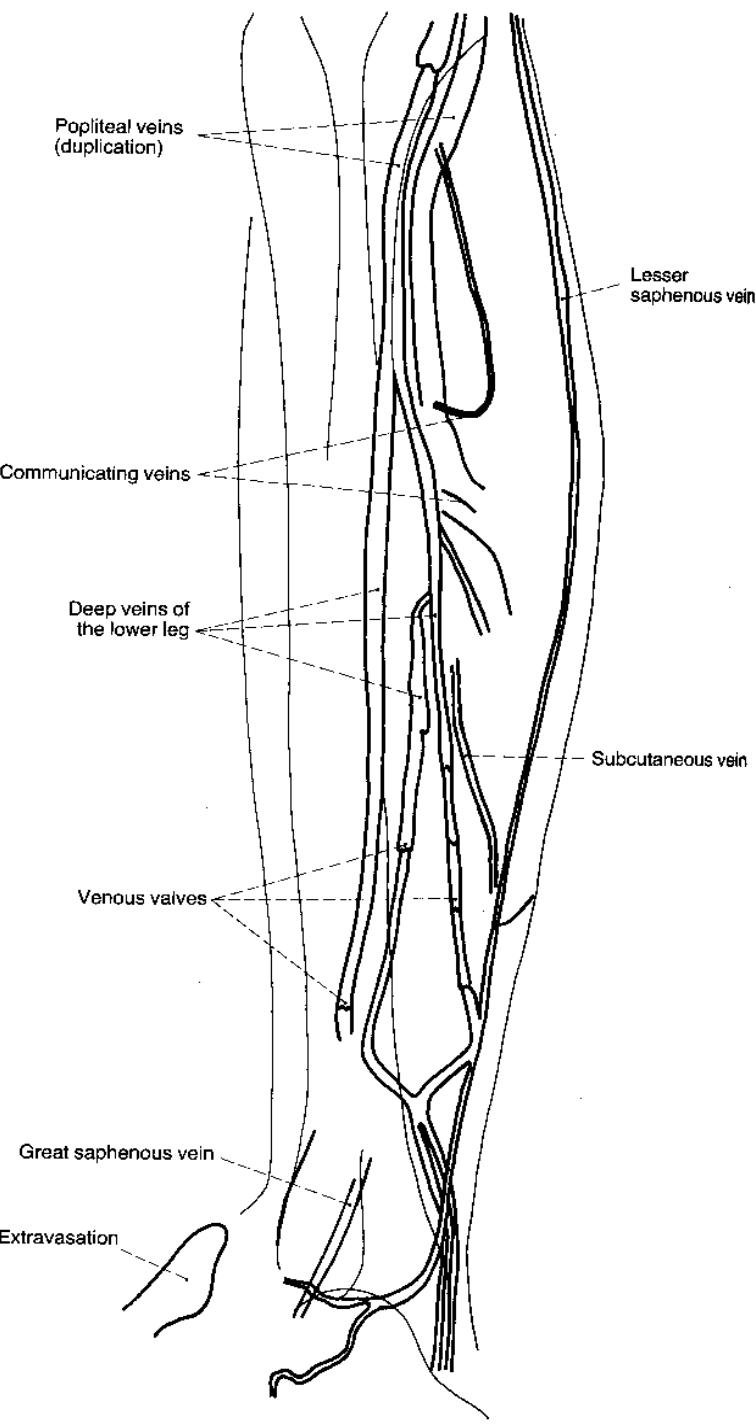
## V. SAPHENA MAGNA

- v. saphena accessoria
- v. epigastrica spf.
- v. circumflexa ilium spf.
- vv. pudendae ext.

vv. perforantes







v. saphena magna

femur



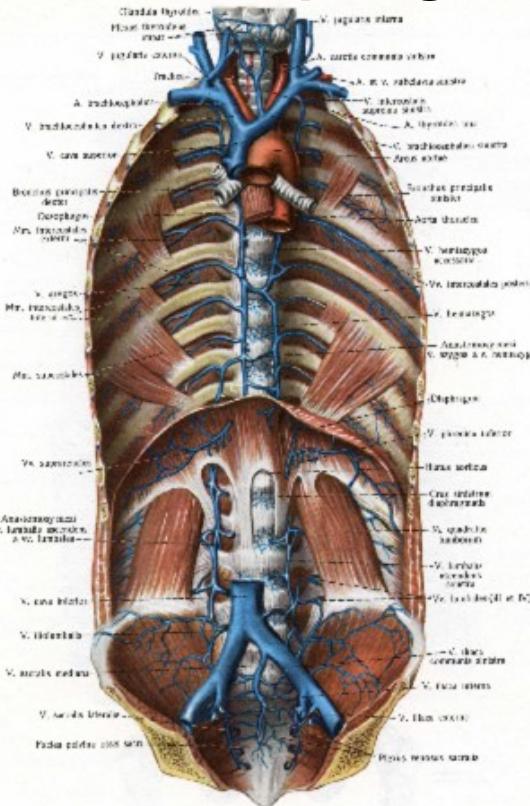
## *ULCUS CRURIS*



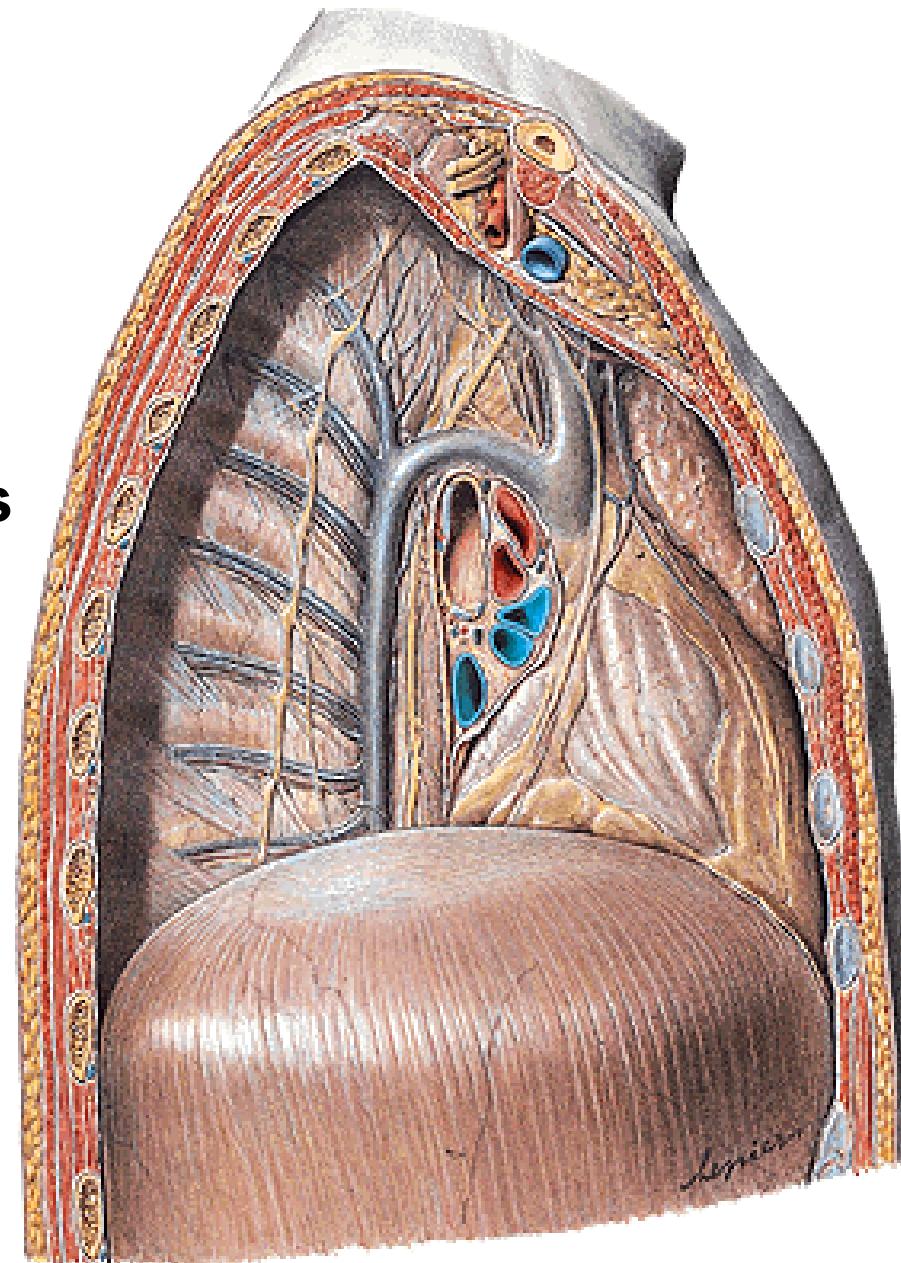


# V. AZYGOS

- v. lumbalis ascendens dx.
  - vv. lumbales dx.
- v. subcostalis dx.
- vv. intercostales post. dx.
- v. intercostalis suprema dx.
- v. hemiazygos
- vv. oesophageae, bronchiales, mediastinales

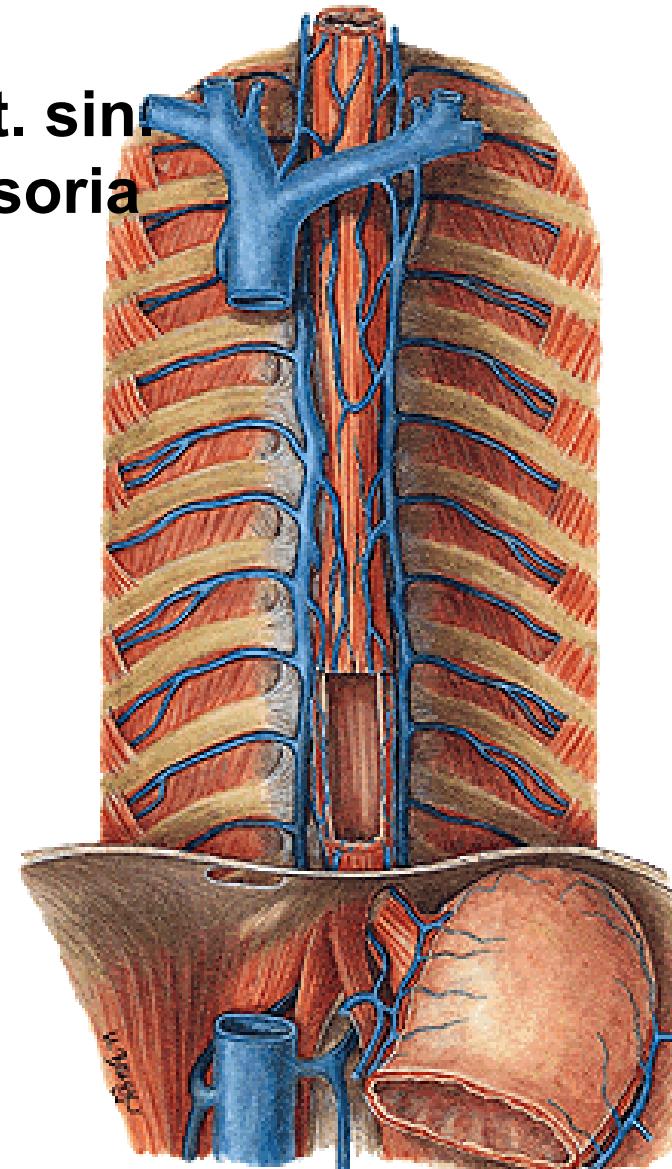
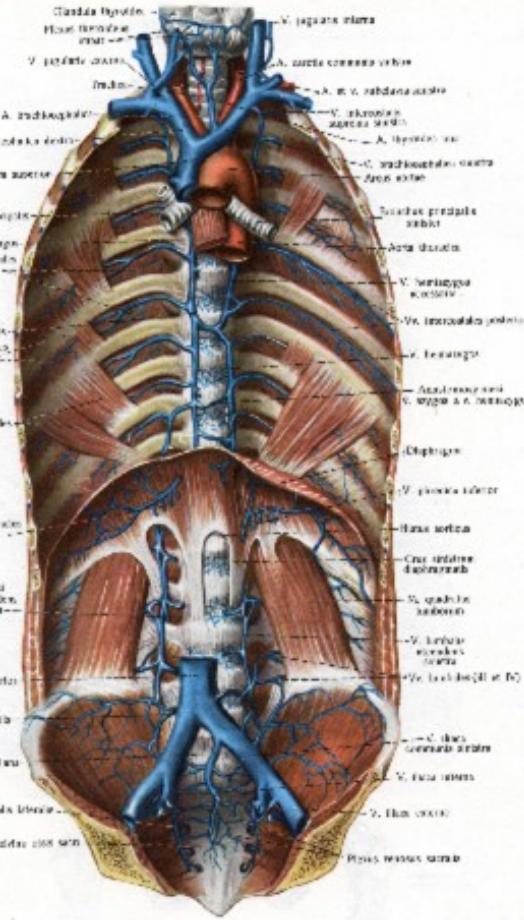


- v. phrenica sup. dx.



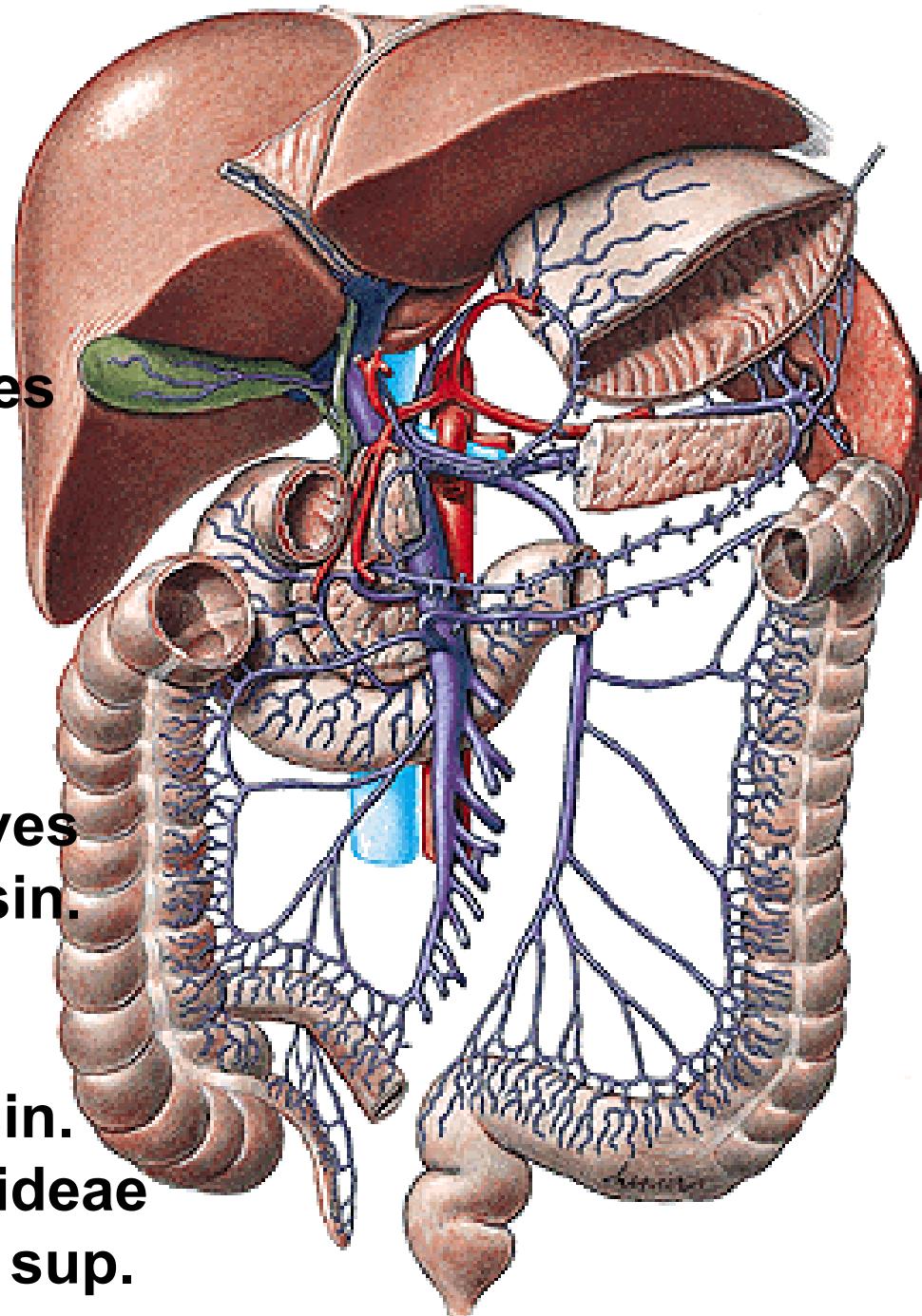
# V. HEMIAZYGOS

- v. lumbalis ascendens sin.
  - vv. lumbales sin.
- v. subcostalis sin.
- vv. intercostales post. sin.
- v. hemiazygos accessoria
  - v. intercostalis  
suprema sin.
- vv. oesophageae
- vv. bronchiales,
- vv. mediastinales
- v. phrenica sup. sin.



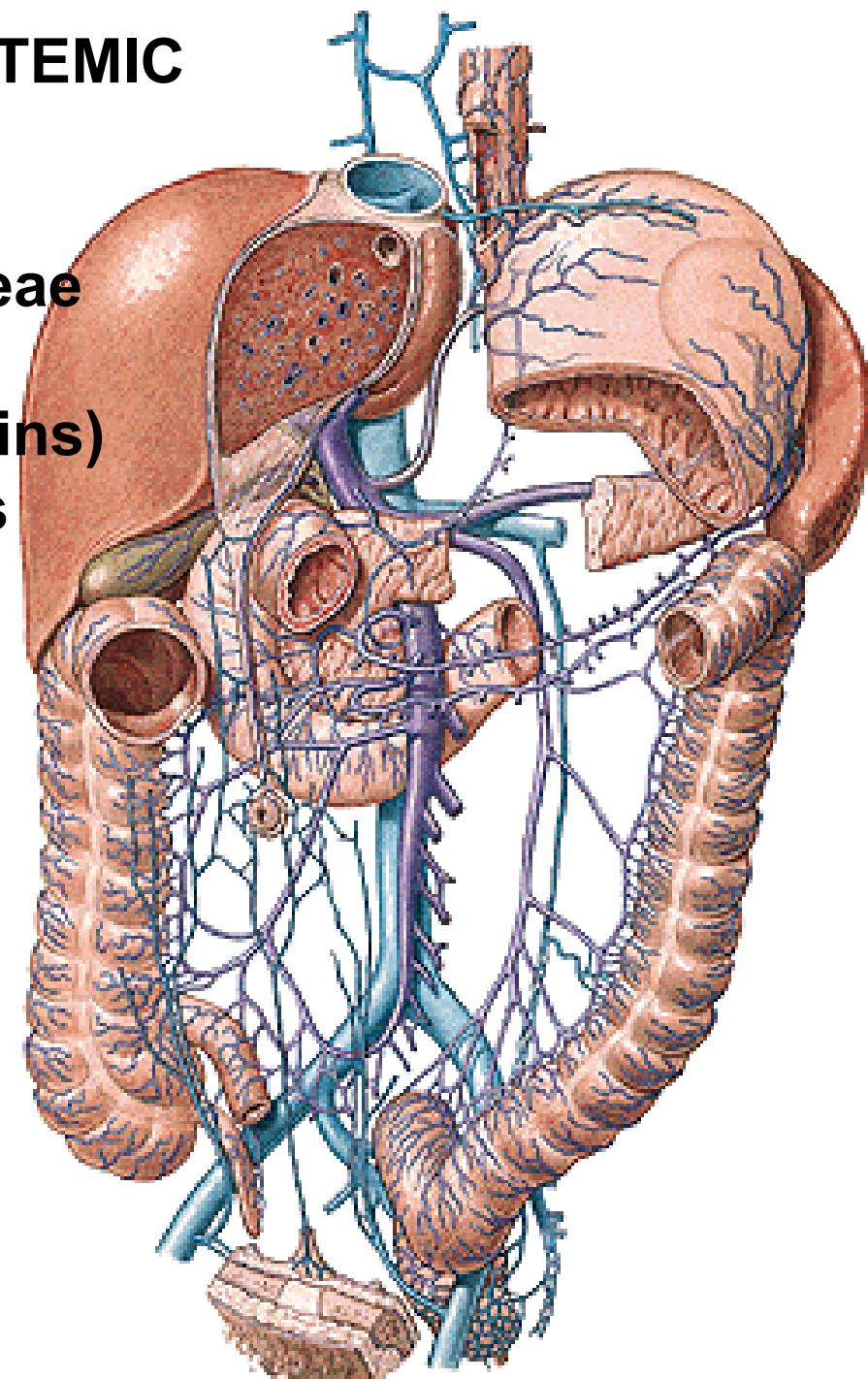
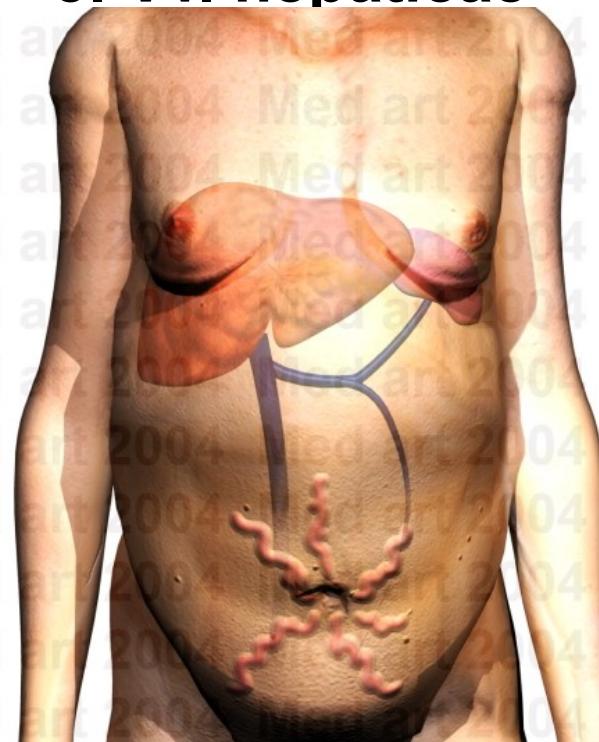
## V. PORTAE

- vv. cysticae
- v. gastrica sin.
- v. gastrica dx.
- v. mesenterica sup.
  - vv. pancreaticoduodenales
  - vv. pancreaticae
  - v. gastroepiploica dx.
  - vv. jejunales et ileales
  - v. ileocolica
  - v. colica dx. et media
- v. lienalis- vv. gastricae breves
  - v. gastroepiploica sin.
  - vv. pancreaticae
  - v. mesenterica inf.
    - v. colica sin.
    - vv. sigmoideae
    - v. rectalis sup.



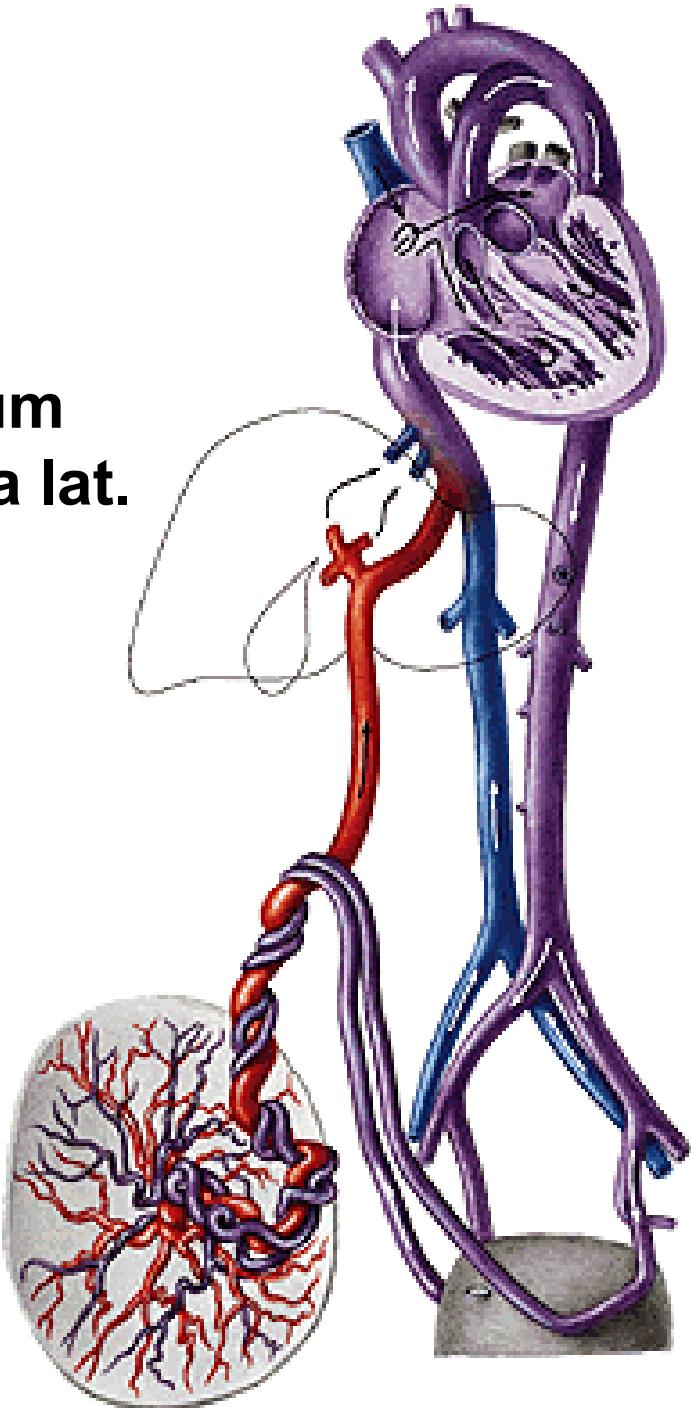
# **PORTAL-CAVAL / PORTAL-SYSTEMIC ANASTOMOSES**

- 1. Vv. gastricae – vv. oesophageae**
- 2. Vv. paraumbilicales**  
**(caput Medusae, Burrow's veins)**
- 3. Plexus rectalis - hemorrhoids**
- 4. Retzius' veins**
- 5. Vv. hepaticae – vv. phrenicae**



## FETAL CIRCULATION

- v. umbilicalis – lig. teres hepatis
- ductus venosus – lig. venosum
- foramen ovale – fossa ovalis
- ductus arteriosus – lig. arteriosum
- aa. umbilicales – ligg. umbilicalia lat.



Illustrations were copied from:

**Atlas der Anatomie des Menschen/Sobotta**

**Putz,R., und Pabst,R. 20. Auflage. München:  
Urban & Schwarzenberg, 1993)**