

VEINS

V. CAVA SUP.

6 cm long, 2-3 cm in diameter

v. brachiocephalica dx. et sin.

V. BRACHIOCEPHALICA

v. jugularis interna and **v. subclavia** (=venous angle, angulus venosus)

truncus lymphaticus dexter, ductus thoracicus

v. jugularis ext. is - v. retromandibularis, v. occipitalis and v. auricularis post.

vv. thyroideae inf. from the lower part of plexus thyroideus impar that receives also

- vv. laryngeae inf.

- vv. tracheales

(sometimes **v. thyroidea ima** instead – v. brachiocephalica sin.)

vv. thymicae, tracheales, mediastinales, bronchiales, pericardiacae

v. vertebralis - plexus venosus suboccipitalis

v. thoracica int.

v. intercostalis suprema anastomoses with v.azygos(right) and v. hemiazygos accessoria (left)

V. JUGULARIS INT.

sinus sigmoideus - bulbus superior

Intracranial tributaries: sinus durae matris

Extracranial tributaries:

vv. pharyngeae - plexus pharyngeus

v. facialis – **v. angularis**

- **v. prof. faciei** – plexus pterygoideus

- **v. palatina ext.**

v. lingualis

v. thyroidea sup. – plexus thyroideus impar (v. laryngea sup.)

(tr. thyrolingualis, thyrolinguofacialis)

v. thyroidea media

v. retromandibularis (35%)

v. temporalis media

v. transversa faciei

Plexus pterygoideus:

v. alveolaris inf. et sup.

v. sphenopalatina

vv. palatinae

Blood from the plexus flows:

through **vv. ophthalmicae** > sinus cavernosus

through **v. maxillaris** > v. retromandibularis

through **v. prof. faciei** > v. facialis

v. jugularis ext.:

v. retromandibularis . – **v. temporalis spf.**

- **v. maxillaris**

v. auricularis post.

v. occipitalis

v. jugularis ant. (**v. mediana colli**) – arcus venosus juguli

v. transversa colli
v. suprascapularis

V. SUBCLAVIA

v. transversa colli
v. suprascapularis

V. AXILLARIS

vv. thoracoepigastricae – vv. subcutaneae abdominis
v. thoracica lat.
vv. costoaxillares
v. cephalica

VEINS OF THE UPPER EXTREMITY

Deep: vv. digitales, radiales, ulnares, interosseae antebrachii, brachiales, paired, accompany arteries

Subcutaneous: **rete digitale dorsale > vv. metacarpeae dorsales – rete venosum dorsale manus (vv. intercapitulares)** > v. basilica and v. cephalica pollicis

V. basilica – hiatus basilicus – vv. brachiales

V. cephalica pollicis > v. cephalica > v. axillaris

V. mediana cubiti

V. mediana antebrachii - v. mediana cephalica + v. mediana basilica.

V. CAVA INF.

Parietal tributaries:

v. iliaca com. dx. et sin.

vv. lumbales – 4 pairs, v. lumbalis ascendens

vv. phrenicae inf.

v. sacralis mediana

Visceral tributaries

v. testicularis dx. - plexus pampiniformis

v. ovarica dx. - plexus venosus ovaricus

vv. renales. The left vein – v. suprarenalis sin., testicularis sin. or v. ovarica sin.

v. suprarenalis dx.

2-3 vv. hepaticae

V. ILIACA COMMUNIS

- v. iliaca int. et ext.

V. ILIACA INT.

Parietal tributaries accompany arteries.

Visceral tributaries arise from plexuses:

1. Plexus venosus vesicalis

2.a) Plexus venosus prostaticus – v. dorsalis penis prof.

2.b) Plexus venosus vaginalis – v. dorsalis clitoridis prof.

>vv. vesicales >v. iliaca. int

3. Plexus venosus uterinus anastomoses with plexus ovaricus and vaginalis > vv. uterinae, vaginales

4. Plexus venosus rectalis - submucosal plexus - **v. rectalis sup.** > v. portae (hemorrhoids).

The perirectal (outer) plexus - **v. rectalis media et inf.**, - v. pudenda int. > v. iliaca int. > v. cava inf.

5. **Plexus venosus sacralis** > v. sacralis mediana et lat.

V. ILIACA EXT.

v. epigastrica inf.

v. circumflexa ilium prof.

VEINS OF THE LOWER EXTREMITY

Deep: **vv. digitales plantares, metatarsae plantares, tibiales post. et ant., peroneae, poplitea, femoralis, profunda femoris**, paired.

Subcutaneous: **vv. digitales dors.** > **vv. metatarsae dors.** – **rete venosum dorsale pedis, rete venosum plantare pedis** –connected by **vv. intercapitales, v. marginalis med. et lat.**

V. SAPHENA PARVA

v. marginalis lat.

v. femoropoplitea

> v. poplitea

V. SAPHENA MAGNA

v. marginalis med.

v. saphena accessoria

v. epigastrica spf.

v. circumflexa ilium spf.

vv. pudendae ext.

> v. femoralis

V. PORTAE

vv. cysticae - gall bladder

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 inf.

PORTO-CAVAL/PORTO-SYSTEMIC ANASTOMOSES

1. Vv. gastricae – vv. oesophageae – esophageal varices

2. Connections around the umbilicus – **vv. paraumbilicales** (lig. teres hepatis) - subcutaneous veins of the anterior abdominal wall (caput Medusae).

3. Burrow's veins - plexus venosus vesicalis - paraumbilical veins.

4. Plexus rectalis – hemorrhoids.

5. Retzius' veins: v. lienalis, vv. mesentericae – vv. renales, lumbales.
6. Connections between hepatic veins and the phrenic veins – bare area of the liver.

CAVO-CAVAL ANASTOMOSES

V. azygos

v. lumbalis ascendens dx. and v. subcostalis dx.

vv. intercostales post. dx. (8-10)

v. intercostalis suprema dx. – vv. intercostales post. dx. (2-3)

v. hemiazygos – v. lumbalis asc. sin. – vv. lumbales sin.

- **vv. intercostales post. sin. (3-5)**

- **v. hemiazygos accessoria** - vv. intercostales post. sin.(5)

- v. intercostalis suprema sin.

- **vv. oesophageae, bronchiales, mediastinales**

- **v. phrenica sup. sin.**

vv. oesophageae, bronchiales, mediastinales

v. phrenica sup. dx.