

NERVE & BLOOD SUPPLY OF UPPER LIMBS

NERVE SUPPLY

BRACHIAL PLEXUS

The brachial plexus is a network (plexus) of nerves formed by the anterior rami of the lower four cervical nerves and first thoracic nerve (C5, C6, C7, C8, and T1). This plexus extends from the spinal cord, through the cervicoaxillary canal in the neck, over the first rib, and into the armpit. It supplies afferent and efferent nerve fibers to the chest, shoulder, arm, forearm, and hand.

Branches of brachial plexus are:

- AXILLARY NERVE
- MUSCULOCUTANEOUS NERVE
- RADIAL NERVE
- ULNAR NERVE
- MEDIAN NERVE

AXILLARY NERVE

The axillary nerve or the circumflex nerve is a nerve of the human body, that originates from the brachial plexus.

MUSCULOCUTANEOUS NERVE

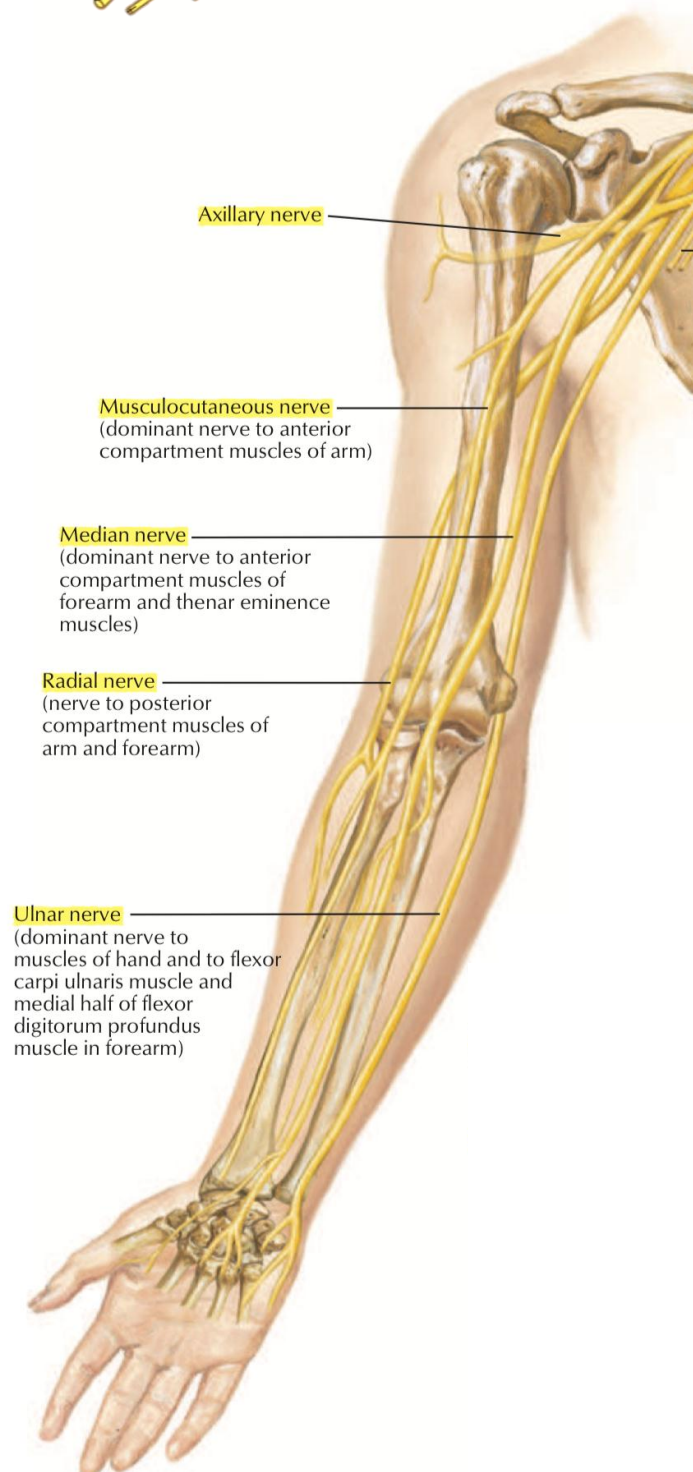
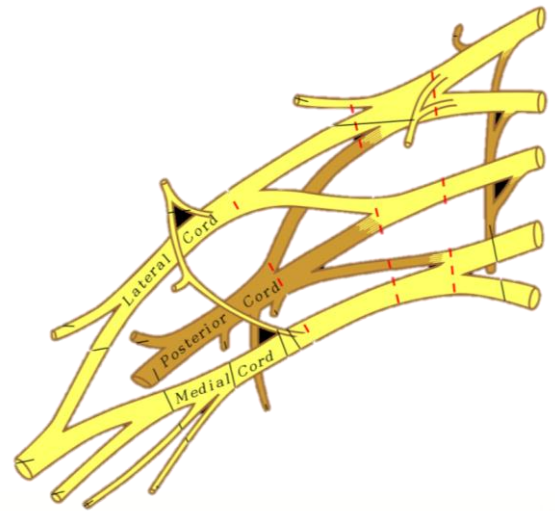
The Musculocutaneous nerve is a large branch of the Brachial Plexus. It is called musculocutaneous nerve as it supplies the muscles of the front of the arm and skin

RADIAL NERVE

The radial nerve is a nerve in the human body that supplies the posterior portion of the upper limb.

ULNAR NERVE

the ulnar nerve is a nerve that runs near the ulna bone. This nerve is directly connected to the little finger, and the adjacent half of the ring finger, innervating the palmar aspect of these fingers, including both front and back of the tips, perhaps as far back as the fingernail beds.



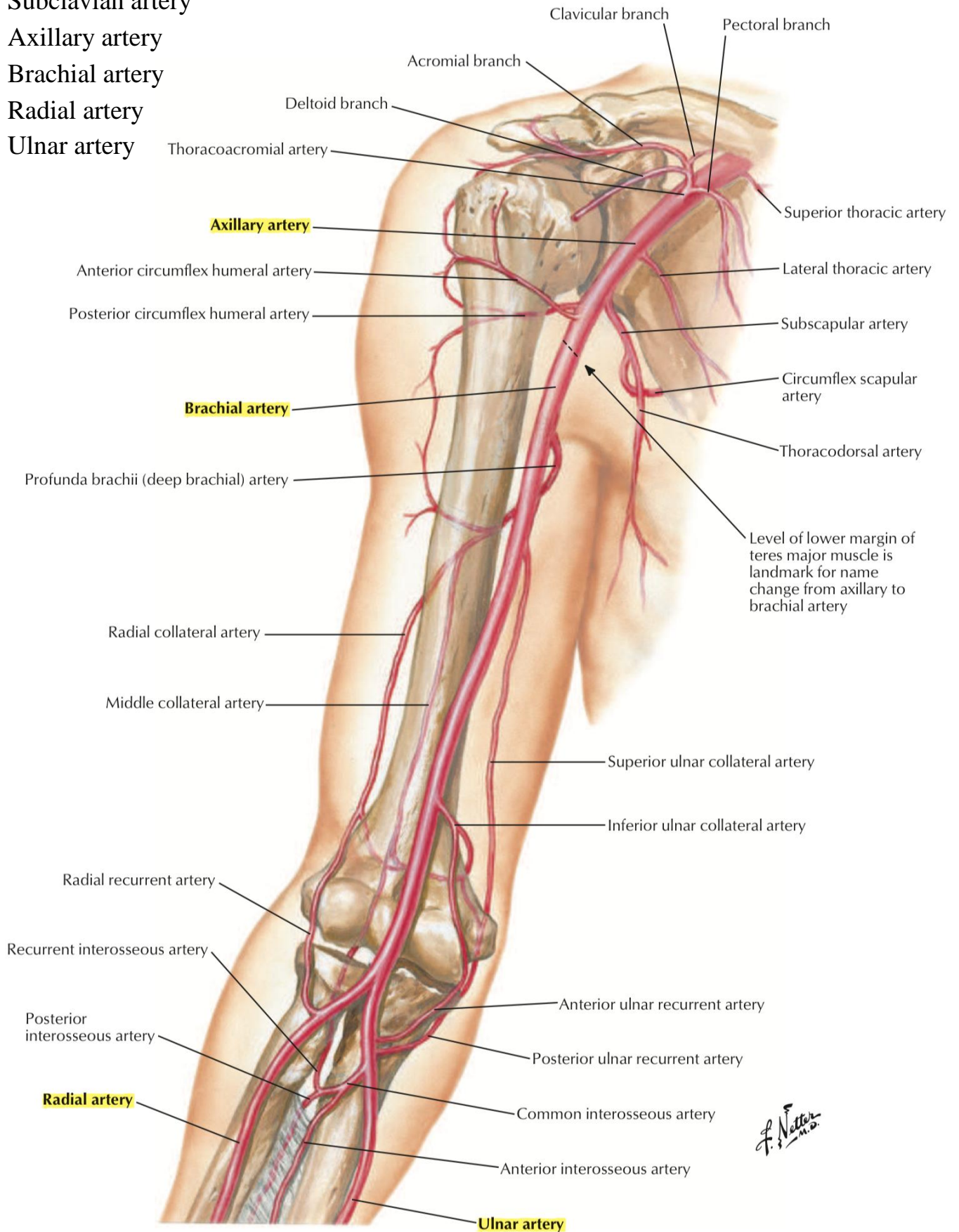
MEDIAN NERVE

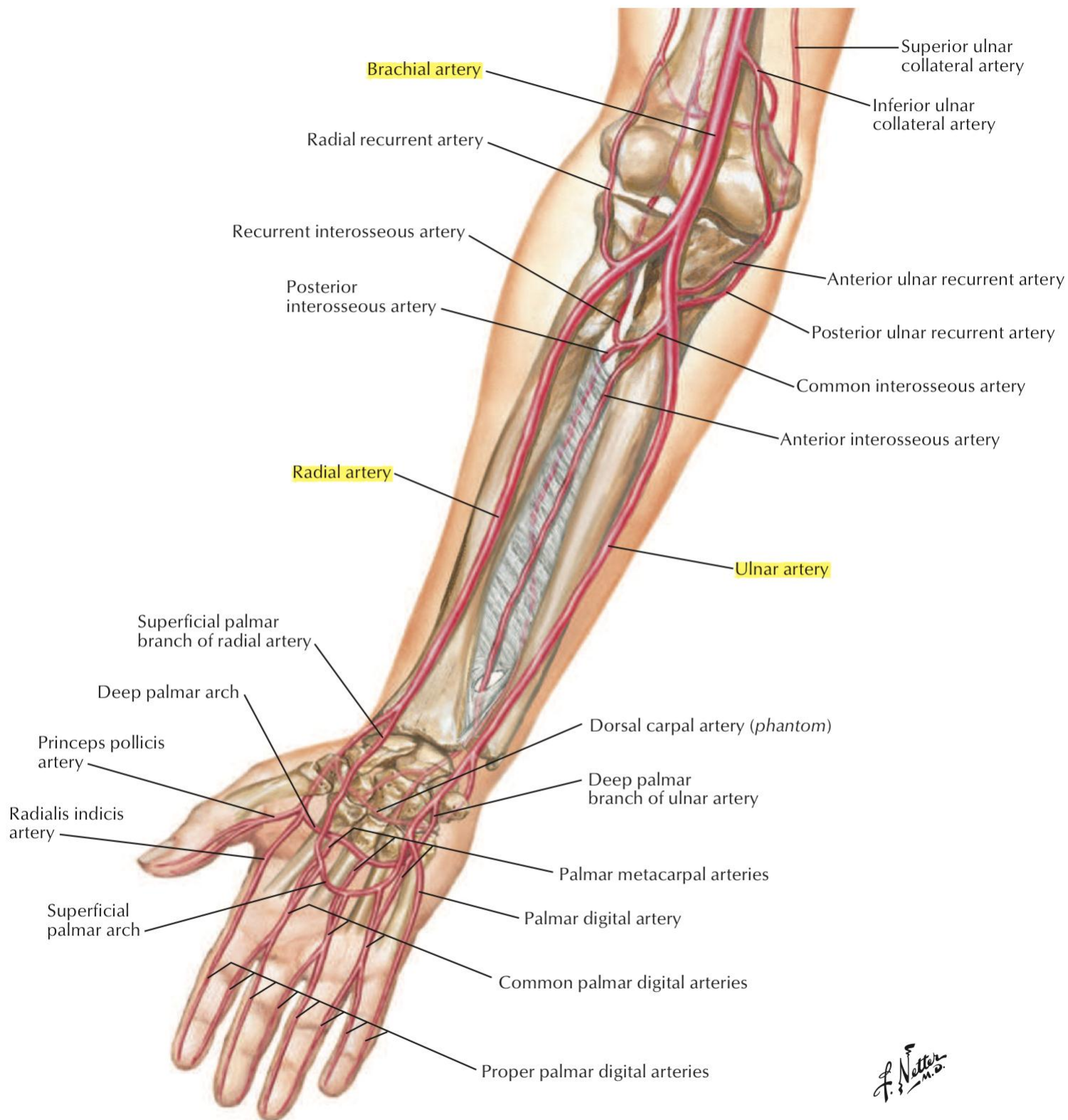
The median nerve arises from the branches from brachial plexus, courses through the anterior part of arm, forearm, and hand, and terminates by supplying the muscles of the hand.

Blood supply

ARTERIAL BLOOD SUPPLY

- Subclavian artery
- Axillary artery
- Brachial artery
- Radial artery
- Ulnar artery





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VENOUS BLOOD SUPPLY

The venous system of the upper limb drains deoxygenated blood from the arm, forearm and hand. It can be subdivided into the superficial system and the deep system.

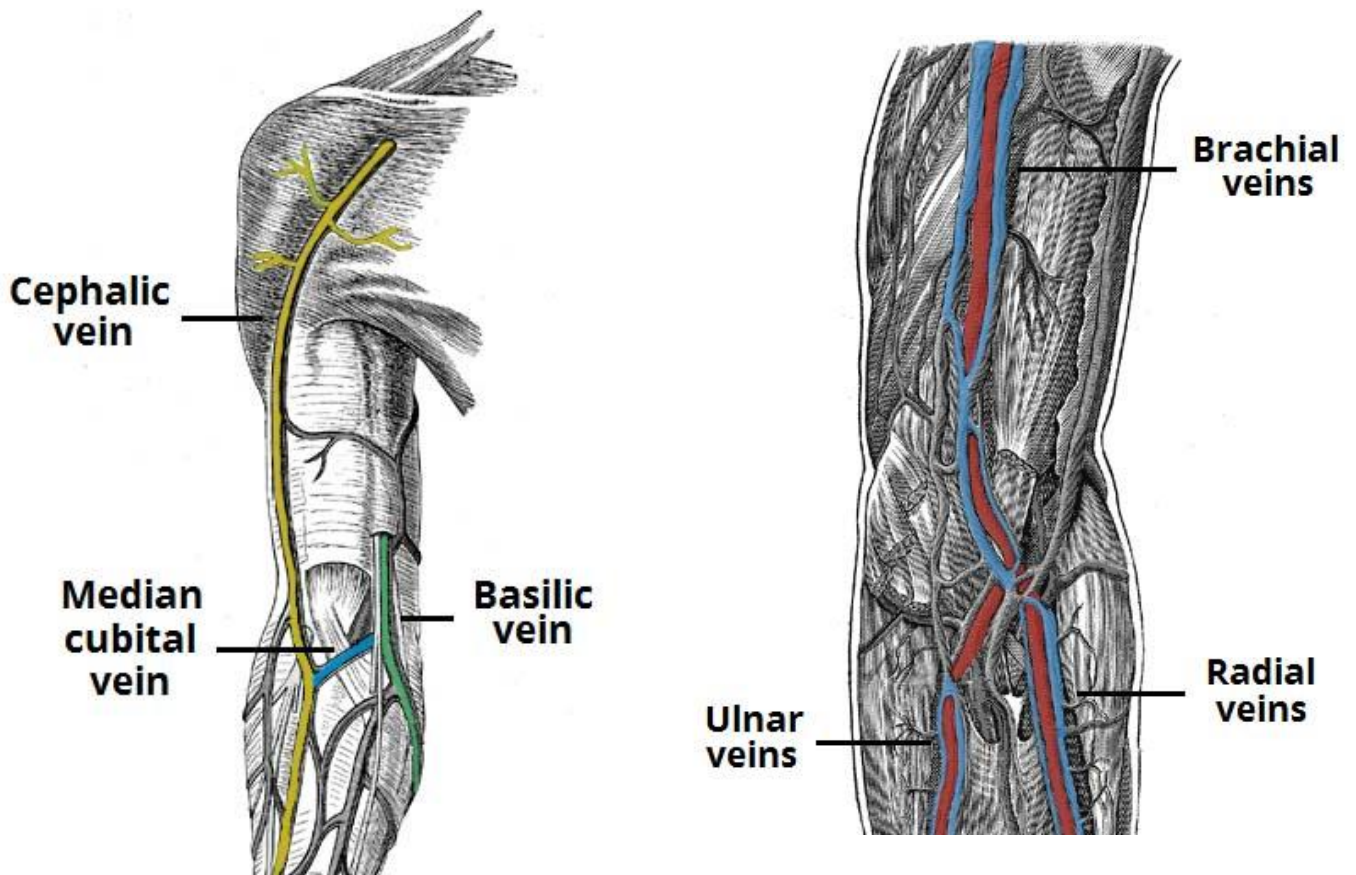
SUPERFICIAL VEINS

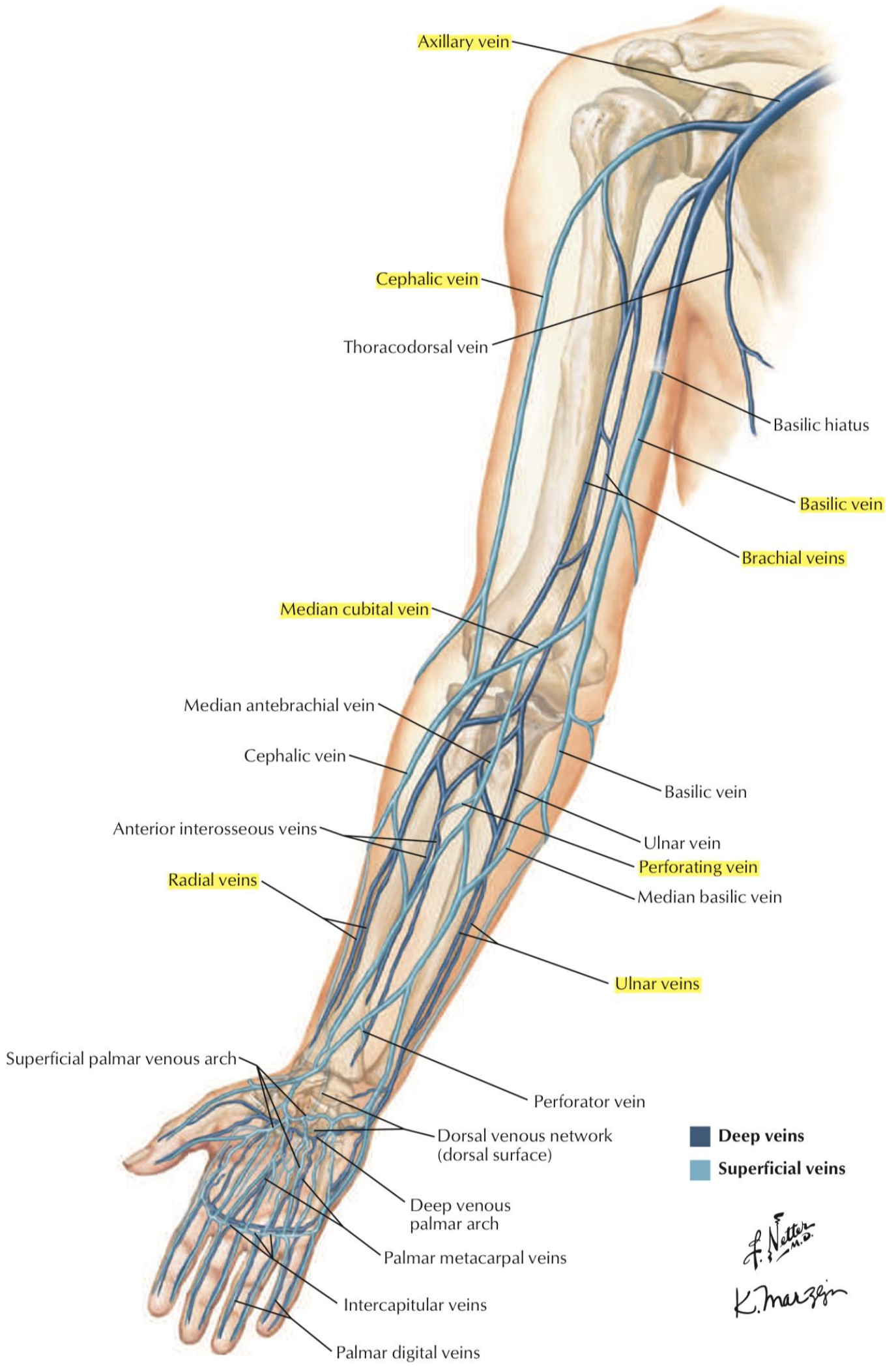
- cephalic veins
- Basilic veins

The major superficial veins of the upper limb are the cephalic and basilic veins and are connected at the elbow by the median cubital vein.

DEEP VEINS

- The brachial: veins are the largest in size
- Radial vein
- Ulnar vein
- Perforating veins: run between the deep and superficial veins of the upper limb, connecting the two systems.





Axillary vein

Cephalic vein

Thoracodorsal vein

Basilic hiatus

Basilic vein

Brachial veins

Median cubital vein

Median antebrachial vein

Cephalic vein

Basilic vein

Anterior interosseous veins

Ulnar vein

Perforating vein

Radial veins

Median basilic vein

Ulnar veins

Superficial palmar venous arch

Perforator vein

Dorsal venous network (dorsal surface)

Deep venous palmar arch

Palmar metacarpal veins

Intercapitular veins

Palmar digital veins

■ Deep veins
■ Superficial veins

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