

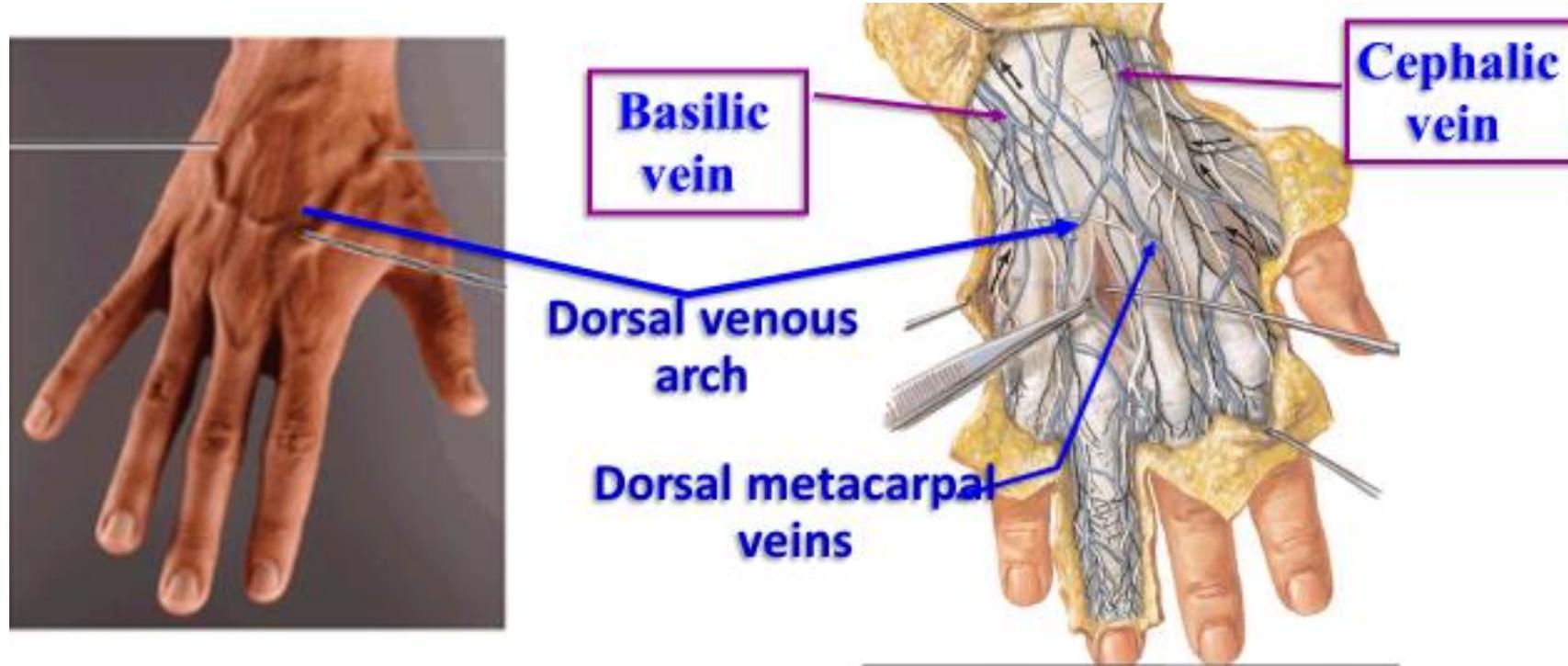
VEINS OF UPPER & LOWER LIMB

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VEINS OF UPPER LIMB

SUPERFICIAL VEINS



- **Dorsal Venous arch**

- This is a venous plexus in the superficial fascia of the dorsum of the hand.
- It receives three dorsal metacarpal veins which are formed by the union of dorsal digital veins from adjacent sides of the fingers.

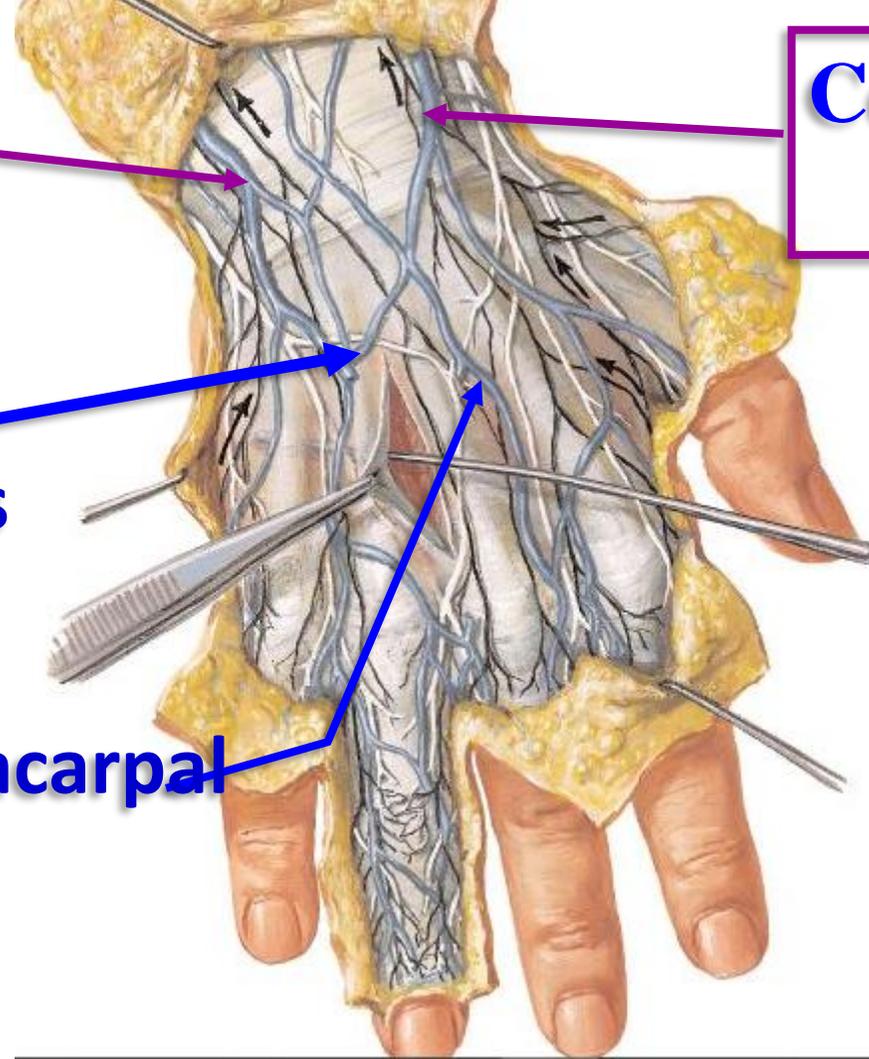


Basilic vein

Cephalic vein

Dorsal venous arch

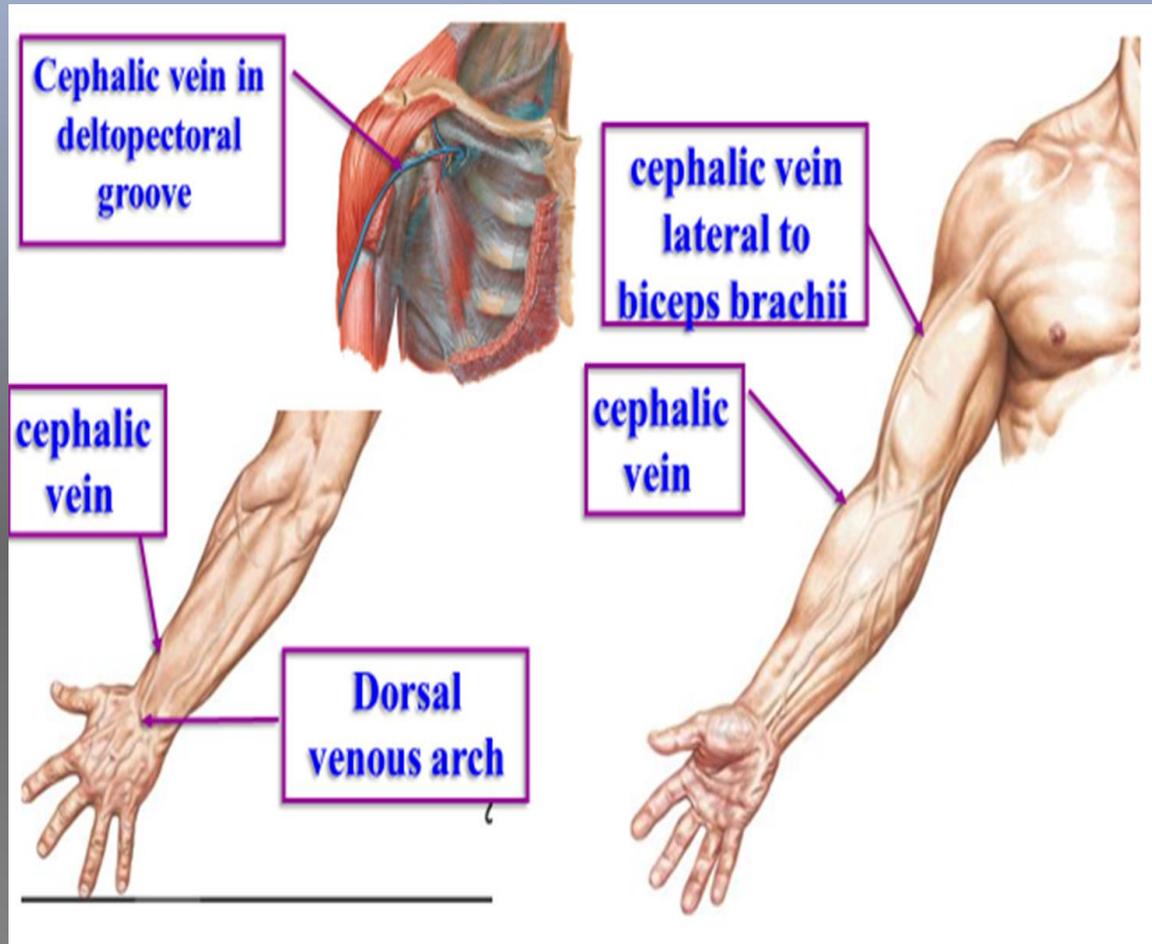
Dorsal metacarpal veins



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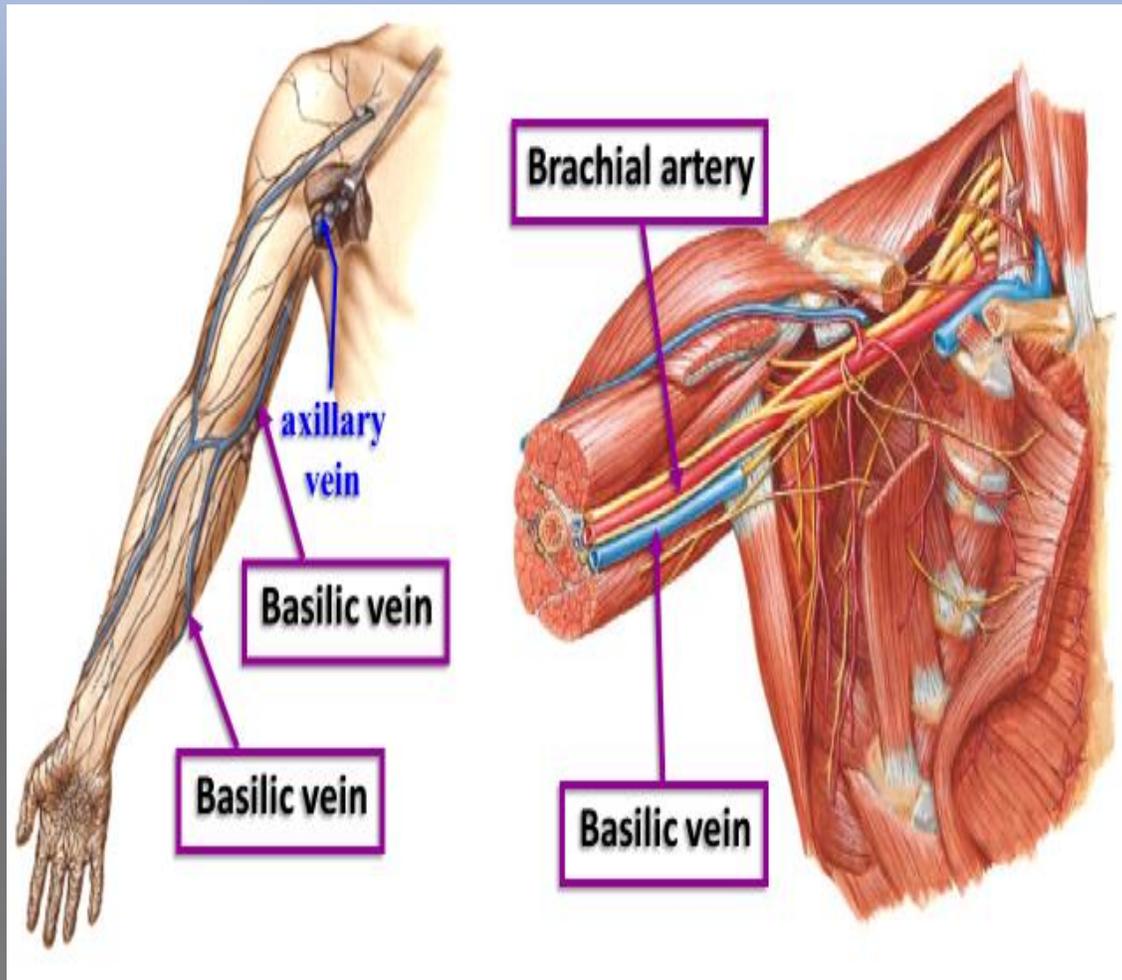
• Cephalic Vein

**** Origin;** union of the lateral end of the dorsal venous arch with the dorsal digital veins of the radial side of the thumb.

**** Course;** It is formed over the anatomical snuff-box.

- It curves around the lateral side of the forearm to ascend on the lateral part of the front of the forearm up to the front of the elbow,.
- It ascends close to the lateral side of the biceps brachii muscle.
- It pierces the deep fascia and ascends in the deltopectoral groove.

**** Termination;** It ends in the upper part of the **axillary vein**.



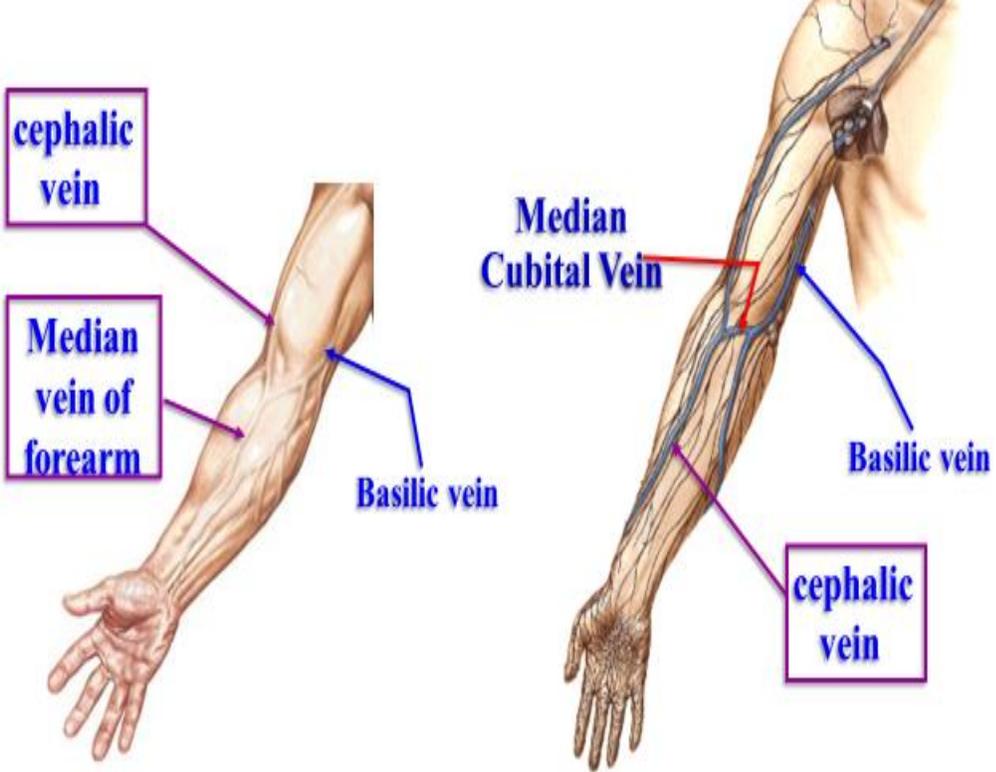
• Basilic Vein

**** Origin;** by the union of the medial end of the dorsal venous arch with the dorsal digital vein of the ulnar side of the little finger.

**** Course;** It ascends along the medial side of the back of the forearm; and near the elbow it inclines forwards to reach the front of the elbow.

- **At the insertion of coracobrachialis muscle,** it pierces the deep fascia and ascends close to the medial side of the brachial artery.

**** Termination;** it continues up into the axilla as the **axillary vein** at the lower border of **teres major muscle**.



• Median Cubital Vein

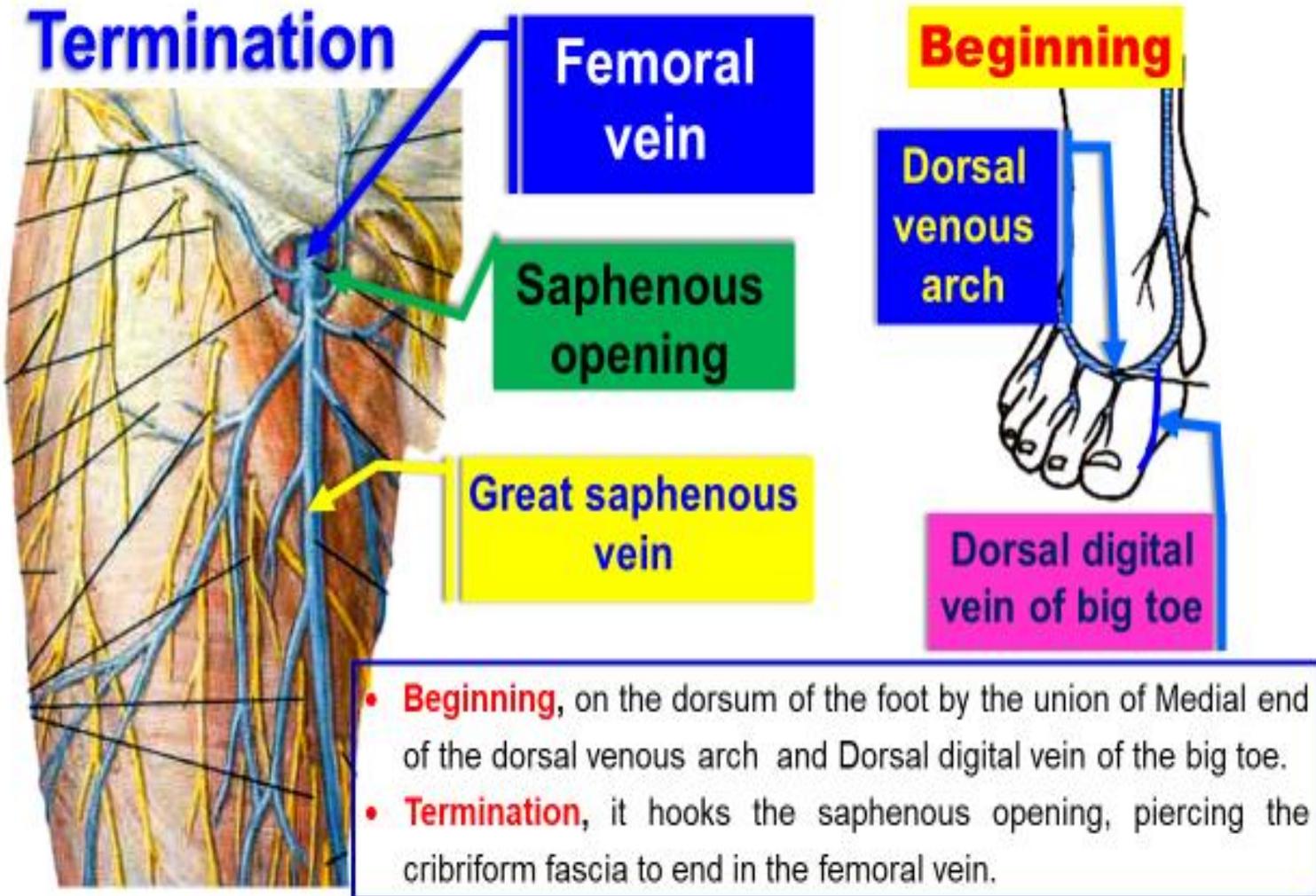
- This is a short oblique vein which lies across the front of the elbow.
- It **arises** from the cephalic vein, it runs upwards and medially to **join** the basilic vein.
- The **bicipital aponeurosis** separates the vein (superficial) from the end of the brachial artery and median nerve (deep).

• Median Vein of the Forearm

- This vein is commonly present on the front of the forearm.
- It arises from a superficial venous plexus in the palm and ascends to the front of the forearm.
- At the front of the elbow it joins the median cubital vein or basilic vein.
- But, **commonly** it divides into a **lateral** branch joins the cephalic vein and a **medial** branch joins the basilic vein (**NO Median cubital vein**).

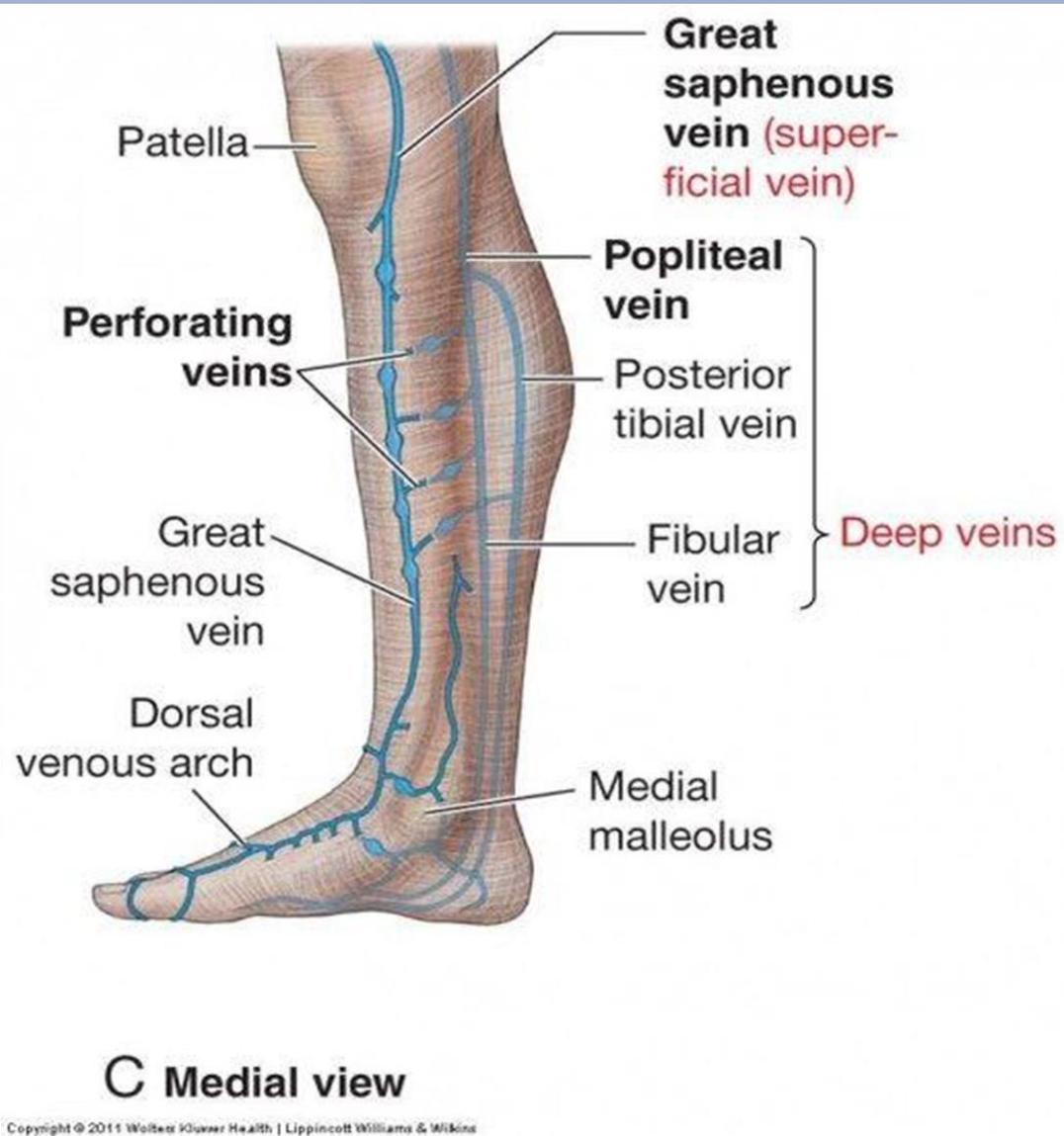
VEINS OF LOWER LIMB

A-Superficial veins



- saphenous nerve accompanied it Along its course on the dorsum of foot, in front of the medial malleolus and medial side of the leg,

Tributaries of great saphenous vein



perforating veins connect the great saphenous vein with deep veins

-also it receives:

1- superficial circumflex iliac vein .

2- superficial epigastric vein .

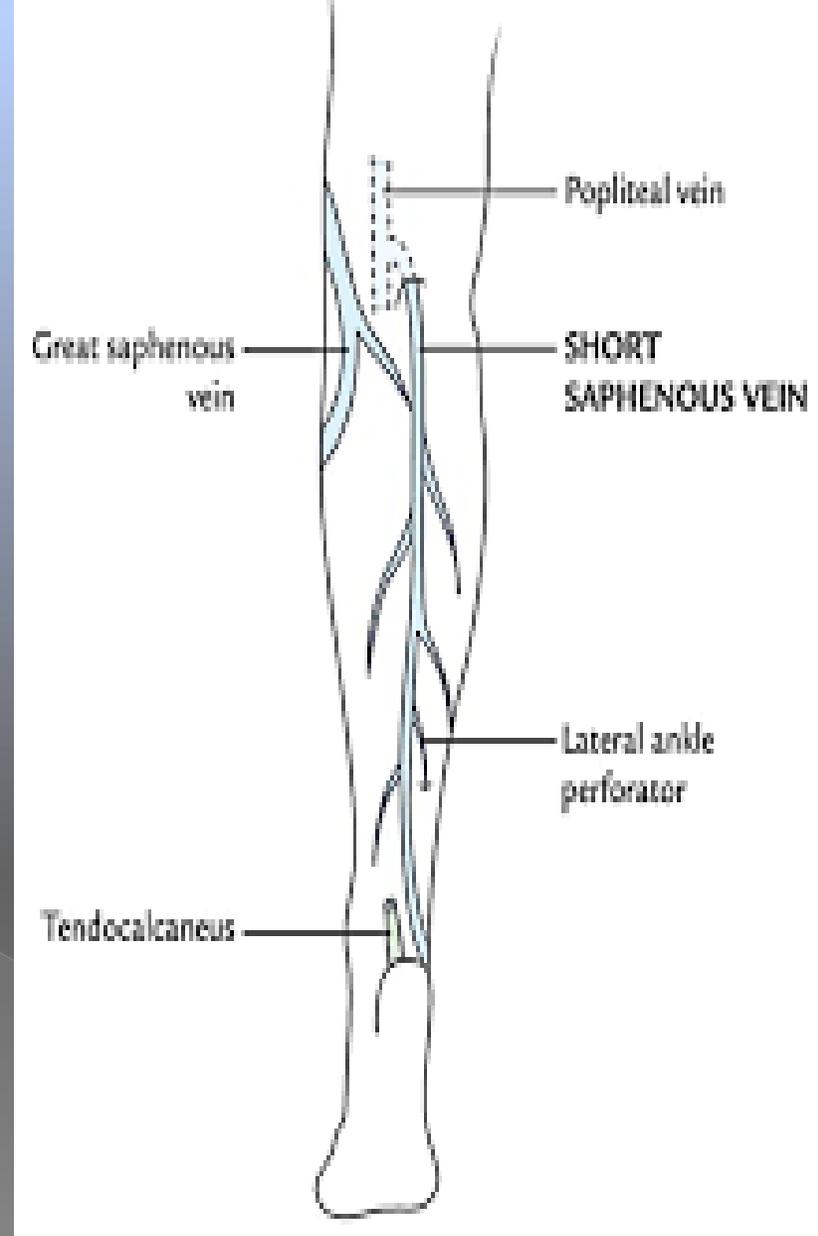
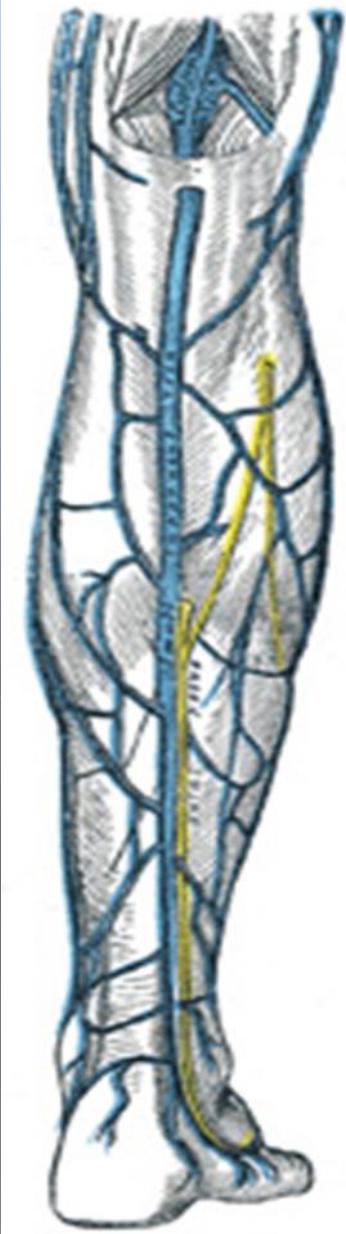
3- superficial external pudendal vein .

• Small Saphenous Vein

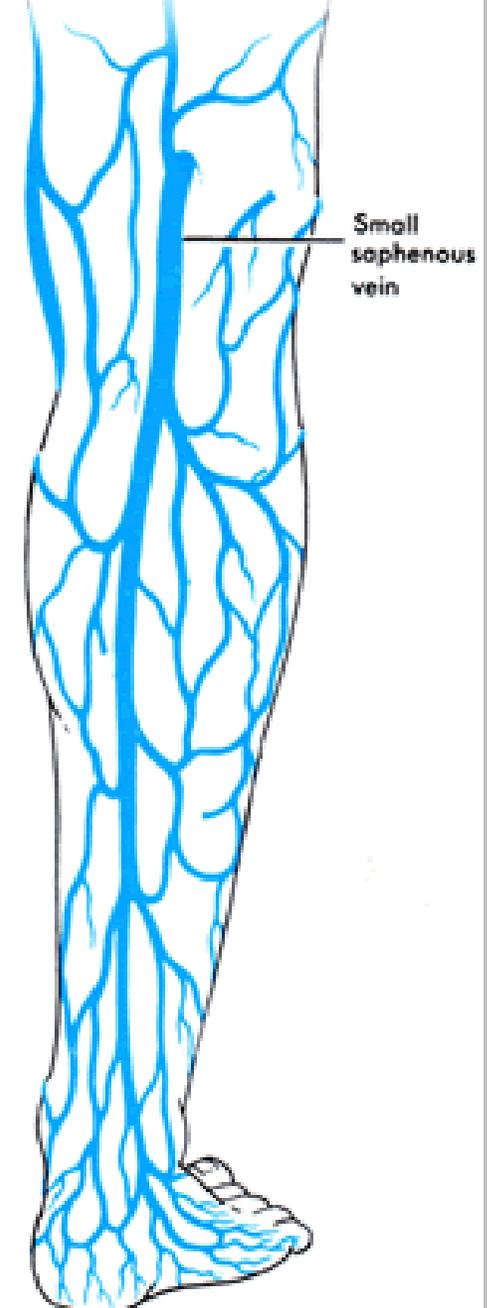
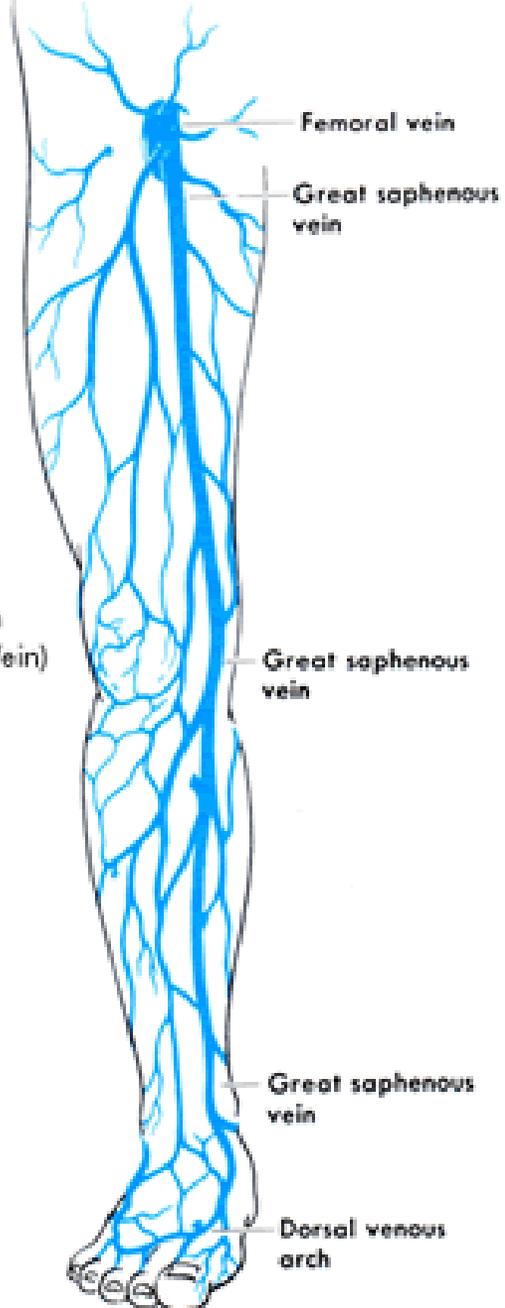
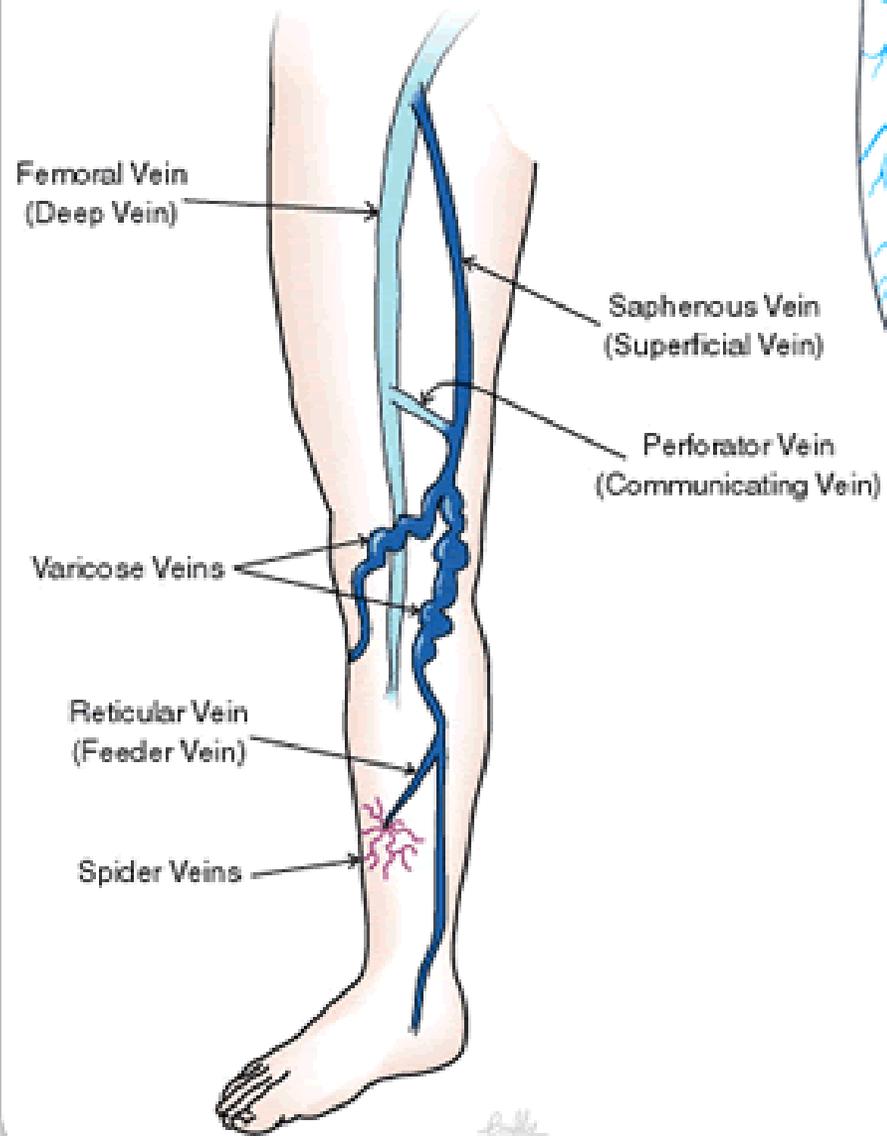
**** Origin:** on the dorsum of the foot by the union of the lateral end of the dorsal venous arch with the lateral dorsal digital vein of the little toe.

**** Course and relations:**

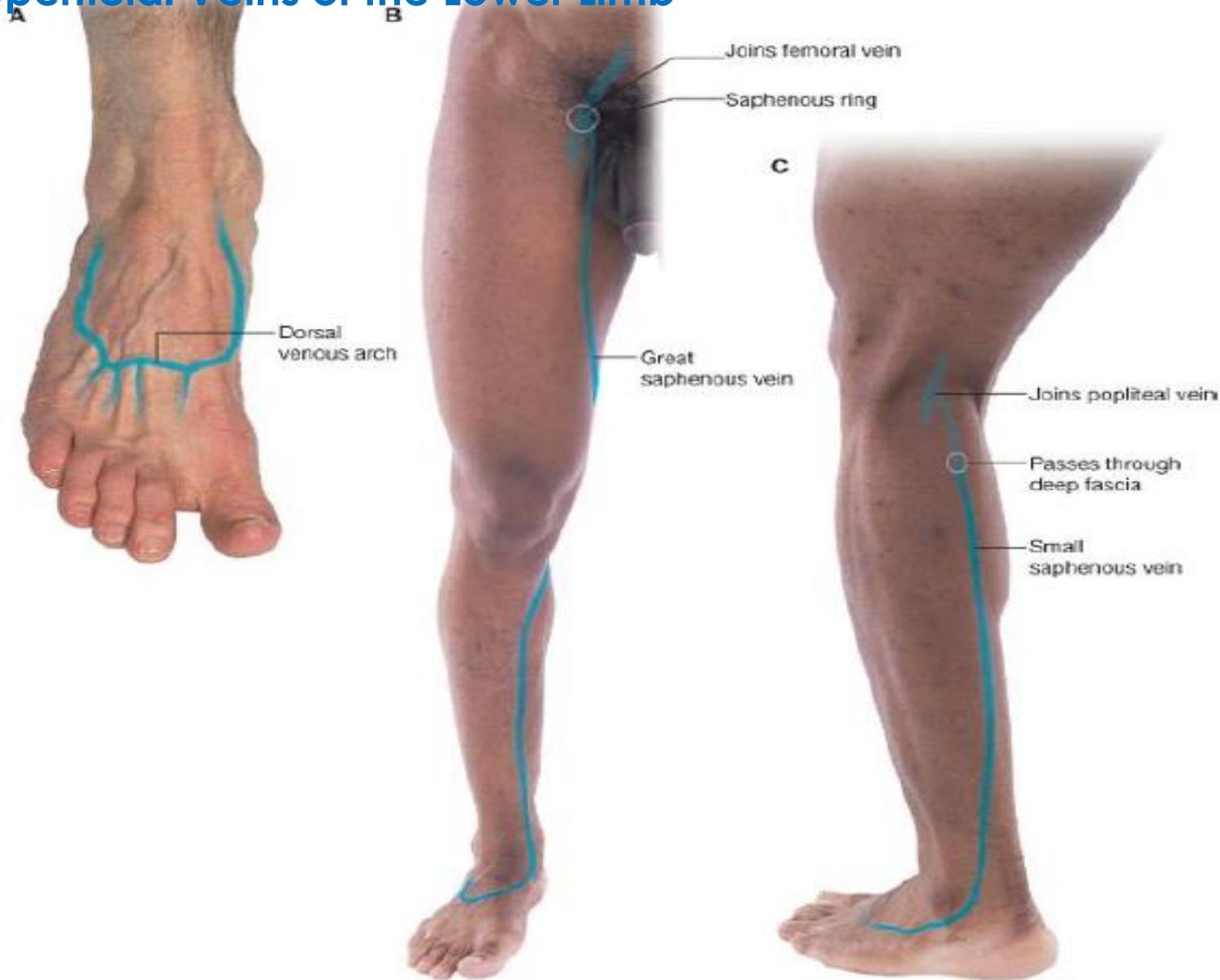
- It passes backwards along the lateral border of the dorsum of the foot.
- Then, it curves up passing **behind the lateral malleolus** and ascends on the back of the leg.
- About the middle of the popliteal fossa, it pierces the popliteal fascia to **end in the popliteal vein**.
- Along its course it is closely accompanied by the **sural nerve**.



Vein Anatomy



Major Superficial Veins of the Lower Limb



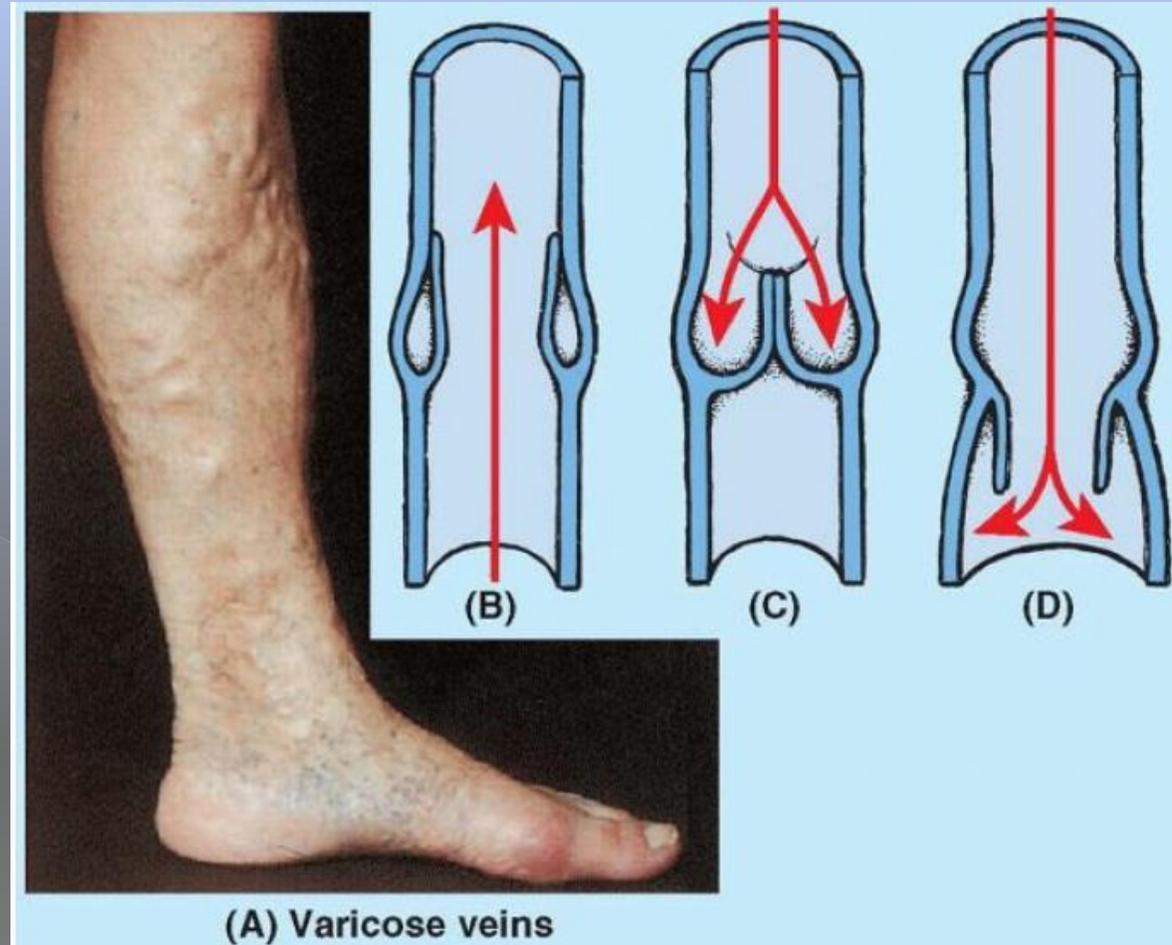
Drake: Gray's Anatomy for Students, 2nd Edition.

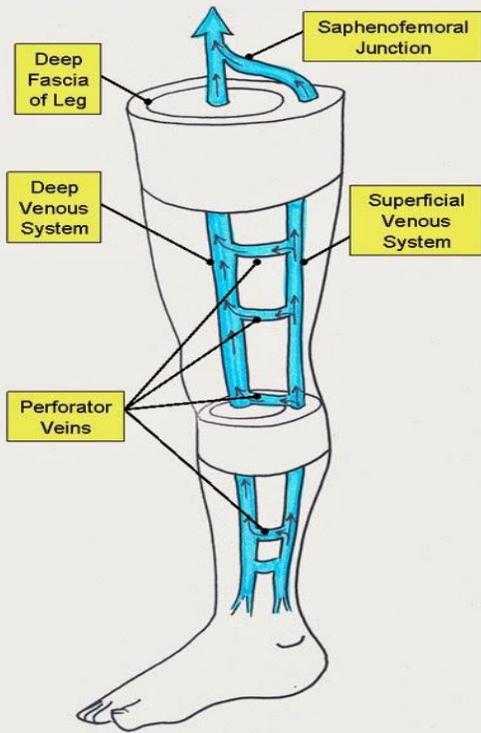
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Figure 6.131 Major superficial veins. **A.** Dorsal aspect of the right foot. **B.** Anterior view of right lower limb. **C.** Posterior aspect of the left thigh, leg, and foot.

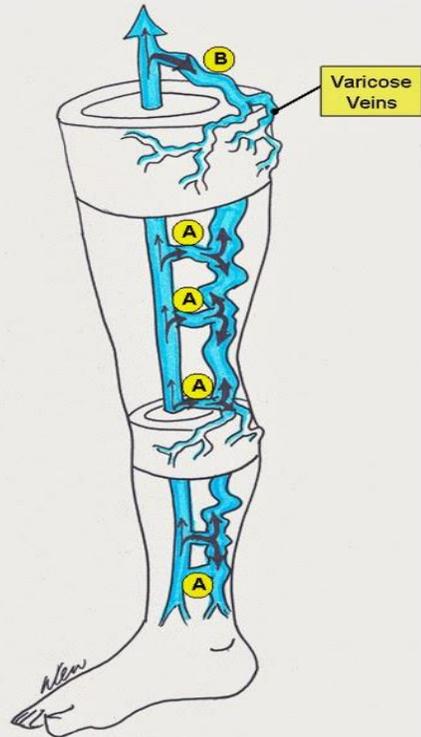
Varicose veins

- Frequently, the great saphenous vein and its tributaries become varicose (dilated so that the cusps of their valves do not close).
- Varicose veins are common in the posteromedial parts of the lower limb and may cause discomfort.
- In a healthy vein, the valves allow blood to flow toward the heart (B) while keeping blood from flowing away from the heart (C).
- Valves in varicose veins (D) are incompetent due to dilation or rotation and no longer function properly. As a result, blood flows inferiorly in the veins, producing varicose veins.





(1.) Normal Venous Drainage



(2.) Venous Hypertension
 (B) - Saphenofemoral Incompetence
 (A) - Perfortator vein Incompetence

The normal venous return of great saphenous vein to

A- Deep vein through perforating veins

B- The femoral vein

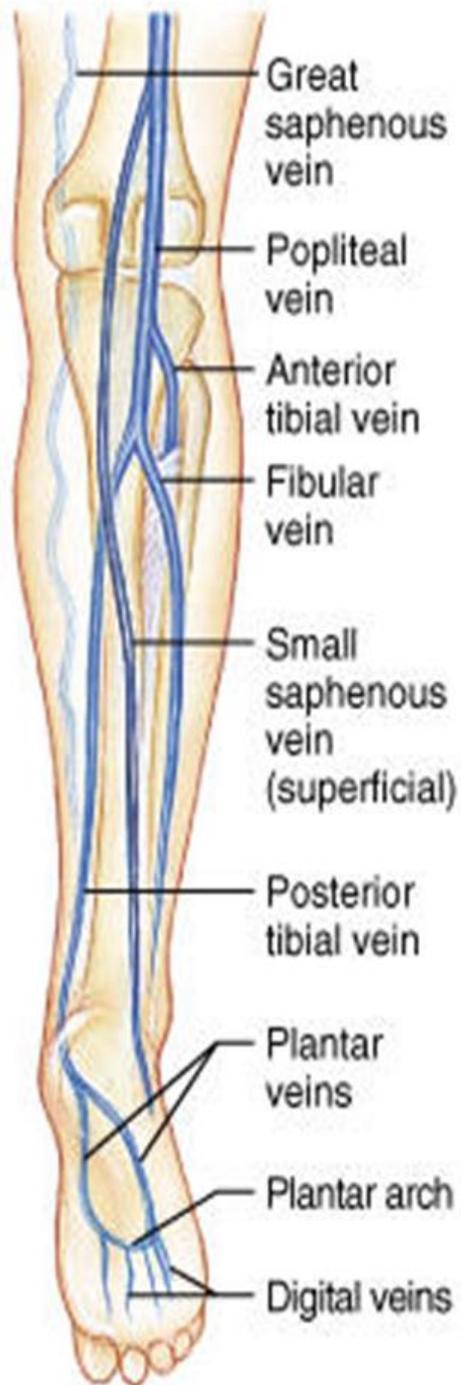
- Great saphenous vein contains **many valves** along its course, the most important valve at its termination

- **The valves** allow passage of the blood from greater saphenous vein to the deep vein and femoral vein.

- Contraction of muscles leads to pump blood upward and pump blood from superficial veins to deep vein (**muscular pump**)

Deep veins

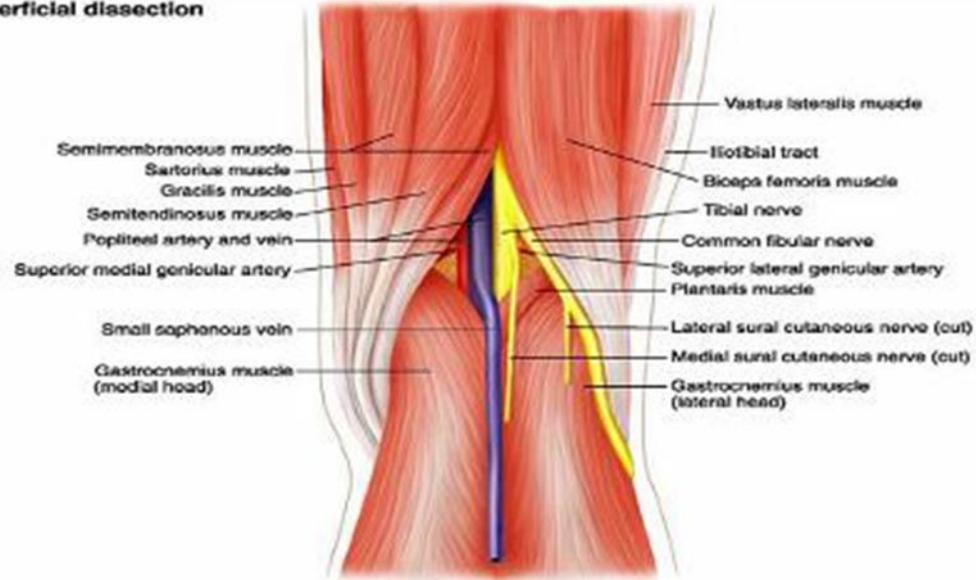
- The **plantar digital veins** arise from plexuses on the plantar surfaces of the digits, unite to form **four metatarsal veins**; these run backward in the metatarsal spaces, communicate, by means of perforating veins, with the veins on the dorsum of the foot, and unite to form the **plantar venous arch** which lies alongside the plantar arterial arch.
- From the deep plantar venous arch the **medial and lateral plantar veins** run backward close to the corresponding arteries and, after communicating with the great and small saphenous veins, unite behind the medial malleolus to form the posterior tibial veins.



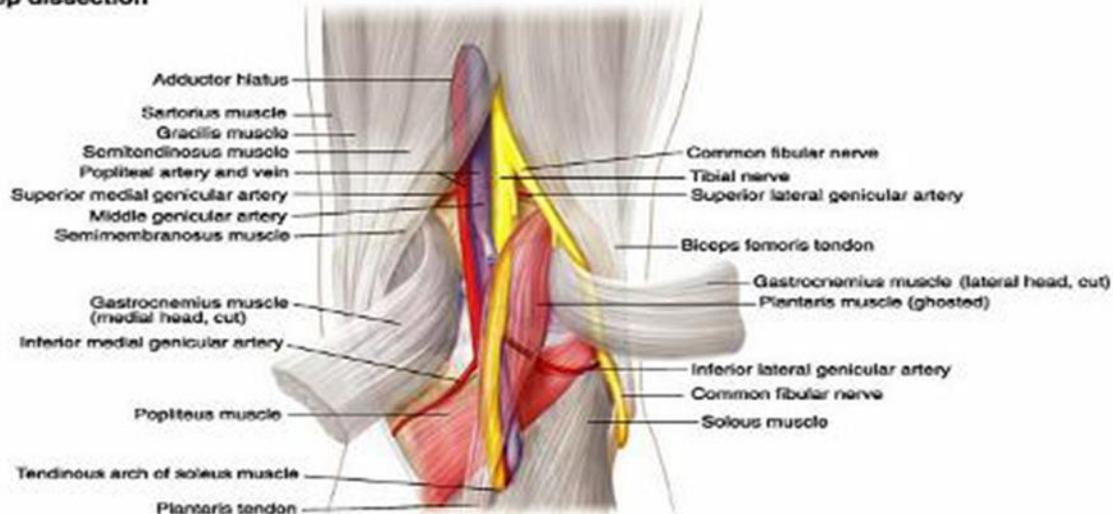
- The **posterior tibial veins** accompany the posterior tibial artery, and are joined by the **peroneal veins**.
- The **anterior tibial veins** are the upward continuation of the venæ comitantes of the dorsalis pedis artery. They leave the front of the leg by passing between the tibia and fibula, over the interosseous membrane, and unite with the posterior tibial, to form the **popliteal vein**.

Popliteal vein

A. Superficial dissection



B. Deep dissection



Beginning:

union of the vena comitantes of the anterior and posterior tibial arteries at the lower border of popliteus

Termination:

the adductor opening and continues as the femoral vein.

Tributaries:

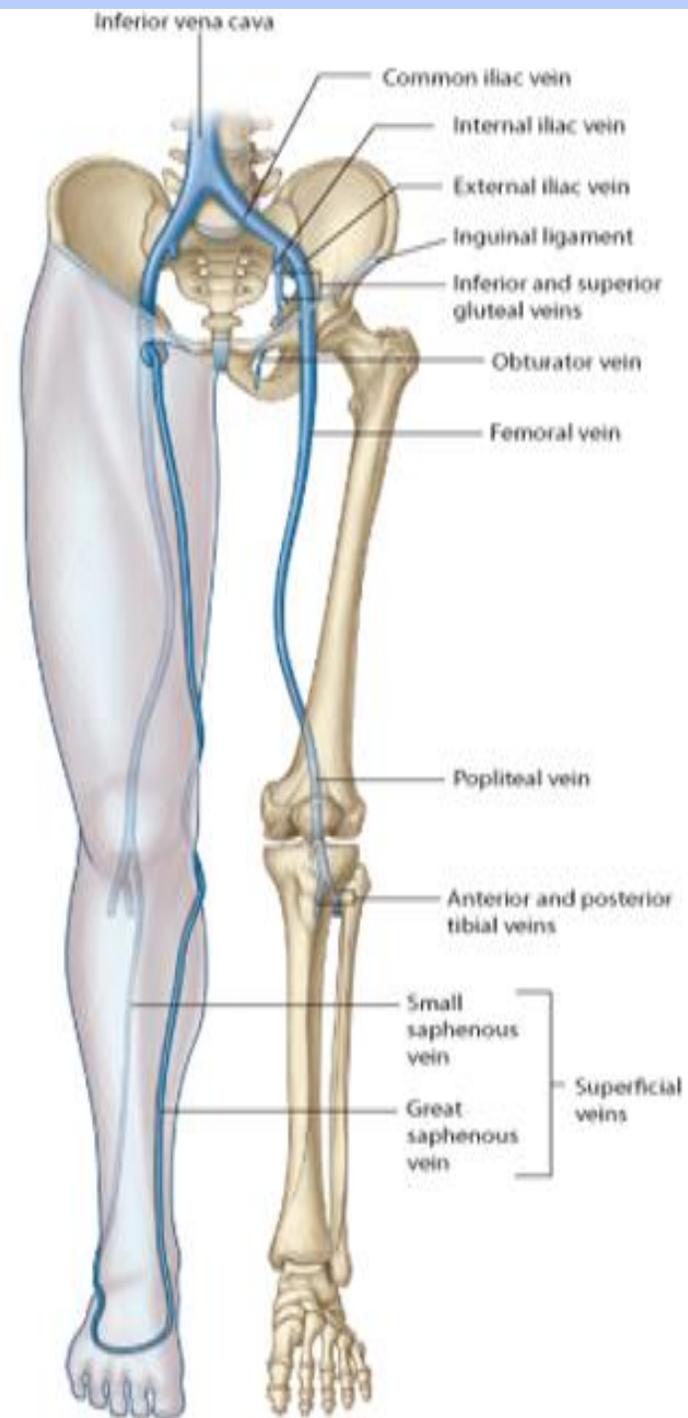
Muscular veins,
genicular veins corresponding to the arteries
the small saphenous vein.

Femoral vein

Beginning:

continuation of the popliteal vein at the adductor opening.

It **terminates** as the external iliac vein after passing behind the inguinal ligament medial to the femoral artery.



A photograph of a large field of raspberries in rows, stretching towards a horizon with mountains under a sunset sky. The text "Thank You" is written in a yellow, cursive font across the middle of the field.

Thank You