

From where	Shaft of tibia	Shaft of fibula
Def	It is triangular in cross section, having 3 borders and 3 surfaces.	-----
The borders of the shaft	<p>1- Anterior border: prominent forming shin of the tibia (subcutaneous).</p> <p>2- Medial border: is subcutaneous.</p> <p>3- interosseous border is directed laterally (towards the fibula)</p>	<p>1- Anterior border; begins from the apex of subcutaneous triangular area on the lateral aspect of the lower part of the shaft above the lateral malleolus.</p> <p>2- Interosseous border: close to medial side of anterior border.</p> <p>3- Posterior border: extends from the back of the lateral malleolus.</p>
The surfaces of the shaft	<p>1- Medial surface: between anterior and medial borders. almost completely subcutaneous.</p> <p>2- Lateral surface: between anterior and interosseous borders.</p> <p>3- Posterior surface: between interosseous and medial borders. - Upper part is crossed by an oblique ridge called soleal line. - The area above the soleal line is nearly triangular. - The area below the soleal line is divided into medial and lateral parts by vertical line.</p>	<p>1- Anterior surface: between anterior and interosseous borders.</p> <p>2- Lateral surface: between anterior and posterior borders.</p> <p>3- Posterior surface: wide between posterior and interosseous borders. - It divided into lateral and medial parts by a prominent ridge called medial crest which is more marked than the borders of the bone.</p>
End	<ul style="list-style-type: none"> • Upper end (Head of Fibula): - This end is expanded and carries a circular facet which articulates the fibular facet of the lateral condyle of the tibia to form the superior tibiofibular Joint. - The styloid process or apex of the head. - The neck of fibula constriction below the head 	<ul style="list-style-type: none"> • Lower End (Lateral Malleolus) of fibula: - This end is flattened from side to side. <p>1- Its lateral surface is subcutaneous and continuous with a triangular subcutaneous area on the lateral aspect of the lower part of the shaft.</p> <p>2- The medial surface of the lateral malleolus is differentiated into</p> <p>a- Anterior triangular articular part which articulates with the lateral surface of the body of the talus in the ankle joint.</p> <p>b- A posterior non-articular part is depressed to form the malleolar fossa.</p> <p>3- The back of the lateral nucleolus shows a longitudinal groove (for the tendon of peroneus brevis). - The lower end of the lateral malleolus is lower than the medial malleolus.</p>

Some muscles

From where	Plantaris	Gastrocnemius	Soleus
Origin	<ul style="list-style-type: none"> • from the popliteal surface of the femur just above the Lateral condyle. • The muscle may be absent. 	by 2 heads: 1- Medial head: From the popliteal surface of the femur just above the medial condyle. 2- Lateral head: from lateral surface of lateral condyle of femur above and behind the lateral epicondyle. It contains sesamoid bone called Fabella.	from 1- Upper 1/3 of posterior surface of fibula. 2- Back of the head of the fibula. 3- Tendinous arch (between head of fibula and soleal line). 4- Soleal line of the tibia 5- Middle 1/3 of medial border of tibia.
Course	It is a long slender tendon which descends between the gastrocnemius and soleus.	-----	-----
Insertion	either Into the tendocalcaneus. ♣ OR separately in the posterior surface of the calcaneus.	Tendocalcaneus into the middle of the posterior surface of the calcaneus.	into the tendocalcaneus .
Nerve supply	Tibial nerve.	Tibial nerve (each head receive separate branch).	Double nerve supply. 1- Its superficial surface, branch from the tibial nerve in the popliteal fossa. 2- Its deep surface, branch from the posterior tibial nerve in the leg.
Actions	Plantar Flexion of the foot.	1- Plantar flexion of the foot (at ankle joint). 2- Flexion of the knee joint.	powerful plantar flexor of the foot (acted only on the ankle joint).

Deep group posterior compartment of the leg

- 1- Tibialis posterior (Posterior Tibial nerve)
- 2- Flexor digitorum longus (Posterior Tibial nerve)
- 3- Flexor hallucis longus (Posterior Tibial nerve)
- 4- Popliteus (Tibial nerve)

From where	Popliteus	Flexor Digitorum Longus	Flexor Hallucis Longus	Tibialis Posterior
Origin	groove on lateral surface of Lateral condyle of femur below the lateral epicondyle - The muscle is intracapsular extrasynovial.	Posterior surface of the tibia below the soleal line and medial to the vertical line	Lower 2 /3 of posterior surface of fibula lateral to the median crest	1- Posterior surface of tibia below soleal line and lateral to the vertical line 2- Posterior surface of fibula medial to median crest 3- Interosseus membrane.
Insertion	triangular area on posterior surface of the tibia above the soleal line	- They divide into 4 tendons which are inserted into plantar surface of the distal (terminal) phalanges of the lateral 4 toes. - Each tendon passing through an opening in corresponding tendon of Flexor digitorum brevis opposite the proximal phalanx	plantar surface of terminal (distal) phalanx of the big toe (hallux) (Flexor hallucis brevis splits into lateral and medial to allow the passage of FHL)	- It divided into 2 slips: A- Medial slip to the tuberosity of navicular bone (main insertion). B- Lateral slip divided into several slips to: 1- All tarsal bones except talus. 2- Bases of all metatarsal bones except the first and the 5 th metatarsal bones.
Nerve supply	Tibial nerve. - It descends superficial to the muscle and then hooks on the lower border to supply the muscle through its deep surface.	Protection of the lateral meniscus.		
Action	-Unlocking of knee joint - At the beginning of flexion of knee joint - Lateral rotation of femur on tibia when the foot is fixed on the ground - Or medial rotation of tibia on femur when the foot is raised from the ground - Protection of the lateral meniscus.	1- Plantar flexion of the foot. 2- Inversion of the foot. 3- Supporting the longitudinal arch of the foot. 4- Flexion of all joints of the lateral 4 toes	1- Plantar flexion of the foot. 2- Inversion of the foot. 3- Supporting the longitudinal arch of the foot 4- Flexion of all Joints of the big toe.	1- Plantar flexion of the foot. 2- Inversion of the foot. 3- Supporting the longitudinal arch of the foot.

