

Muscle of Anterior compartment of leg:

Boundaries:

Anterior: Deep Fascia

Post: Interosseous membrane

Medial: Lateral surface of the shaft of the tibia

Lateral: Ant (Intermuscular septum)

Content: ^{TAM} ^{EHL} ^{EDL} ^{VT} Ant tibial Artery - (1) Nerve ^{Deep PN}



TIBIALIS ANTERIOR: - Chief muscle of Anterior compartment
↳ multipennate muscle (most superficial).

ORIGIN: @ upper $\frac{2}{3}$ rd of lateral surface of the tibia of lateral condyle of the tibia

⑥ Along the part of interosseous membrane

⑦ Overlying deep fascia of leg.

INSERTION - Medial cuneiform -
medial base of 1st metatarsals.

NERVE - Deep peroneal nerve.

clinical: Hirsch's syndrome → This compartment swells
of venous return reduced. This compress the tibial Artery.
of shin splints. ↳ ischaemia & pain

EXTENSOR HALLOUS LONGUS

ORIGIN: Anterior surface of the shaft of the tibia

• Adjacent Interosseous membrane

INSERTION: Base of the distal phalanx of the big toe

NERVE: Deep peroneal nerve (L5) inn.

ACTION: Extends hallux, Dorsiflex foot.

EXTENSOR DIGITORUM LONGUS: (D) - pulls 4th & 5th digits

ORIGIN: tibia 4th and medial part of Anterior

CHONDROGENOUS surface of fibula: (D) - pulls 4th & 5th digits

INSERTION: Middle of distal phalanx of lateral 4 toes

NERVE: Deep peroneal nerve (L5-S1)

ACTION: 2nd - 5th Dorsiflex foot

PRONUS PERIUS: - molars double -

ORIGIN: Level 1/4 in of Ant surface of fibula

• Ad interosum mem

INSERTION: 5th metatarsal base

NERVE: Deep peroneal nerve

ACTION: Dorsiflex foot, Eversion of foot

Main artery of Anterior compartment

ANTERIOR TIBIAL ARTERY: (Post Ant Artery)

ORIGIN: small branch of popliteal artery at the lower

border of popliteus muscle

COURSE:

⇒ It enters the back of the leg at the lower border of popliteus through a opening in the epineurial membrane.

⇒ In Ant comp → It runs virtually downwards to the ankle lying b/w medial of lateral malleoli

TERMINATION: It enters the dorsum of foot and changes its name as dorsalis pedis artery.

RELATIONS: It is deep to the lateral malleolus

⇒ In the upper part it lies b/w TA and EDL

⇒ In middle 1/3 it lies b/w EHL and TA. (Same lower part)

⇒ It crosses from 1 → 2 side of the tendon of EHL deep to the lateral malleolus

BRANCHES:

⇒ Ant of Post tibial Recurrent Artery. → Anterior knee joint

⇒ Muscular branches

⇒ Ant. Med. of Ant lateral malleolus artery → Ankle joint

Deep peroneal nerve

DEEP PERONEAL NERVE:
(Ant tibial nerve)

ORIGIN:

Terminal branch of common peroneal nerve
Root value is ventral primary Rami of L4, L5, S1, S2

COURSE:

⇒ It begins on the lateral side of the neck of fibula & passes under cover of the upper part of peroneus longus

⇒ It enters by passing the Ant intermuscular septum, & passes under cover of the lower part of peroneus longus

⇒ It spirals around the neck of fibula, giving off EPL to foot

⇒ The extensive mass of deep nerves

⇒ The nerve lies lateral to artery in its upper part - middle part one-third of Ant to artery in the middle part.

TERMINATION: It ends by dividing into the lateral of medial terminal branches.

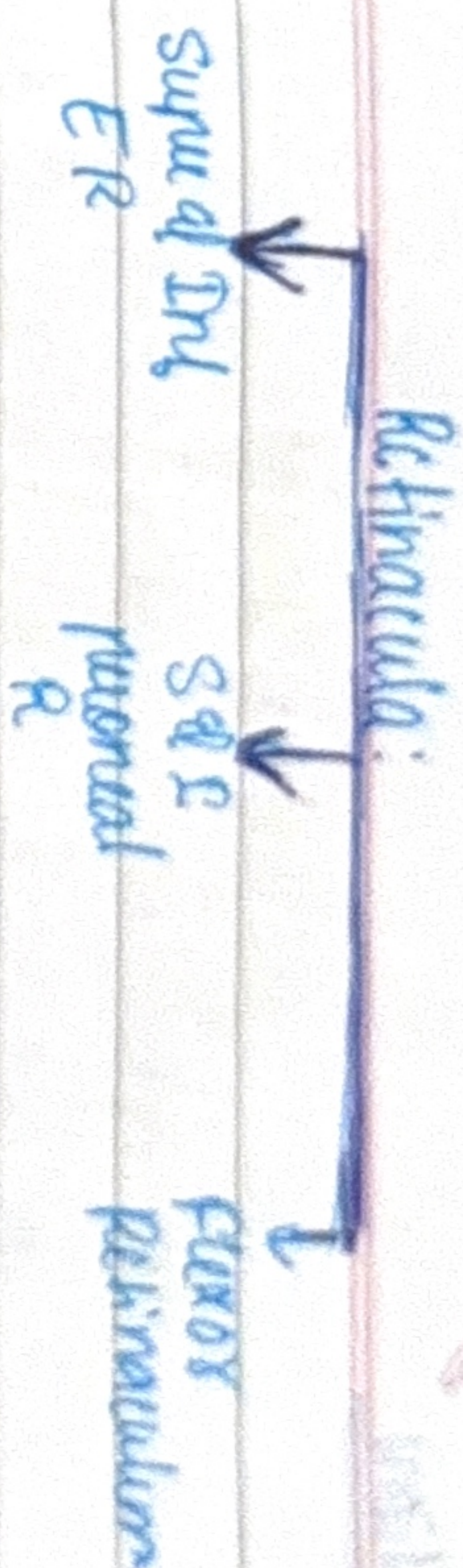
lateral terminal branch → ends in peroneus longus
medial branch → supply skin

BRANCHES:

lateral branch of cutaneous branch

CLINICAL: The paralysis of muscle of Ant compartment of foot

due to injury of deep peroneal nerve leads to foot drop, that is the loss of its ant. extension



Retinacula in front of the Ankle:

Superior extensor Retinaculum

⇒ Broad band of the deep fascia. (Above the ankle)

Attachments:

Medially → lower part of the Ant border of tibia
Laterally → lower part of the Ant border of the tibia

Medially it splits to enclose TA with its synovial sheath.

⇒ Tendon of EHL, EPL, Peroneus tertius and deep peroneal nerve

Ant tibial artery pass deep to the Retinaculum.

Inferior extensor Retinaculum

Y-shaped band of deep fascia, proximal part of dorsum of the foot

Attachments:

Medially → medial head - tibia above medial condyle

lateral head → fibula above t-t-t. in the medial malleolus.

lower part → pass with deep fascia of the sole