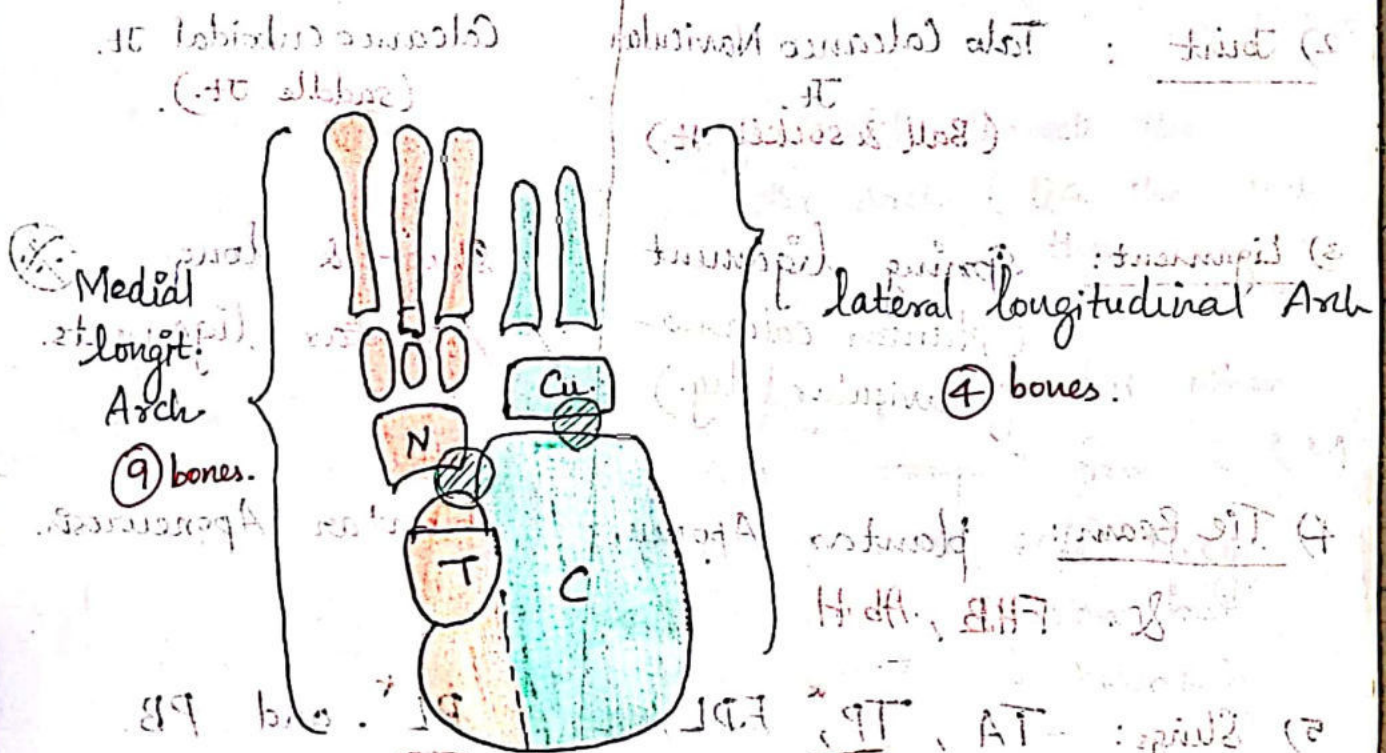


Components of Arches → starts from post. Tubercle of Calcaneum to metatarsals (phalanges are not...)



Clinical: Why 2nd metatarsal (is frequently) fractured in army/police man who "MARCH" frequently?

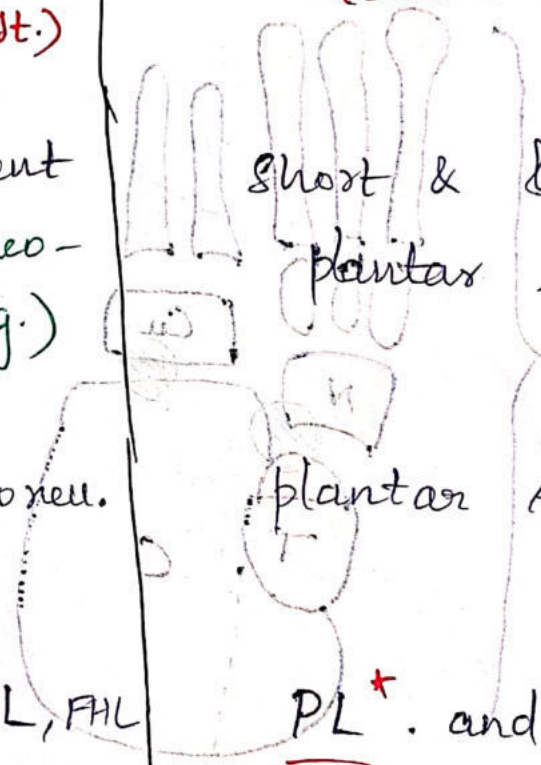
∵ Since intermediate cuneiform is small relatively 2nd metatarsal is relatively long (Ref. ing.).

Also interned. cuneiform forms a socket b/n L & M cuneiform so 2nd metatarsal is locked in that socket. so during March, it suffers the most force Hence fractures freq.

↓
Simply its longest & fixed metatarsal.

Differences b/w Medial Longit Arch & Lat. L.A

	MLA	LLA
1) <u>Summit</u> :	Talus	Calcaneum
2) <u>Joint</u> :	Talo Calcaneo Navicular Jt. (Ball & socket Jt.)	Calcaneo cuboidal Jt. (Saddle Jt.)
3) <u>Ligament</u> :	Spring ligament (plantar calcaneo-Navicular lig.)	Short & long plantar ligaments
4) <u>Tie Beam</u> :	plantar Aponeu. & FHB, Ab.H	plantar Aponeurosis
5) <u>Slings</u> :	TA, <u>TP</u> *, FDL, FHL (<u>invertors</u>)	<u>PL</u> * and PB. (<u>evertors</u>)



Note:

*** Summit** → bone which bears the weight & transmits the weight A & P.

* Only ④ ball & socket jt in whole body ⇒ 1) Shoulder jt. 2) Hip jt. 3) TCN jt. 4) Incudo-stapedial

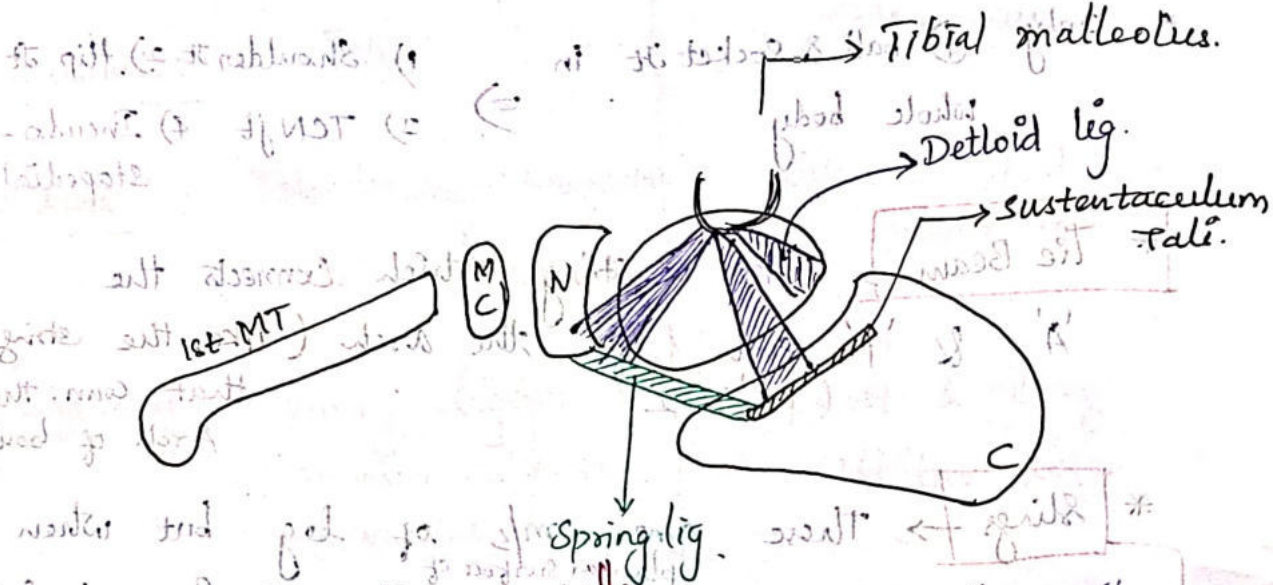
*** Tie Beam** → like a string which connects the 'A' & 'P' ends of the arch (like the string that conn. the Arch of bow)

* **Slings** → These are m/s of leg but when they reach the ^{plantar surface of} foot, they ^{come from} L & N side during contraction of these m/s they not only help in inversion & eversion but they also pull the arch upwards & maintain the concavity of the arch.

MLA ↓ invertors
LLA ↓ They simply help in SLINGING the arch from above.
evertors

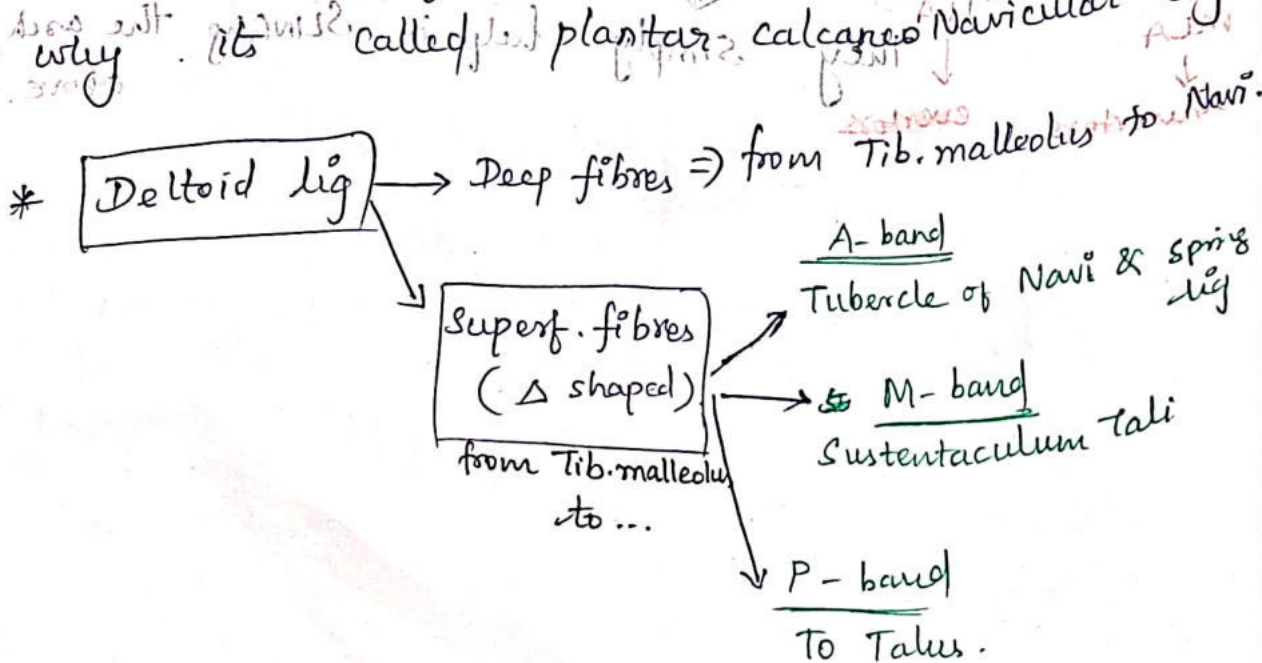
lig of Foot (MEDIAL VIEW).

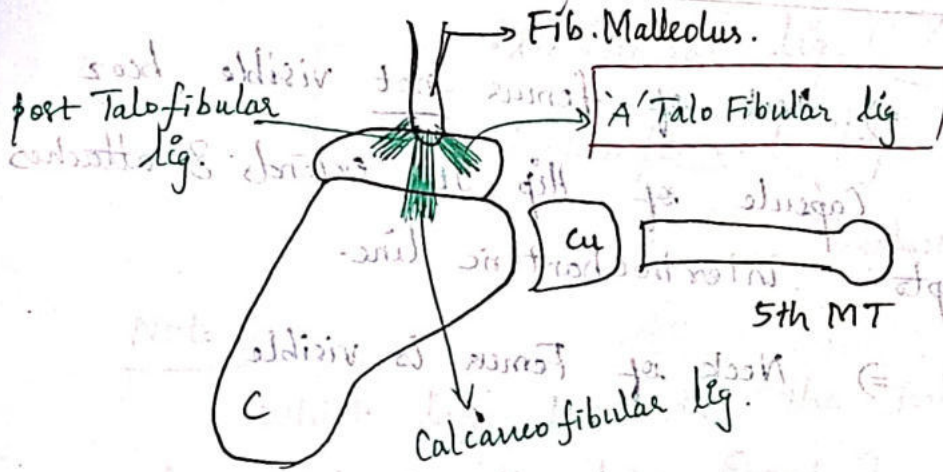
8 ligaments of foot (medial view)



Supports HEAD of Talus

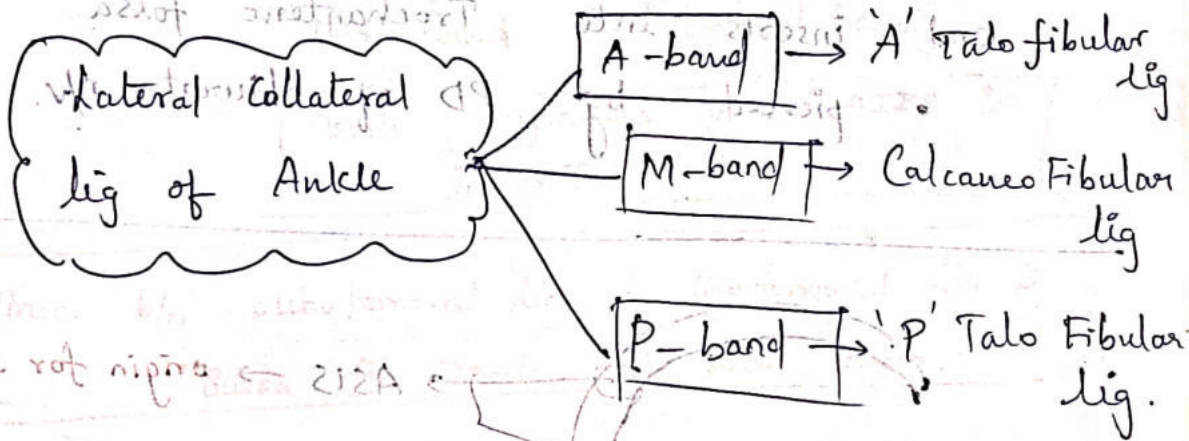
Note: Spring lig → from sustentaculum tali to the Tuberosity of Navicular bone. That's why it's called plantar calcaneonavicular lig.





m/c involved in inversion injury of foot.

Note:



* Ant. Talo fib. lig ⇒ injured in inversion during plantar flexed foot

* Calcaneo fibular lig ⇒ involved in inversion injuries of neutrally placed foot

High heels.
Climbing down the stairs.