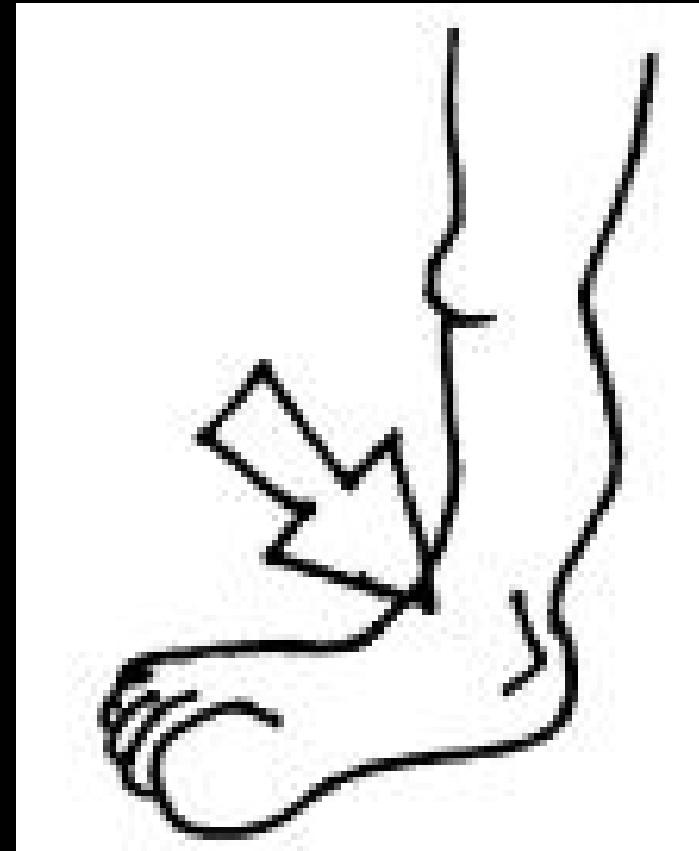


Evaluation of the Ankle and Lower Leg



HISTORY



*Remember the
questions from
lecture #2?*

OBSERVATION

*Remember what to
look for from lecture
#2?*



PALPATION

- Let's break the body up into 4 areas
 - Lateral
 - Anterior
 - Medial
 - Posterior
- Use Bony Landmarks to Identify Structures
- Start from proximally and work distally

Lateral

- Head of Fibula
 - Peroneus Long.
 - Peroneus Brev.
- Shaft of Fibula



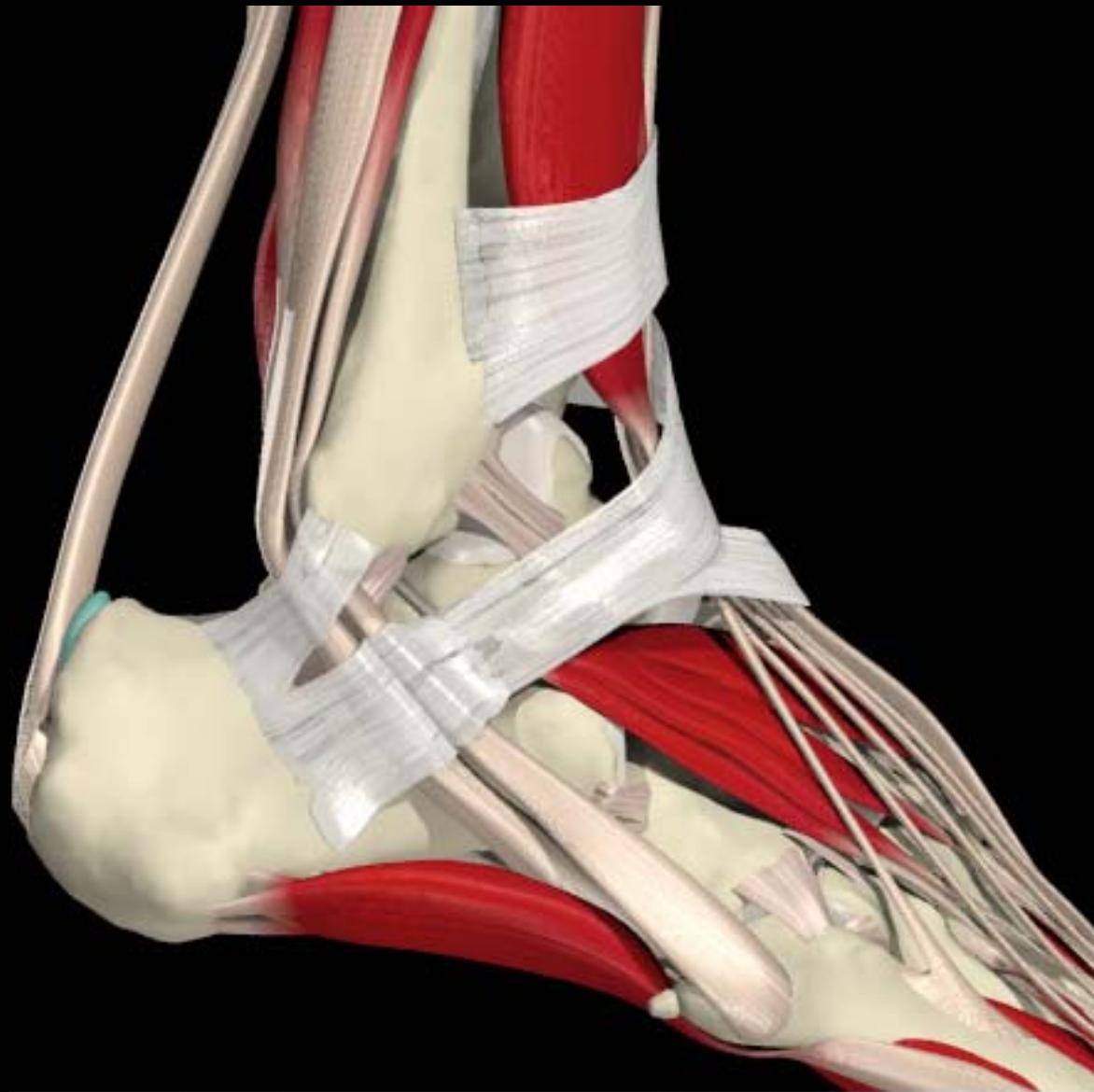
Lateral

- Shaft of Fibula
 - Ant Tib-Fib Lig
 - Interosseous Membrane
- Lateral Malleolus
 - CFL
 - ATL



Lateral

- Shaft of Fibula
 - Superior Peroneal Ret.
- Base of 5th MT



Anterior

- Anterior Tibial
Shaft



Anterior

- Dome of Talus



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Anterior

- Ant Tibial Shaft
 - Tibialis Ant
 - Ext Hallicus Long
 - Ext Digit Long
- Dome of Talus
 - Extensor Ret
 - Dorsal Pedis



Medial



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Medial

- Medial Malleolus
 - Deltoid Ligament
- Sustenaculum Tali
 - Spring Ligament



Medial

■ Medial Malleolus

- Flex Hallicus Long
- Flex Digitorum
Long
- Tibialis Posterior



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Posterior



Posterior



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Posterior

- Gastroc-Soleus
- Achilles Tendon
- Calcaneal
Bursae



STRESS

- Bone
- Joint
- Muscle / Tendon
- Nerve
- Vascular

Evaluating an Injury

**Where is
It?**

**What Does it
Do?**

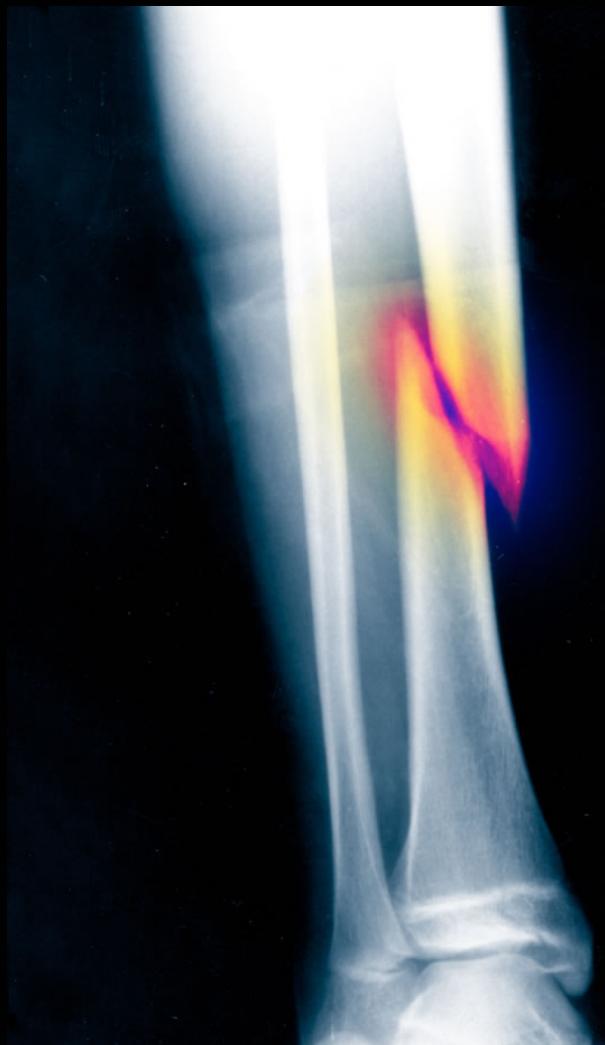
**How Does it
Get Damaged?**

**How do
I test it?**

Bones



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BONE – Bump Test



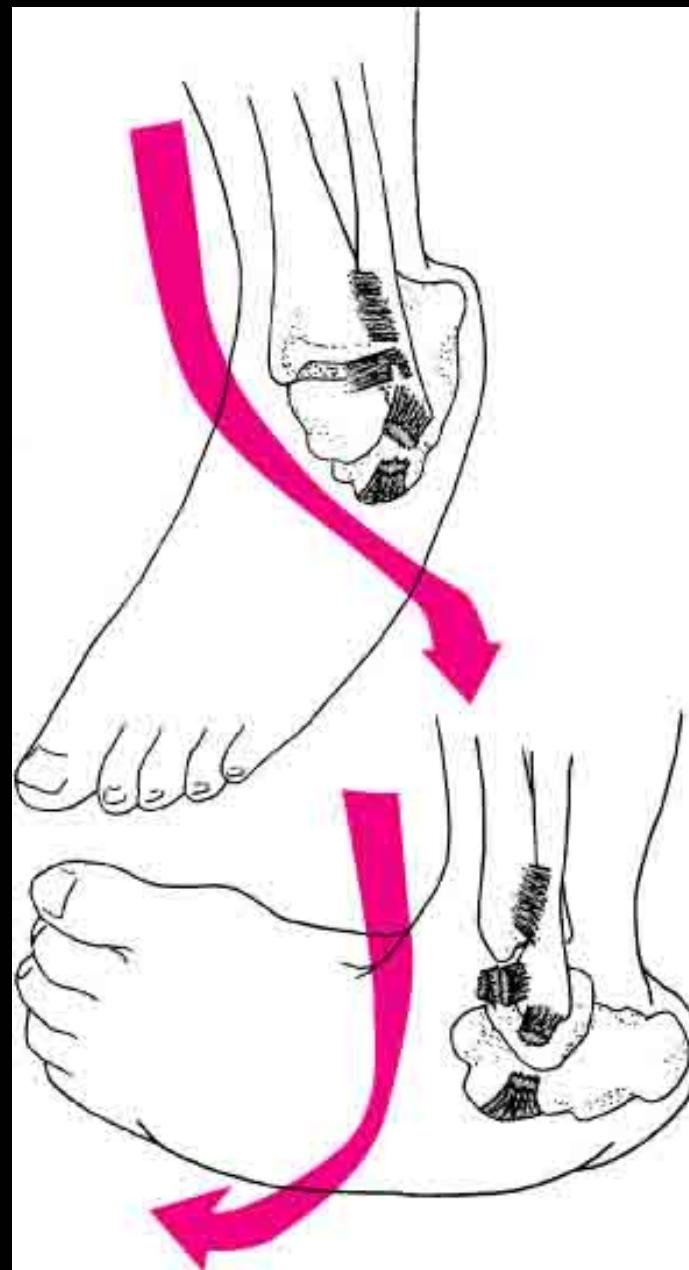
Bone – Squeeze Test



Joints

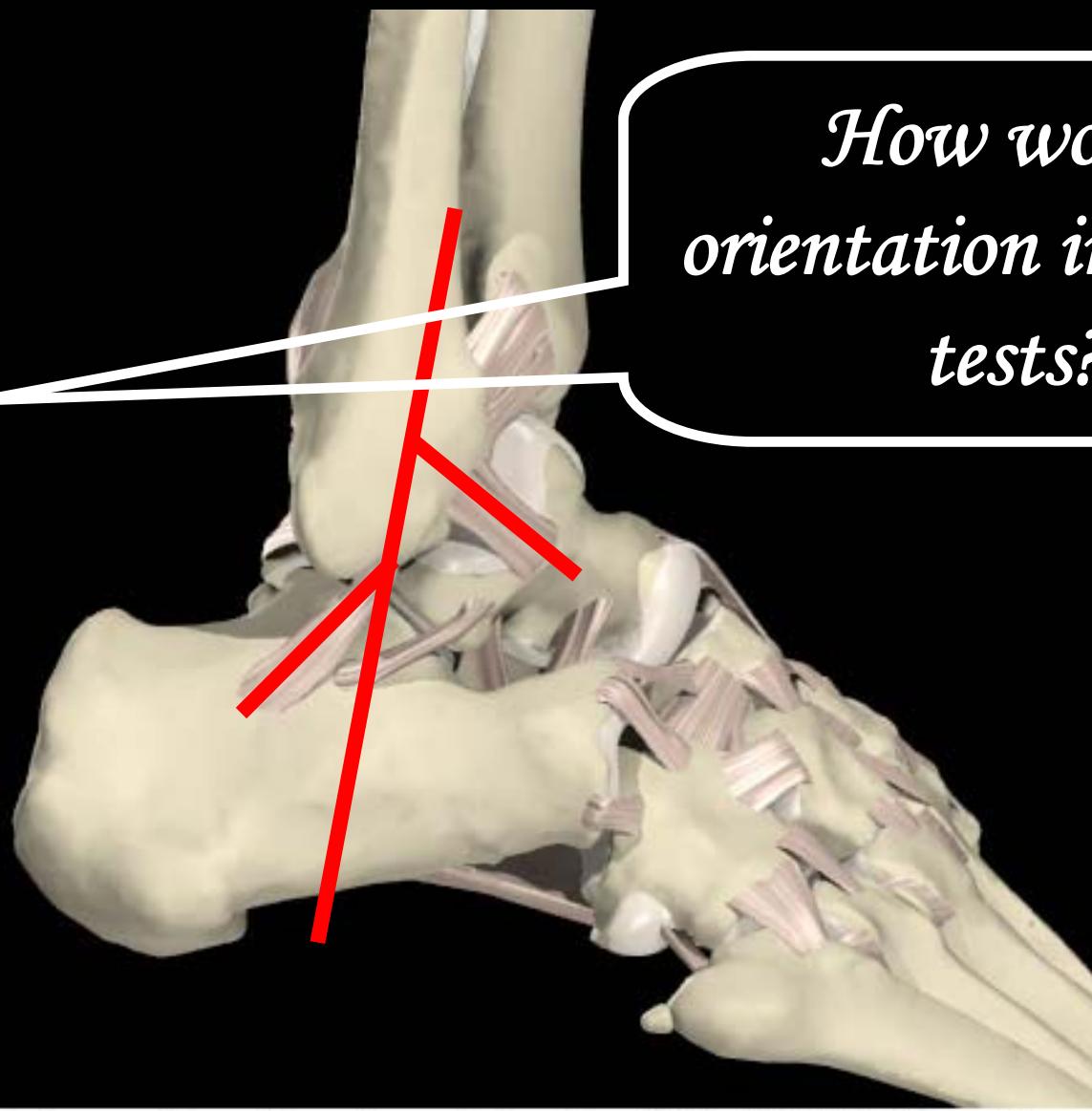


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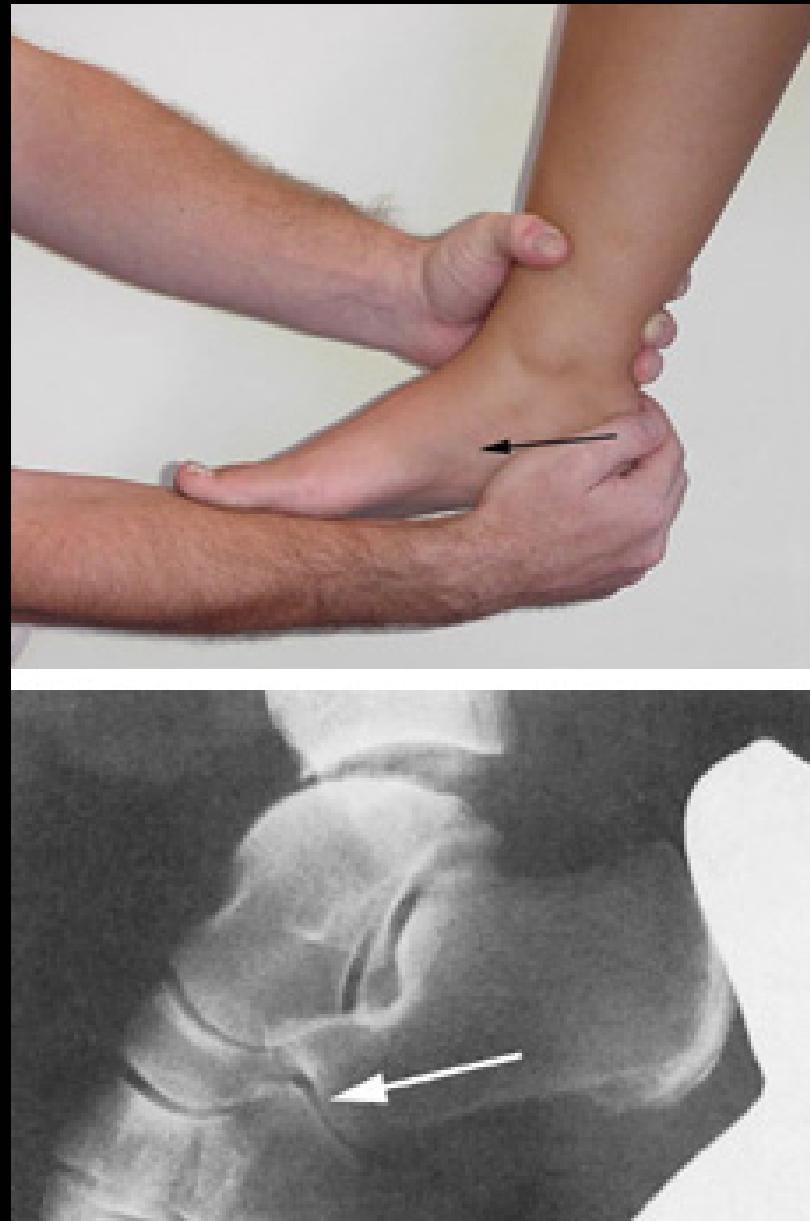


*How would
orientation influence
tests?*

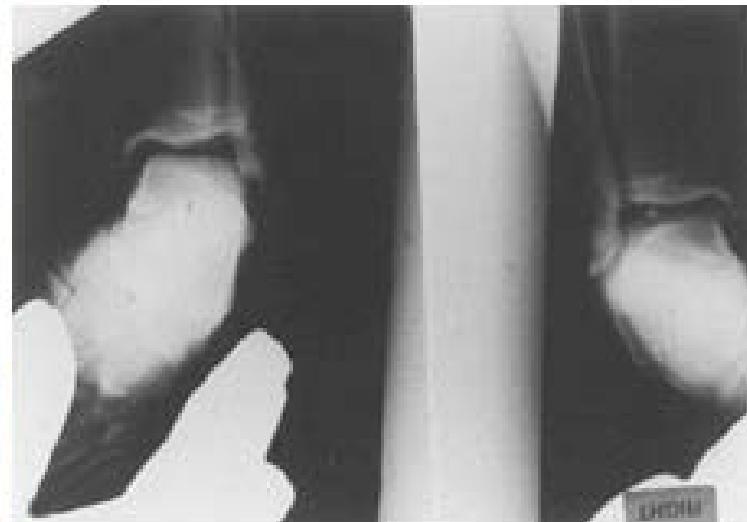


JOINTS –

Anterior Drawer Test

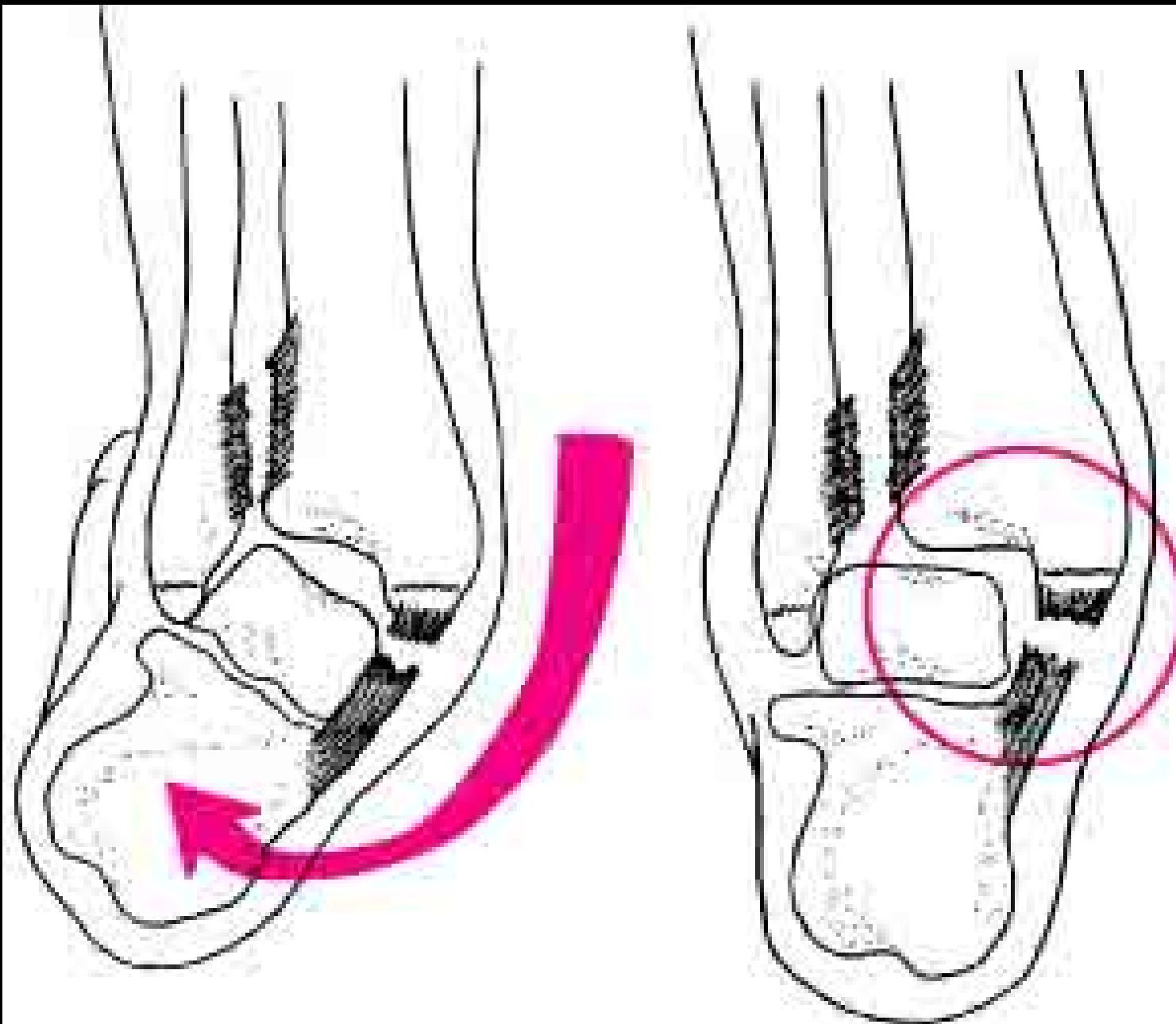


Inversion Talar Tilt





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Eversion Talar Tilt







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Kleiger's Test



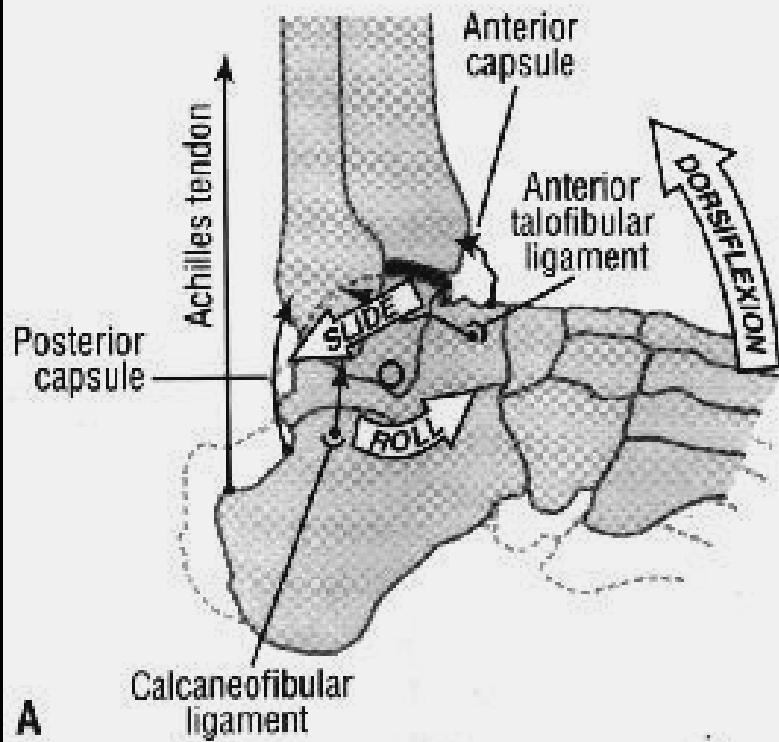
Squeeze Test - Revisited

*Where's
the pain?*

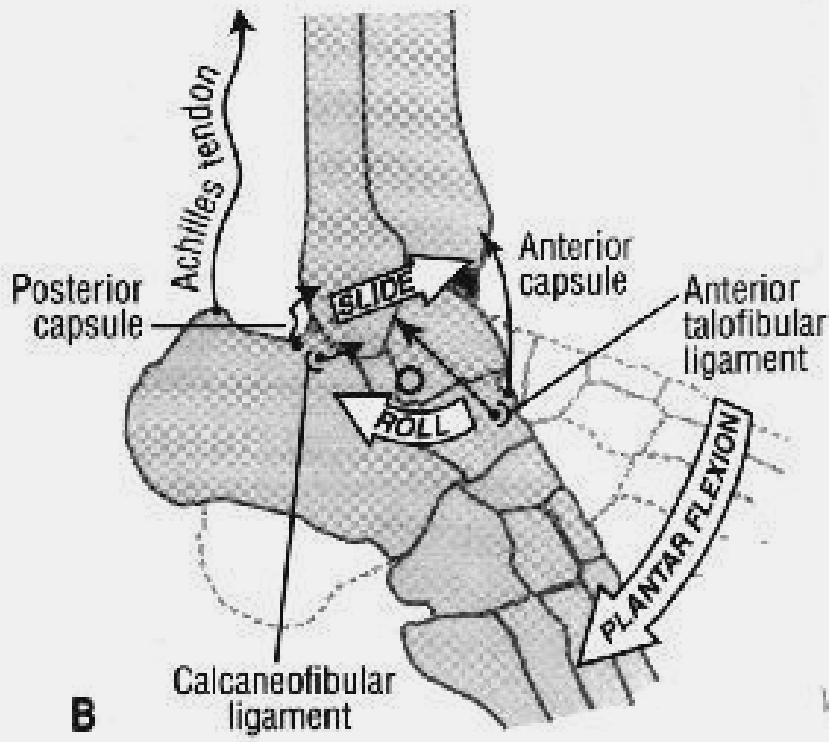


Talocrural joint

DORSIFLEXION

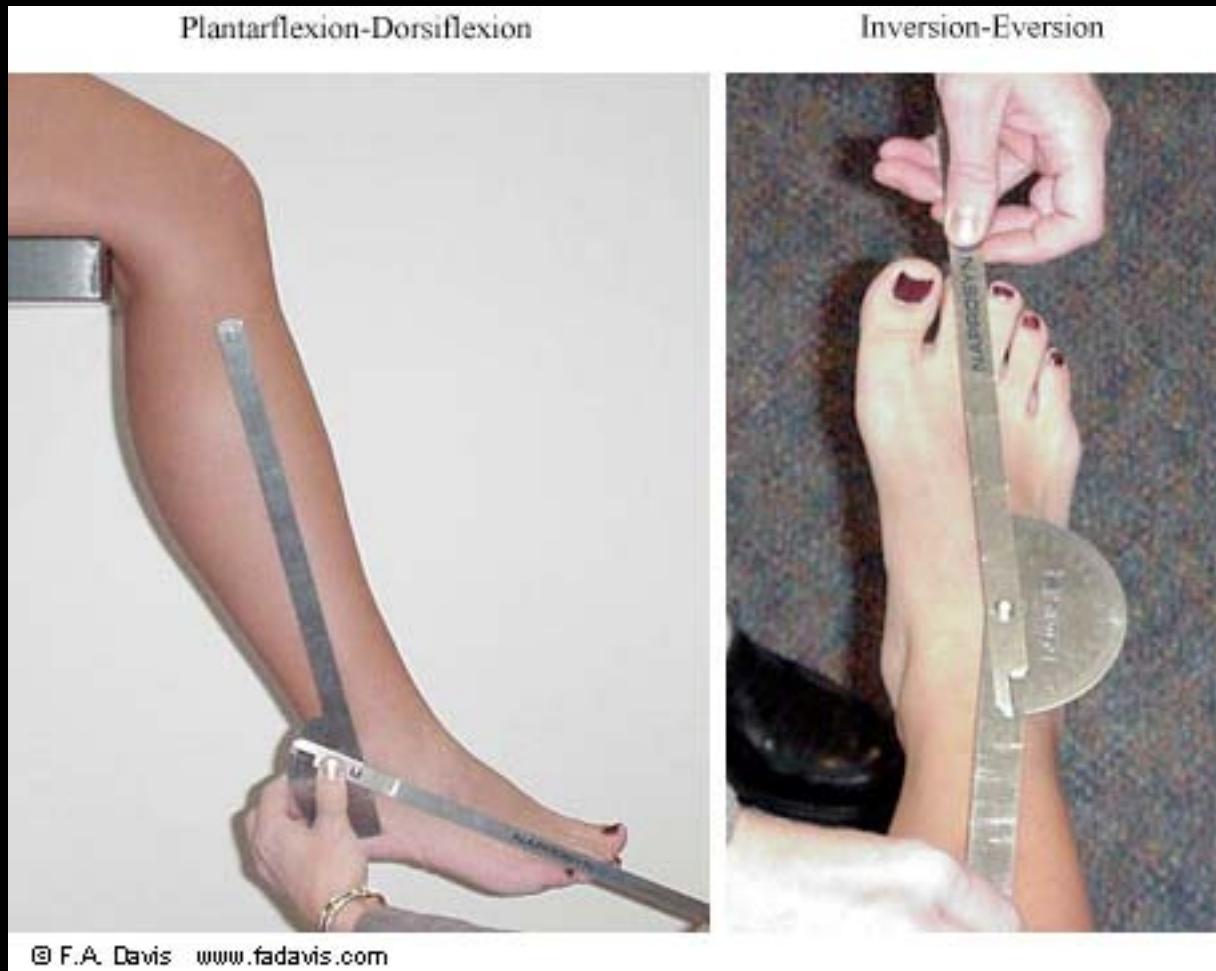


PLANTAR FLEXION



RANGE OF MOTION

- Axis of Rotation
- Motion Available



MUSCLE

Interactive Skeleton - Sports & Kinetic



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Muscle Actions

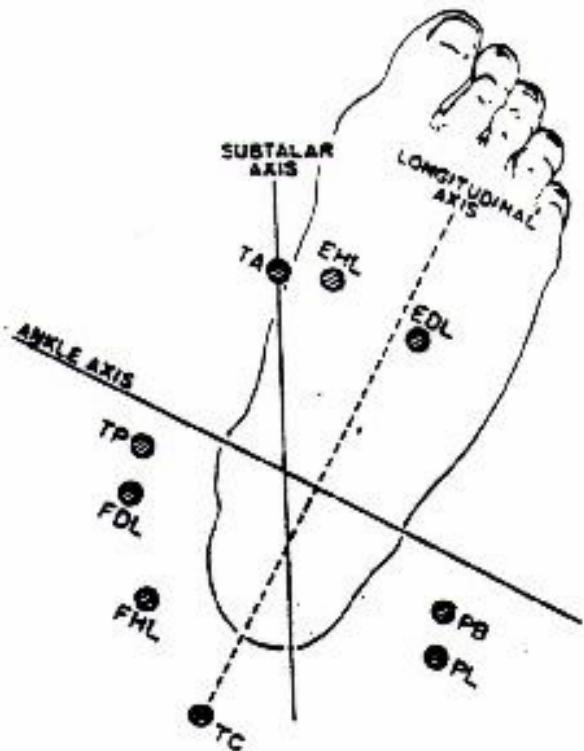


Figure 9

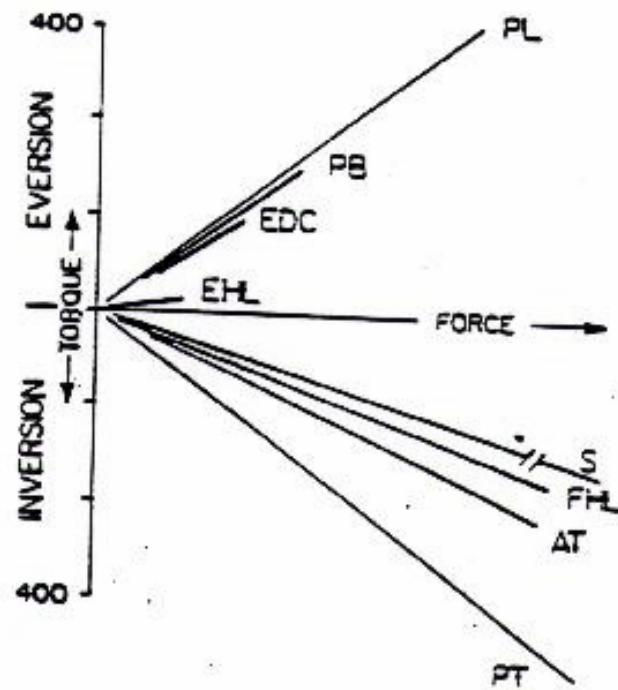
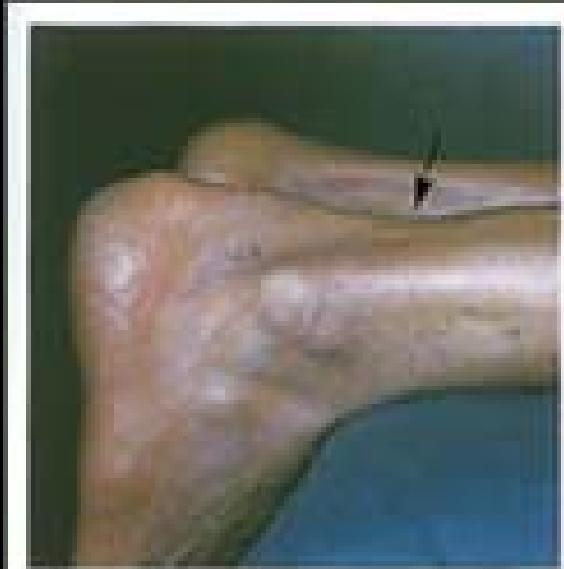


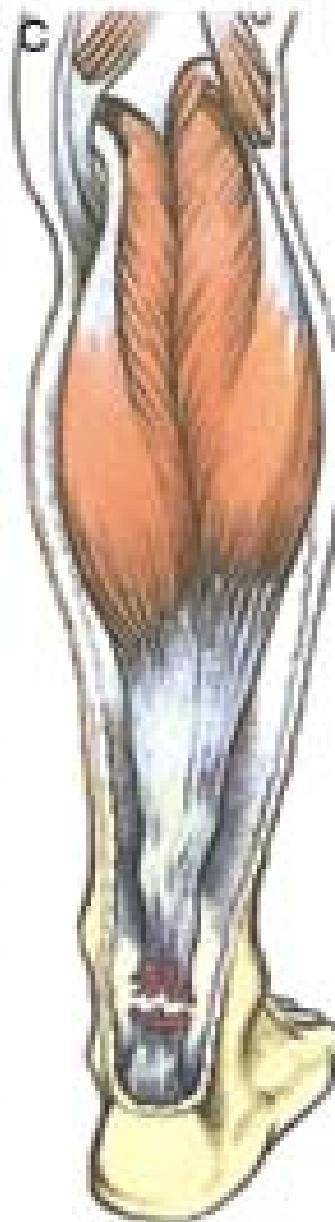
FIG. 4. Muscle action on the subtalar joint. Angle represents relative effectiveness as an inverter or evertor. Length of line indicates relative force. PL = peroneus longus; PB = peroneus brevis; EDC = extensor digitorum communis; EHL = extensor hallucis longus; S = soleus (actual length 5 times that shown); FHL = flexor hallucis longus; AT = anterior tibialis; PT = posterior tibialis.



A



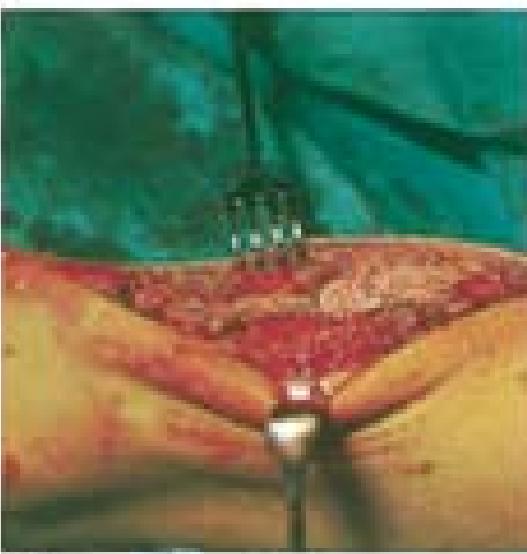
B



C

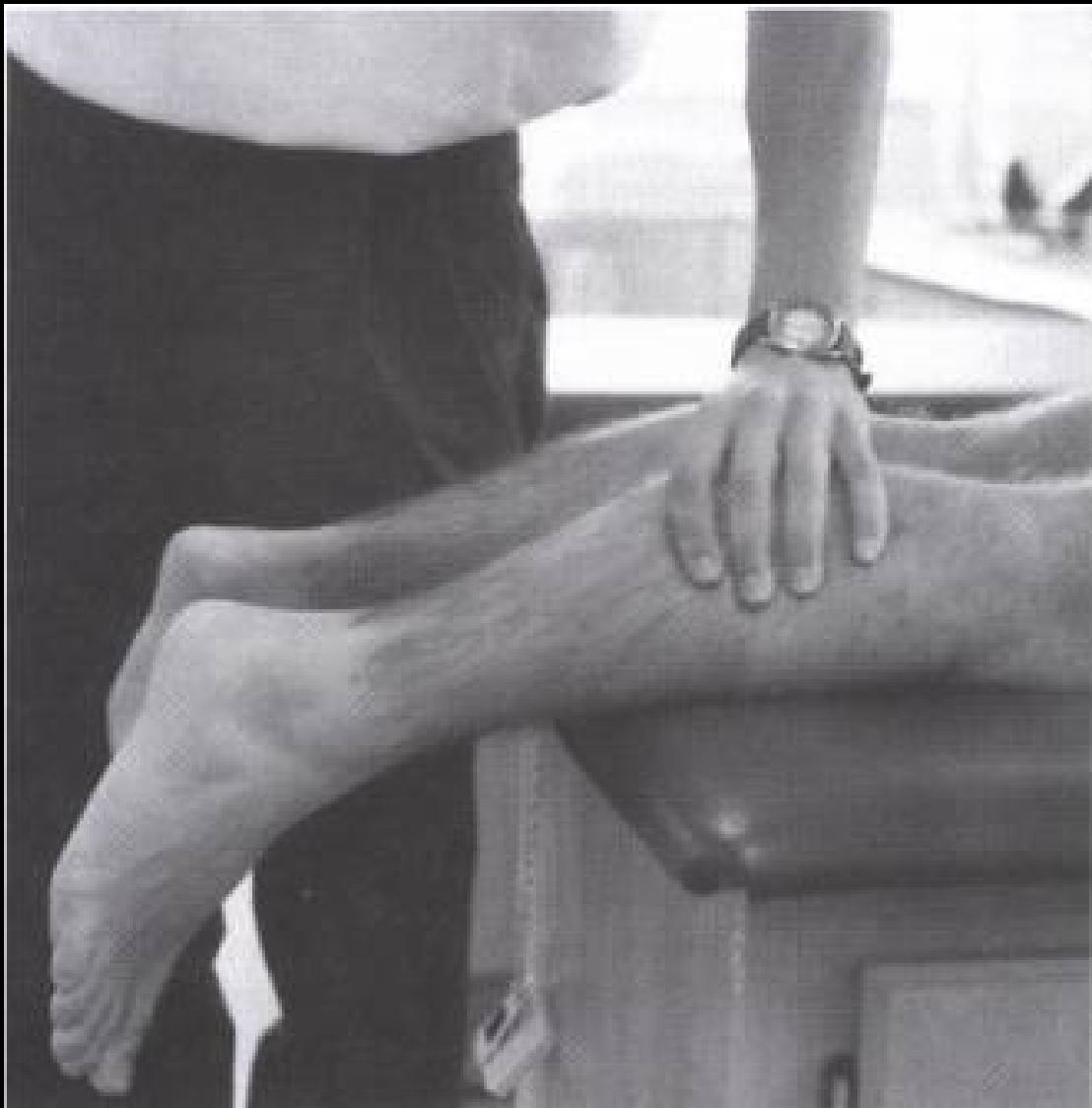


D

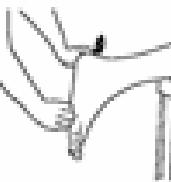
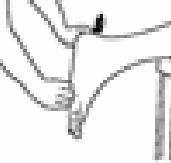


E

Thompson Test



NERVE

			
Nerve Root Level	Sensory Testing	Motor Testing	Reflex Testing
L4		 Deep peroneal n.	 Patellar t.
L5		 Deep peroneal n.	 Patellar t.
S1		 Tibial n.	 Achilles t.
S2		 Intrinsic foot/toe muscles Lateral plantar n.	 Achilles t.

Dermatomes

L4

L5

S1

S2



Dermatomes

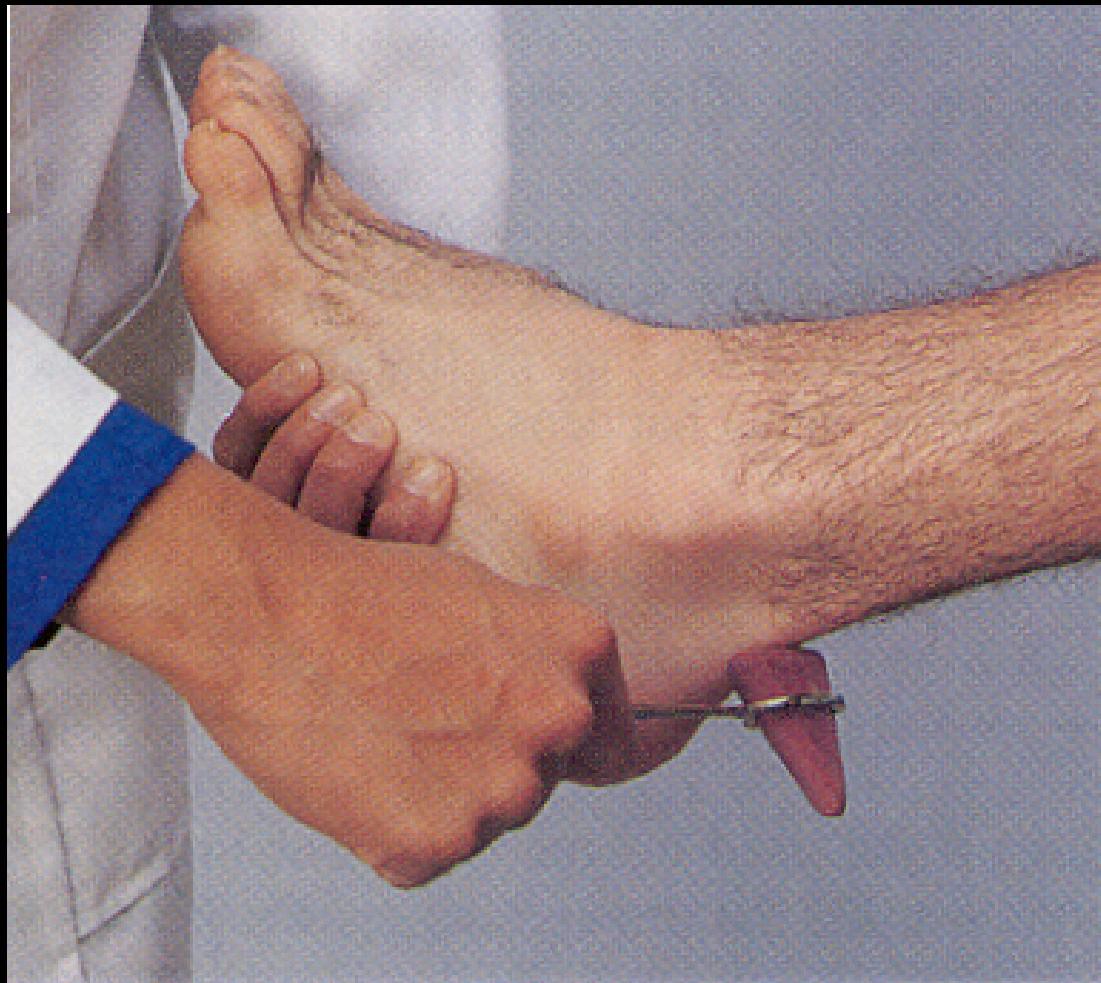
L4

L5

S1

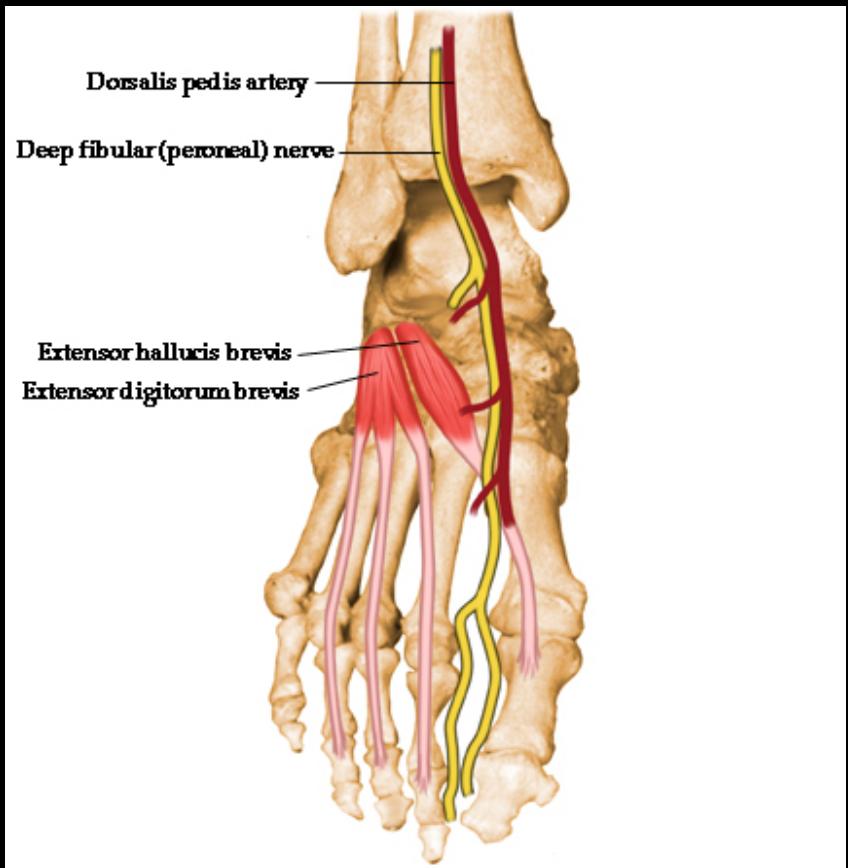
S2





VASCULAR

Posterior Tib

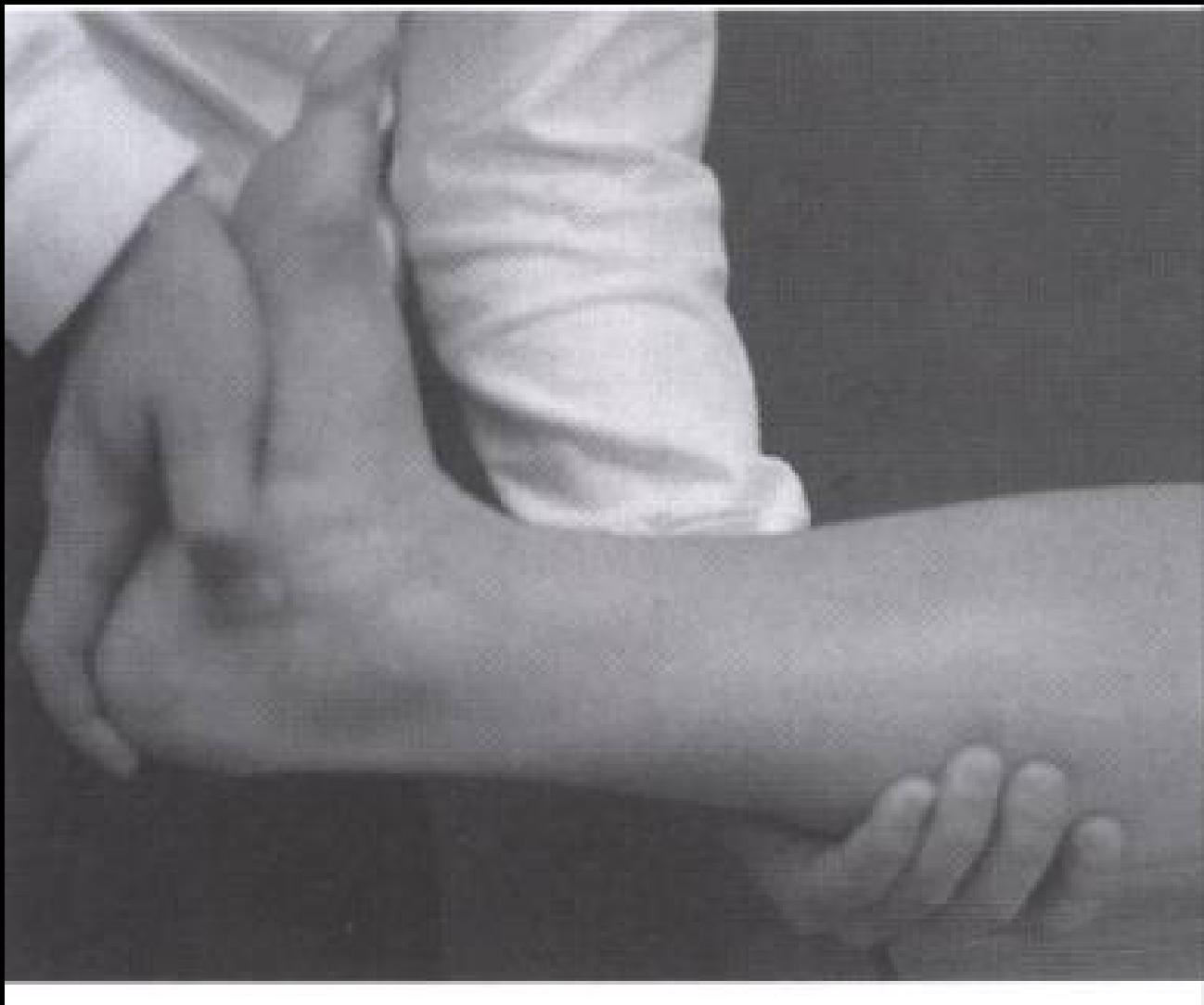


Dorsal Pedis

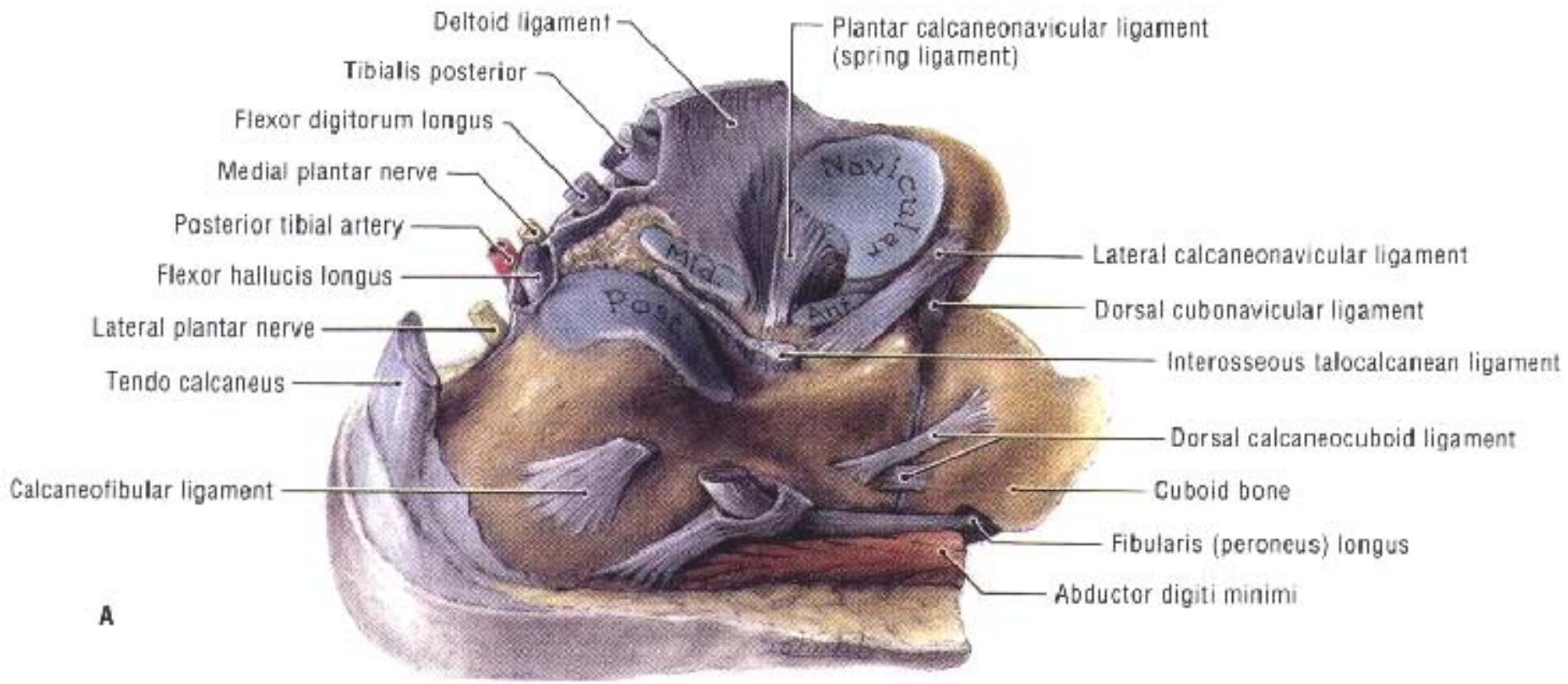


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Homan's Sign



Questions?



A