

## Ankle and Lower Leg



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## 3 Bones



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## Three Joints

- Proximal Tib-Fib
- Distal Tib-Fib
- Talo-crural

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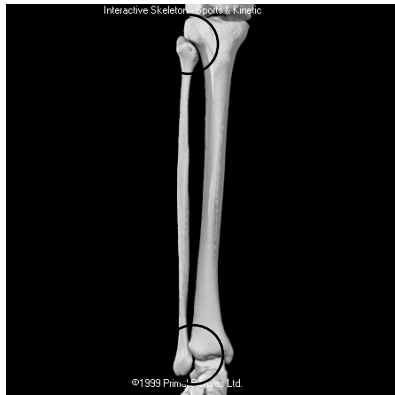
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## Tib – Fib Joints



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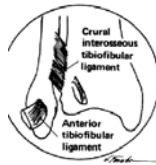
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## Distal 'tib-fib' Joint

- Syndesmosis
- motion-small
  - dorsiflexion -anterior and superior movement of fibula
- ligaments-
  - interosseous ligament
  - anterior/ posterior tibio-fibular ligaments>strong



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## Ankle /talo-crural joint

- Concave tibia/fibula with the talus
- Ankle joint surface is large and congruent



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**Ankle mortise**

mortise = movable wrench  
> mobility/stability



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Interactive Foot and Ankle 2 © 2001 Primal Pictures Ltd

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**Lateral**



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## Talocrural Joint



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## Lateral Muscles



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## Anterior



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Anterior  
View



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Anterior  
Muscles



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Medial



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Medial View



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Medial Muscles



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Posterior



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Posterior View



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Posterior Muscles



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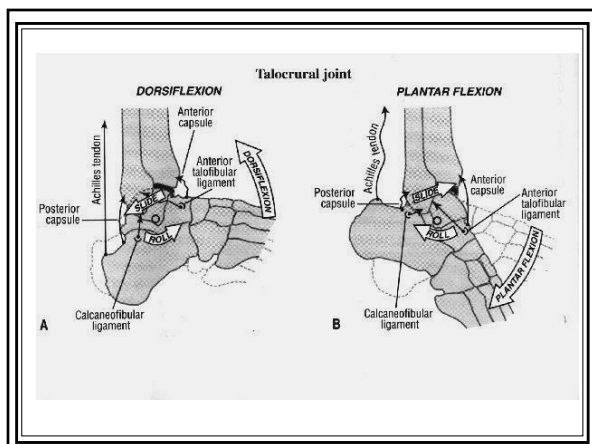
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# Muscle Actions

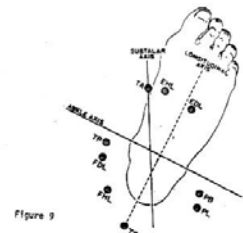


Figure 3

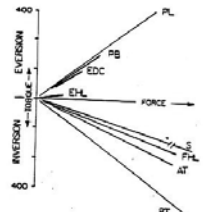


FIG. 4. Muscle action on the subtalar joint. Angle represents relative effectiveness of an inverter or evertor. Length of line indicates relative force. PL = peroneus longus; PB = peroneus brevis; EDC = extensor digitorum communis; EHL = extensor hallucis longus; S = sesamoideus longus; PHL = flexor hallucis longus; AT = anterior tibialis; PT = posterior tibialis.

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# Injuries

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

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# Bone



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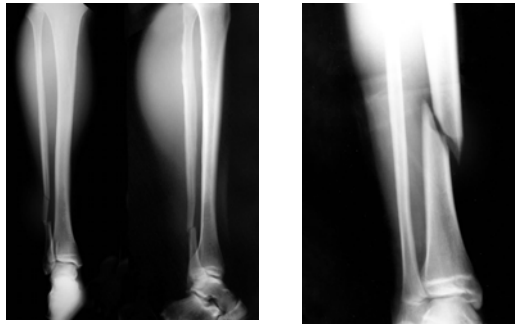
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## Fractures



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## Joints

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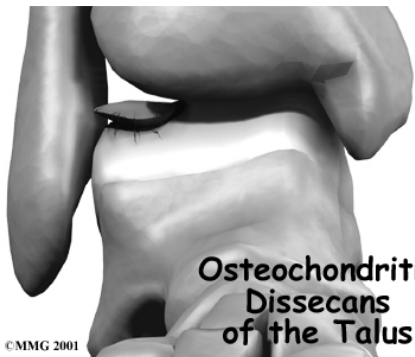
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Osteochondritis  
Dissecans  
of the Talus

©MMG 2001

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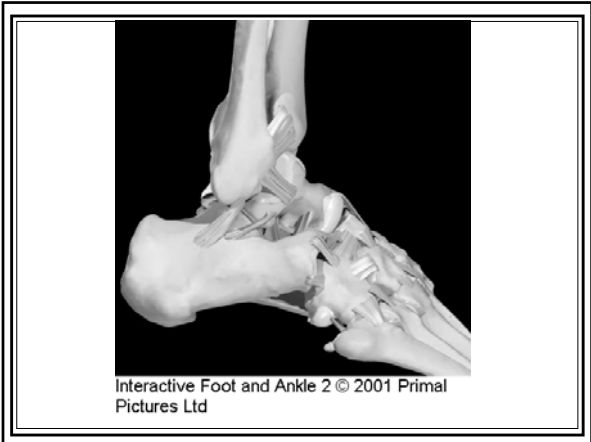
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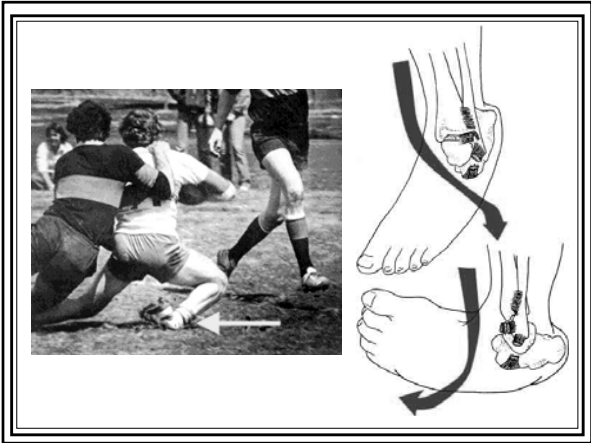
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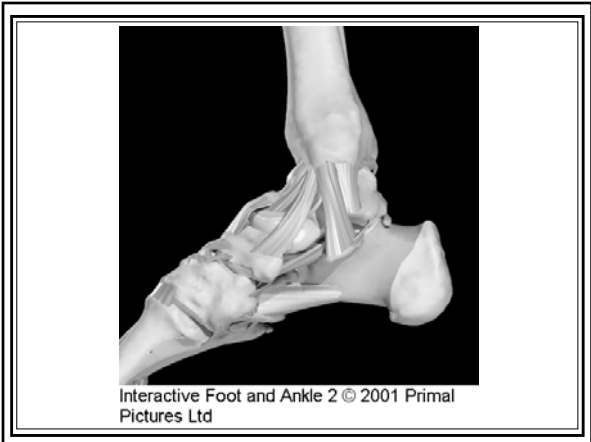
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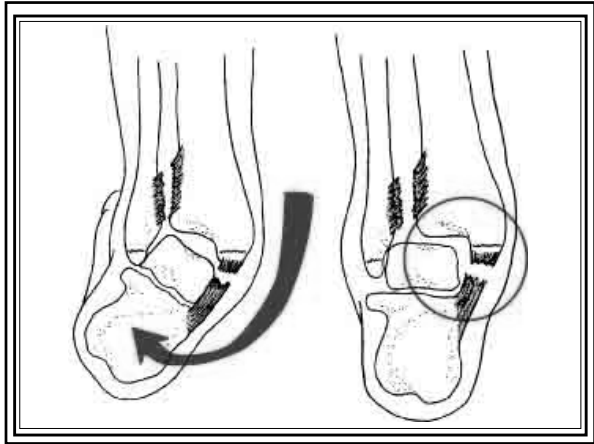
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# Muscle Injuries

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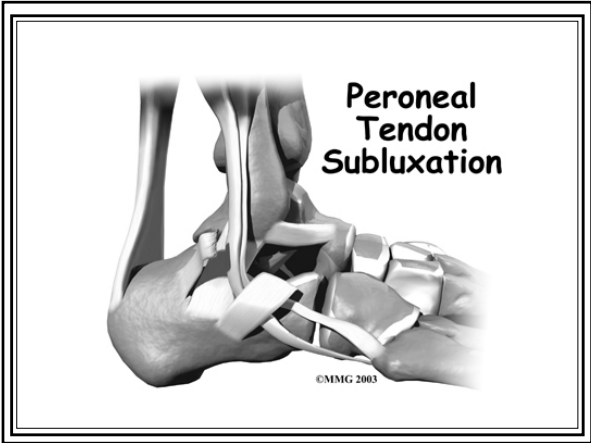
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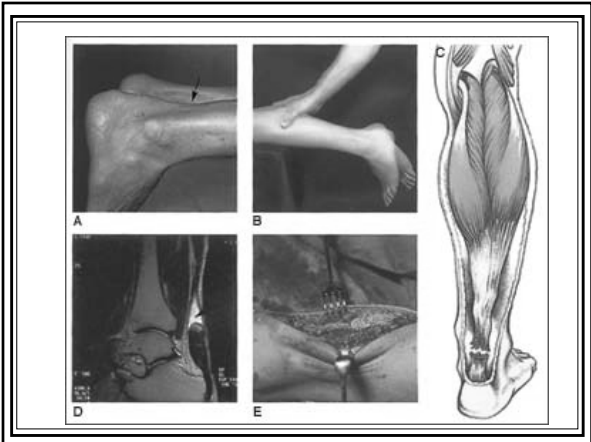
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NERVE

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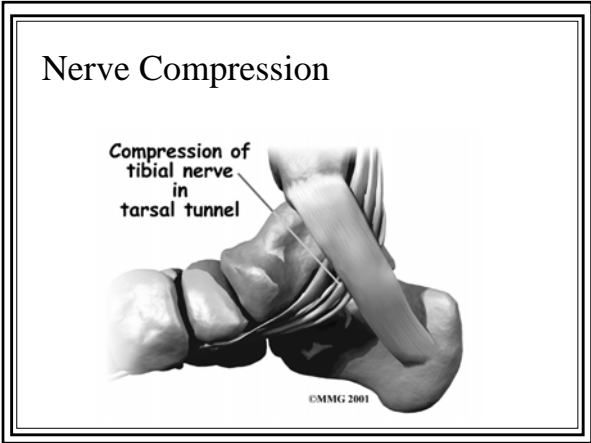
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VASCULAR

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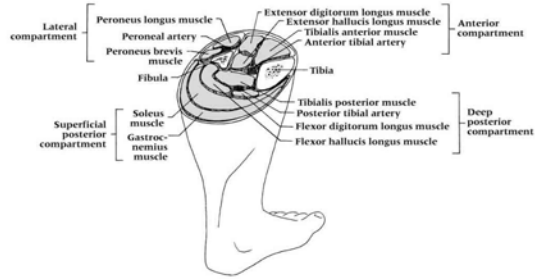
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## Anterior Compartment Syndrome



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**Questions?**

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