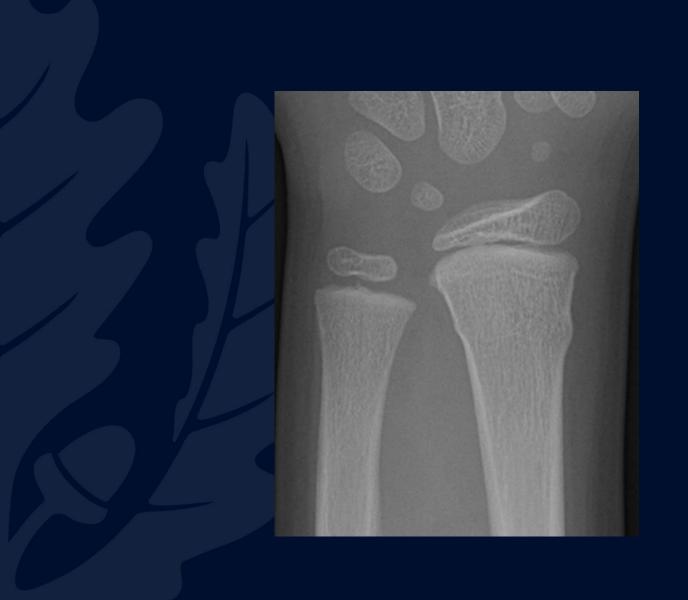
# 14 y/o M fell on his L wrist presents with pain

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# Buckle fracture





PA and lateral views of the left wrist showing contour abnormality of the cortex with buckling of the distal radius.





#### **Buckle Fracture**

- Incomplete fracture of the shaft of a long bone
  - Due to compression from an axial load
  - Characterized by buckling of the cortex
- Most commonly occurs at distal radius but can also occur at distal tibia, fibula, or femur
- Radiographically
  - No distinct fracture line
  - Subtle deformity or buckling of the cortex



### **Buckle Fracture**

- Occurs in children due to the elasticity of their bones
  - Presents with tenderness over bone
  - Other symptoms of swelling, decreased ROM may be minimal
- Management:
  - Stable tx aimed at pain relief and protection of bone from further injury
  - Splint or cast for approx. 3 weeks
  - Distinguish buckle fracture from greenstick fracture



## Greenstick Fractures

- Bone that is bent with a fracture that does not extend completely through the width of the bone
  - Tension side visible, complete fracture
  - Compression side opposite side with a plastic deformation or buckling
- High risk for repeat fracture
  - Immobilization followed by casting for approx. 6 weeks
  - Unstable fracture and may continue to displace after casting
  - Follow with Orthopedist



#### References

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