

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

Jing Marrero, MS4
Edward Gillis, D.O.
Aladdin Tarakji, M.D.







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A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide. The leaf has a prominent central vein and several smaller veins branching off it. The background of the slide is a solid dark blue.

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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