Case Study | CARESTREAM OnSight 3D Extremity System

Wrist-Hand Trauma

Patient History

Patient presented in pain from falling on an outstretched hand. Standard 2D X-ray imaging was performed (3 view) followed by imaging on the CARESTREAM OnSight 3D Extremity System.

Findings

A Colles' fracture is clearly seen on the 2D radiographs. Typical treatment would be cast immobilization or surgical fixation.

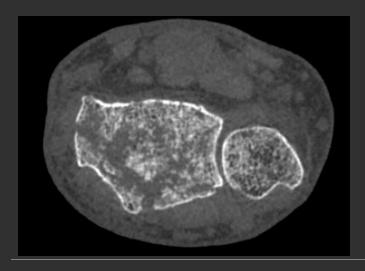






Figure 1 Standard 3-view 2D X-ray with evidence of Colles' fracture (Distal Radius Fracture)

If an Extremity CT was used, the following images could have been obtained:





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Figure 2 MPR slices from the patient in Figure 1 acquired with the OnSight extremity CT system showing a clear comminuted Colles' fracture of the distal radius with an associated fracture of the trapezium

Diagnosis for this patient could potentially identify both the Colles' and trapezium fracture as it is easily seen in the extremity CT scan compared to 2D radiographs. Fractures of the trapezium are very important to detect and treat early given the importance of the trapezium in the carpometacarpal joint in actions such as grip and pinch1. Typical treatment could be cast immobilization or surgical fixation for both fractures in one treatment.

¹DN Ramoutar, C Katevu, AG Titchener, and A Patel Trapezium fracture - a common technique to fix a rare injury: a case report Published online 2009 Sep 17. doi: 10.4076/1757-1626-2-8304 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2769426/



