

Crouching Tiger Hidden Fracture - When Xray Just Ain't Enough (Comminuted Intra-Articular Fracture Distal End Humerus)

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INTRODUCTION:

Intra-articular fractures are always dealt with extra care in view of the complexity due to the aim of anatomical reduction and stabilization. There are a multitude of factors which should be taken into account prior to surgical intervention.

MATERIALS & METHODS:

This is a case study of a young lady that had a fall and sustained a comminuted fracture of the distal end of her left humerus, which was picked up in a normal radiograph as a lateral epicondyle fracture. The comminution was only discovered after a CT scan was requested. Open reduction and internal fixation was planned, and the fracture was fixed with multiple screws. Fracture configuration is an important factor that should always be taken into account prior to surgical planning. Certain configurations may not alter the course and modality of management, but most do require precise planning and possibly the inclusion of an alternative implant or reduction and fixation technique.

RESULTS:

An article was published in 2006, where the study of 24 patients looked into the role played by Computer Tomography in decision making during the management of intraarticular fractures of the calcaneum. There was no significant difference between the radiograph base and CT scan based decisions; however, there are variations among the observer or assessors for the CT based assessment.



Figure 1: Xray of right elbow

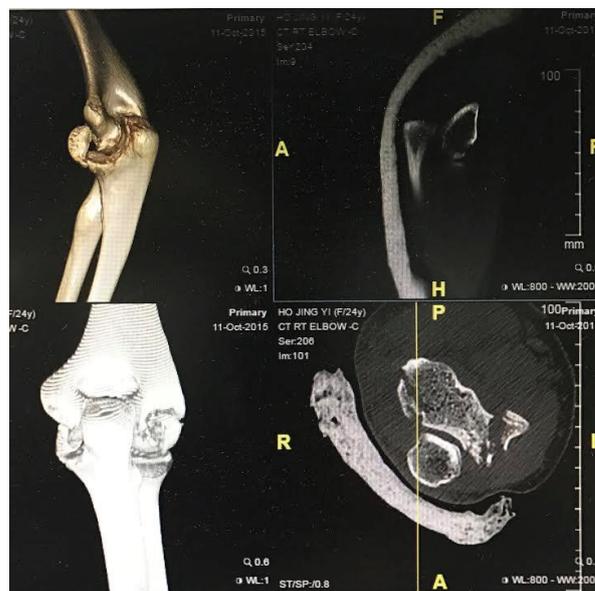


Figure 2: CT findings post trauma

CONCLUSION:

CT scans should not be used as sole and routine determinants of fracture fixation, but it does provide better insight into pre operative planning for fixation; therefore a CT scan should be requested for whenever there is a suspicion of intraarticular comminution that might not be easily picked up in a plain radiograph.

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