Coronal Shear Fractures of the Distal Humerus

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Coronal shear fractures of the distal humerus are rare, frequently are comminuted, and are without management consensus. Typically, they result from low-energy trauma via an indirect impact along the radius in full extension or a posterolateral transient dislocation followed by spontaneous reduction. This video reviews current concepts on the diagnosis of, classification of, surgical approaches for, and treatment options for capitellar and trochlear fractures.

CT scans and the Dubberley classification are extremely helpful in the decision-making process. Most fractures necessitate open reduction and internal fixation, typically with the use of headless compression screws. Antegrade and retrograde fixation are possible. In patients with posterior comminution, a posterolateral plate and screws are indicated. Arthroscopic management is a rare treatment option for select patients. If fixation is not possible because of poor bone quality or severe comminution, then elbow replacement may be indicated, specifically in elderly patients.