Fractures of the medial humeral epicondyle

Objectives
1. Describe mechanism of injury for fractures of the medial humeral epicondyle
2. Discuss the clinical and radiographic findings of fractures of the medial epicondyle
3. Discuss the management of fractures of the medial humeral epicondyle

Discussion point
1. After a literature review on this subject, how do you decide what to do for this injury?

Discussion
Medial epicondyle fractures tend to occur in older children than supracondylar or lateral condyle fractures, often from athletic activities, arm wrestling being a particularly oftmentioned activity. Injuring forces that would result in a humeral shaft fracture in an adult may fracture the medial epicondyle when the apophysis is not yet closed. A large number of medial epicondyle fractures accompany elbow dislocation; the medial epicondyle fracture may be the only radiographically evident injury if the dislocation spontaneously reduces.

Everyone writing on the subject agrees that minimally displaced fractures may be treated with immobilization. For displaced fractures, the literature is obfuscating. If there is any trend, it would be toward internal fixation for those who may want to return to sports activities; for others it is still quite unsettled. The study by Joseffson is a standard for the quite good results of nonoperative management. Even with medial epicondylar fractures accompanying elbow dislocation, symptomatic instability was uncommon.

References