Reviewer's report

Title: Occult posterolateral rotatory dislocation of the elbow with olecranon fracture in a child: a case report

Version: 2 Date: 16 May 2012

Reviewer: Jan-Hendrik Gosemann

Which of the following best describes what type of case report this is?: An unexpected association between diseases or symptoms

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

Is the case report ethical?: Yes

Is there any missing information that you think must be added before publication?: Yes

Is this case worth reporting?: Yes

Is the case report persuasive?: Yes

Does the case report have explanatory value?: No

Does the case report have diagnostic value?: No

Will the case report make a difference to clinical practice?: No

Is the anonymity of the patient protected?: Yes

Comments to authors:

The authors present a case of an 11-year old Asian boy with a minimally displaced olecranon fracture and lateral epicondylar avulsion fracture after a motor vehicle accident. First diagnosis was made by plain x-ray and computed tomography. Stress radiographs under general anaesthesia revealed severe posterolateral rotatory instability. The boy was taken to theatre where the lateral epicondylar osteochondral fragment and lateral collateral ligament complex were fixed. After surgery lateral instability was reported to have disappeared. The authors conclude that early initial repair after careful physical examination and interpretation of radiographs can produce excellent results. They also state that delayed diagnosis or surgery may cause chronic instability or non-union leading to further surgery.
This is an interesting case, describing a rare combination of a minimally displaced olecranon fracture and lateral epicondylar avulsion fracture combined with severe posterolateral rotatory instability. The authors present a well-written manuscript. However, some major remarks arise while reading this manuscript:

- It is mandatory that every presenting patient should be examined carefully and thoroughly. Early diagnosis/treatment is important for every trauma patient to decrease morbidity and sequelae. What’s new?
- Radiation exposure should be avoided whenever possible, especially in the growing patient. In children magnetic resonance imaging should be considered if possible. What was the purpose of CT diagnostic? The authors should inform the reader about the decision making process and discuss advantages and disadvantages of the chosen diagnostic/treatment pathway.
- The conclusion that delayed diagnosis or surgery may cause chronic instability or non-union leading to further surgery is hypothetical and cannot be based on the presented case/data.

**Quality of written English:** Acceptable