

## Clinical Image

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# Olecranon apophysitis on MR images

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### Description

An 11-year-old water-polo male player with no previous history of trauma presented to the emergency department with right elbow pain for the past 3 months. X-ray showed olecranon fragmentation and irregularity (arrow on a). Sagittal and axial T1W (c-d) and PDFS (b-e) MR images demonstrated fragmentation (arrow on c-d) with hyperintensities (arrow on b-e) across the olecranon apophysis. Findings were consistent with olecranon apophysitis. No avulsion was demonstrated at the triceps tendon insertion. Because of the high speed at which the pa-

tient has to throw the ball, he needs strong triceps contractions to stabilize the elbow. It's presumed that repeated forceful contractions may cause significant stress on the triceps insertion causing interruption of blood supply and localized avascular necrosis which results in fragmentation and edema of the tip of the olecranon, nevertheless, the etiology is unclear. Apophysitis of the olecranon is a very rare condition. To our knowledge, only 5 cases (Hunter and O'Connor 1980 and Danielsson 1983) have previously been reported. This is the first case report which includes MRI images.



## Declarations

**Data sharing statement:** The relevant anonymized patient-level data are available via request from the authors.

**Declaration of interests:** The authors declare no conflicts of interest in the publication of this article.

**Ethical approval and informed consent:** The reported case was reviewed and approved by the institutional ethics comity. Following their guidelines, all protected health information was removed, and individual patient consent was not required for the analysis.

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## References

1. Hunter LY, O'Connor GA. Traction apophysitis of the olecranon. A case report. *Am J Sports Med*. 1980; 8(1): 51-2. doi: 10.1177/036354658000800110. PMID: 7356800.
2. Danielsson LG, Hedlund ST, Henricson AS. Apophysitis of the olecranon. A report of four cases. *Acta Orthop Scand*. 1983; 54(5): 777-8. doi: 10.3109/17453678308996629. PMID: 6670498.