

Symptomatic Patella Cubiti Revealed by Exertional Elbow Pain in a Woman: A Case Report

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Abstract

Case Report

Patella cubiti (PC) is a rare accessory ossicle of the elbow resulting from partial or complete separation of the olecranon from the proximal ulna. It is usually asymptomatic, discovered incidentally, and reported predominantly in men. We describe a 40-year-old woman who presented with left posterior elbow pain of mechanical character following a strength-training session, without a discrete traumatic event. Plain radiographs of the elbow demonstrated a well-corticated ossicle lying posterior to the distal humerus within the triceps tendon, consistent with PC and without an acute fracture line. In the absence of joint blockage, instability, or neurovascular compromise, the patient was managed conservatively with activity modification, analgesia, and clinical and radiological follow-up. This case is notable for a symptomatic, exertion-related presentation in a woman a demographic in which PC is seldom reported and underlines PC as a differential diagnosis for atraumatic posterior elbow pain in physically active individuals, as well as a potential pitfall in the acute setting where it may be mistaken for an olecranon avulsion fracture.

Keywords: patella cubiti, accessory ossicle, olecranon, elbow pain, sesamoid bone, radiography.

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INTRODUCTION

Patella cubiti (PC) is a very rare condition in which the olecranon remains partially or completely separated from the remainder of the ulna. It was first described by Habbe in 1942, and other terms have been used for this accessory bone, including “olecranon epiphyseal bone” by Kjelland in 1945 and “sesamum cubiti” by Sachs and Degenshein. PC is more frequent in men and is usually unilateral, although bilateral cases have been reported. Radiographically, it appears as a well-corticated ossicle with smooth edges situated above the proximal ulna, within or adjacent to the triceps tendon.

The condition is most often asymptomatic and identified incidentally during imaging performed for unrelated reasons, so that symptomatic presentations are uncommon and exertion-related presentations rarer still. We report a physically active woman in whom PC was revealed by posterior elbow pain after a gym session and diagnosed on a simple radiograph, illustrating an unusual demographic and mechanism for this anomaly.

CASE PRESENTATION

A 40-year-old woman, right-hand dominant and without relevant medical or surgical history, presented with pain of the left elbow that began 1 month earlier during a strength-training session. She reported no fall, direct blow, or dislocation. The pain was located at the posterior aspect of the elbow, worse on resisted extension, and there was no antecedent history of elbow trauma or symptoms.

On examination, there was localized tenderness over the olecranon with a firm posterior swelling. The elbow was stable, with a full range of motion and preserved pronation supination. There was no limitation of extension, no mechanical blockage, and the neurovascular examination of the limb was normal. Resisted elbow extension reproduced the pain.

Plain radiographs of the elbow were obtained in frontal and lateral views (Figure 1). They revealed a well-corticated, ovoid ossicle with smooth margins located posterior to the distal humerus at the level of the olecranon, lying within the line of the triceps tendon, without an acute fracture line or displacement.

Radiographs of the contralateral elbow were normal. The appearances were consistent with patella cubiti. Given the absence of disabling mechanical symptoms, no

further cross-sectional imaging was considered necessary.

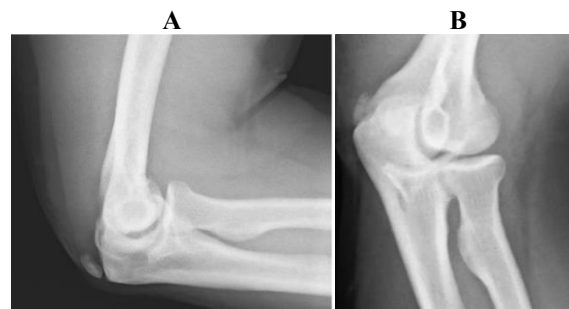


Figure 1: Frontal and lateral radiographs of the affected elbow

A and B: A well-corticated ossicle with smooth margins is seen posterior to the distal humerus at the olecranon, within the triceps tendon, consistent with patella cubiti. No acute fracture line is identified.

In view of the mechanical but non-disabling nature of the symptoms and the absence of instability or joint blockage, a conservative approach was adopted, comprising activity modification, a short period of relative rest and progressive rehabilitation, and clinical and radiological follow-up. At 6 months of follow-up, symptoms had resolved and there was no radiographic change or displacement of the ossicle. Surgical excision was discussed and reserved for persistent or disabling symptoms.

The patient gave her free and informed consent for the completion and publication of this manuscript.

DISCUSSION

Although PC was described more than eighty years ago, its etiology remains poorly understood, and three hypotheses are usually advanced. The congenital hypothesis proposes a failure of fusion between the proximal part of the olecranon and the proximal ulna during embryonic development. The developmental hypothesis attributes PC to an epiphyseal disturbance in early childhood, with separation of the olecranon above the metaphyseal plate and subsequent ossification. The traumatic hypothesis holds that an untreated traumatic separation of the olecranon from the ulna may consolidate as a separate ossicle.

The particularity of the present case is threefold: the patient is a woman, whereas PC is reported predominantly in men; the ossicle was symptomatic, whereas most cases are asymptomatic and incidental; and the symptoms were provoked by physical exertion rather than by a discrete injury. Because the ossicle lies within the triceps tendon, repetitive or high-load contraction of the triceps during resistance training is a plausible mechanism for symptomatic traction at the

ossicle–tendon interface, producing exertional posterior elbow pain in an otherwise silent anomaly.

An important practical point is differential diagnosis. In a patient presenting acutely after gym activity, a well-corticated posterior ossicle may be mistaken for an olecranon avulsion fracture; the smooth, corticated margins, the absence of an acute fracture line, and, where available, a comparable finding on the contralateral side favor an accessory ossicle over an acute fracture. Other entities to consider include a persistent olecranon apophysis, os supratrochleare dorsale, an intra-articular loose body, and post-traumatic myositis ossificans. Recognizing PC avoids unnecessary intervention and mislabeling of a longstanding anomaly as an acute injury.

Management depends on symptoms. Asymptomatic PC requires only observation, with radiographic follow-up to monitor stability. For mild symptoms, analgesia, activity modification, and physiotherapy focused on the triceps and elbow are usually sufficient. Surgical excision of the ossicle is reserved for persistent or disabling symptoms, significant stiffness, or functional limitation not relieved by conservative measures. Documented cases remain scarce, and accessory bones of the elbow, including PC, have been reported with a prevalence below 1% in anatomical series, which underscores the importance of clinician awareness to avoid misdiagnosis. A limitation of this report is that, given the chronic, well-corticated appearance of the ossicle, an incidental patella cubiti coexisting with an independent, self-limiting soft-tissue cause of pain cannot be entirely excluded; the principal value of the case therefore lies in recognition of the entity and its distinction from an acute olecranon avulsion fracture.

CONCLUSIONS

Patella cubiti is an exceptionally rare accessory ossicle of the elbow, usually asymptomatic and incidental. The present case is distinctive for a symptomatic, exertion-related presentation in a woman,

diagnosed on a simple radiograph. It illustrates that PC should be considered in the differential diagnosis of atraumatic posterior elbow pain in physically active individuals and that it may mimic an olecranon avulsion fracture in the acute setting. Conservative management with activity modification and follow-up is appropriate for non-disabling symptoms, with excision reserved for refractory cases. Awareness of this anomaly allows correct diagnosis and avoids unnecessary treatment.

Additional Information

Author Contributions

All authors have reviewed the final version to be published and agreed to be accountable for all aspects of the work.

Human subjects: Consent for treatment and publication was obtained from the patient.

Conflicts of interest: In compliance with the ICMJE uniform disclosure form, all authors declare the following:

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REFERENCES

1. Habbe JE: Patella cubiti: report of 4 cases. *AJR Am J Roentgenol*. 1942, 48:513-26.
2. Kjelland PM: A rare anomaly in the elbow; patella cubiti. *Acta Radiol*. 1945, 26:491-6. 10.3109/00016924509133433
3. Sachs J, Degenshein G: Patella cubiti; a new method of treatment for its avulsion. *Arch Surg*. 1948, 57:675-80.
4. Stanchev S, Gaydarski L, Iliev A, Krupev M, Kotov G, Landzhov B: New insight into the morphological characteristics of patella cubiti. *Surg Radiol Anat*. 2023, 45:1103-6. 10.1007/s00276-023-03172-1
5. Kattan KR, Babcock DS: Case report 105. Bilateral patella cubiti. *Skeletal Radiol*. 1979, 4:249-50. 10.1007/BF00347224
6. Ishikawa H, Hirohata K, Kashiwagi D: A case report of patella cubiti. *Z Rheumatol*. 1976, 35:407-11.
7. Van Demark RE, Anderson TR: Fractured patella cubiti: report of a case with pathologic findings. *Clin Orthop Relat Res*. 1967, 53:131-4.
8. Mittal R, Sampath Kumar V, Gupta T: Patella cubiti: a case report and literature review. *Arch Orthop Trauma Surg*. 2014, 134:467-71. 10.1007/s00402-014-1926-7
9. Winter M, Balaguer T, Tabutin J: Bilateral patella cubiti. A case report. *J Bone Joint Surg Am*. 2006, 88:415-7. 10.2106/JBJS.E.00719
10. Kunc V, Kunc V, Cerny V, Polovincak M, Kachlik D: Accessory bones of the elbow: prevalence, localization and modified classification. *J Anat*. 2020, 237:618-22. 10.1111/joa.13233