Single extremely large loose body in olecranon fossa in a young patient

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DESCRIPTION

A 19-year-old female patient injured her right elbow following a fall off her bike 5 years ago and had gradually developed pain at the extremes of motion with mild restriction in the range of motion and minimal functional compromise. Three years later she had another fall and presented with moderate swelling and a mild loss of elbow extension. During the last 2 years, she had occasional pain and clicking sensation but her symptoms usually settle after a few days' rest and anti-inflammatory medication.

Plain radiographs revealed a single large loose body located in the olecranon fossa measured about 18 mm diameter (figure 1), which has also been confirmed by CT scan (figure 2) and MRI (figure 3). There is also a small area of cortical irregularity at the posterior aspect of the lower end of humerus close to the radiocapitellar joint.

Currently, her ROM remains mildly restricted (range 10°–140°) with normal pronation and supination of the forearm. There seems to be a mechanical block to extension, but her overall function and level of activities remain within normal limits.

Figure 1 Plain radiographs showing a single large loose body seated in the olecranon fossa (arrow).

Figure 2 CT scan (sagittal, axial and coronal cuts) showing the same round loose body in more detail (arrow).

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Figure 3 MRI (sagittal view) showing the large loose body (arrow).

Acquired loose bodies in the elbow joint originate from four main sources of underlying pathology: post-traumatic, degenerative, osteochondritis dissecans and synovial chondromatosis.¹ Typically, patients complain of pain with snapping and clicking in the joint.² Blocking of elbow extension is more common³ and is caused by deposition of chondral fragments in the olecranon fossa. Elbow arthroscopy is the treatment modality of

choice for removal of cartilaginous loose bodies that become symptomatic.⁴

Learning points

- ▶ Loose bodies within the elbow joint are quite rare in young patients and usually remain asymptomatic for prolonged periods.
- ▶ They can gradually increase in size and cause intermittent mechanical symptoms.
- ▶ Symptomatic loose bodies can be removed either arthroscopically or by open surgery.

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