Open access Journal International Journal of Emerging Trends in Science and Technology

The Olecranon Spur Fracture and Its Healing In a Heavy Manual Labourer- A Case Report

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Abstract

Objective: *Olecranon spur is common in males involved in heavy manual labour. The olecranon spur fracture is rarely reported in literature, and most would be associated with triceps tendon disruption. The presence of pseudoarthrosis is to be kept in mind which can mimick fracture. True fracture of the spur in isolation, without triceps tendon disruption is even rarer.*

Case Report: *A 40 year old manual labourer reported with persistent pain in his elbow for one week. The patient gave history of fall on the ground with elbow striking against a large stone one week back. Examination revealed normal elbow function without any defect in triceps tendon. A radiograph showed discontinuity at the base of olecranon spur. A repeat x-ray was taken a month later which showed the discontinuity filled with radioopacity indicating that it was a fracture rather than pseudoarthrosis.*

Discussion: *One must be aware of the presence of the narrow band at the base of the spur appearing in the manner of pseudoarthrosis. This should not be confused with the fracture of the olecranon spur which is a rare entity. Another point of concern in such cases is the disruption of the triceps tendon alongwith the olecranon spur avulsion. So, the patient should be carefully examined whenever a discontinuity is seen at the base of the olecranon spur.*

Conclusion: *A heavy manual labourer reporting with olecranon spur fracture should be approached carerfully lest one might be overlooking a triceps tendon disruption ahich will be highly disabling for the person involved in heavy manual labourer. Although in most cases it might be only a spur fracture in isolation or just a pseudoarthrosis.*

Key words: *Olecranon spur · Olecranon spur fracture.*

INTRODUCTION

The presence of olecranon spur are common in males who do heavy manual labour, such as heavy machine operation and saw mill workers [(1)]. There is also the frequent presence of a narrow band of radiolucency at the base of the spur in such a way that the spur appears to be an isolated skeletal element with a joint-like connection with the ulna in the manner of a pseudoarthrosis [(2)]. This pseudoarthrosis may be sometimes mistaken as a frature.

The occurrence of true fracture through the base of the olecranon spur is considered to be a rare entity, and most would be expected to occur with the disruption of the triceps tendon [(1)]. Therefore the disruption of the triceps tendon should be kept in mind whenever the spur fracture is seen. An isolated olecranon spur fracture is rarely reported in literature. A case is reported here where an isolated olecranon spur fracture was spotted without triceps tendon disruption.

CASE REPORT

A 40 year old male, professionally a manual labourer working in stone-crushing industry, reported to the out-patient department of our hospital. The patient had a fall one week back with his elbow striking against a large stone on the ground while at work. The patient was complaining of persistent pain, aggravated by work, since the fall. On examination the patient had a pin-point tenderness at the tip of olecranon with minimal swelling, when compared to the normal elbow. The patient had no defect palpable within the triceps tendon and his elbow extension was normal. A radiograph was taken which showed discontinuity through the base of the olecranon spur (Fig. 1).

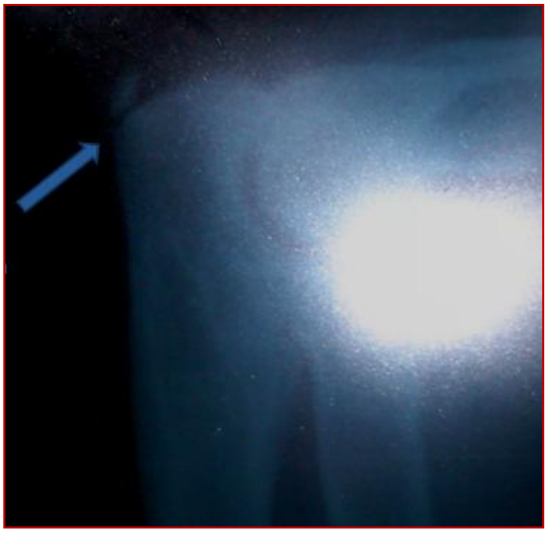

Figure 1: X-ray showing discontinuity at the base of the olecranon spur

The patient was advised to rest his arm in an arm pouch with elbow in lesser degrees of flexion. The patient was called for regular follow-ups for one month during which the patient got relieved of his symptoms. A repeat radiograph was taken which showed that the discontinuity at the base of olecranon spur present in the initial radiograph is filled with the radioopacity (fig 2). It was after seeing the second radiograph it was diagnosed that the patient had fracture through the base of the olecranon spur rather than simply a pseudoarthrosis. Also there was no distruption of the triceps tendon as shown by the examination and the norma l elbow function at the end of follow-up.

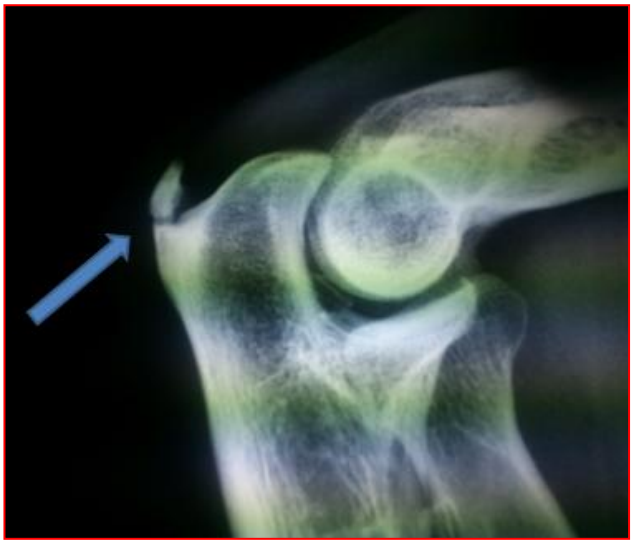

Figure 2: X-ray showing the discontinuity filled with radio-opacity indicating healing

DISCUSSION

Olecranon spurs are not uncommon in males involved in heavy manual labour. But at the same time, one must be aware of the presence of the narrow band at the base of the spur appearing in the manner of pseudoarthrosis[(2)]. This should not be confused with the fracture of the olecranon spur which is a rare entity. Another point of concern in such cases is the disruption of the triceps tendon along with the olecranon spur avulsion. So, careful examination is of immense help to look for the same, especially at places with lesser availability of high quality imaging equipments as was the case with our patient and place. The case presented here proves that the fracture of olecranon spur can take place without triceps tendon disruption, which is very rare.

CONCLUSION

The olecranon spur fracture in heavy manual labourers can occur which should be approached seriously, although it may prove to be a psuedoarthrosis or a simple fracture. But if it turns out to be triceps tendon avulsion and was not taken care of properly, it will be highly disabling for the person involved in heavy manual labour.

ACKNOWLEDGEMENT

Author acknowledges the immense help received from the scholars whose articles are cited and included in references of this manuscript. The authors are also grateful to authors/editors/ publishers of all those articles, journals and books from where the literature for this article has been reviewed and discussed.

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