



ORIGINAL RESEARCH PAPER

Orthopaedics

RECONSTRUCTION OF COMPLETE TEAR OF DEGENERATED TRICEPS TENDON USING SUTURE ANCHOR : A CASE REPORT

KEY WORDS:

Dr Abhishek Chaturvedi

Resident, Dept Of Orthopedics.

Dr Mangesh Panat

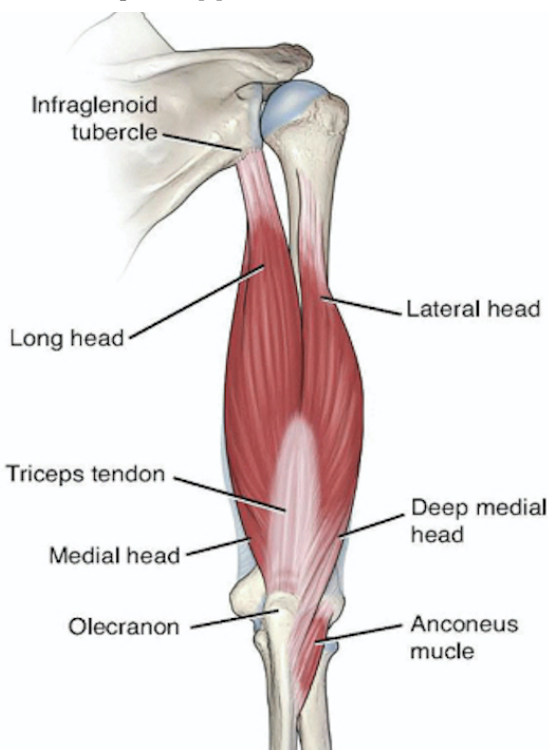
Associate Prof., Dept Of Orthopedics.

Dr Dinesh Vibhute

Lecturer, Dept Of Orthopedics.

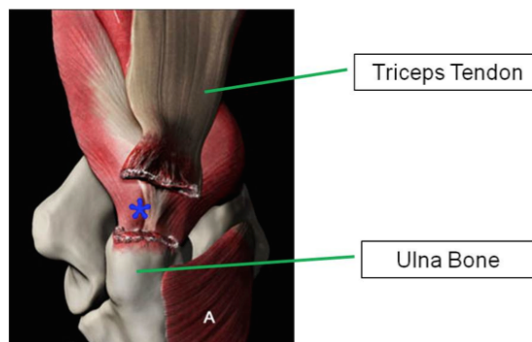
INTRODUCTION

Triceps brachii, the only muscle of the posterior compartment of the arm, is extensor of the forearm. It consists of three muscle bellies or heads: the long head originates from the infraglenoid tubercle of the scapula; the lateral head from the posterior side of the humerus, proximal to the radial nerve groove; the medial head from the posterior side of the humerus, distal to the radial nerve groove and from the intermuscular medial septum. All the muscle heads converge to a single tendon, which inserts onto the proximal surface of the olecranon process [1].



Triceps tendon tear is a relatively rare injury and the rupture of the distal triceps is the most uncommon rupture in the upper extremity. Namely less than 1% of all the upper extremity tendon injuries. [2][3]. Rupture is often associated with pre-existing systemic conditions or drug treatments, including the local or systemic of steroids or systematic endocrine disorders, renal failure, anabolic steroid use, local steroid injection. Patients tend to be men who practice sports and are from 30 to 50 years of age. Injury is commonly caused by falls on an outstretched hand, direct trauma on the elbow, lifting against resistance [4] or sometimes it occurs after a surgical procedure where the triceps was reattached. For example some case reports confirm triceps ruptures after following total elbow arthroplasty. The clinical examination

may detect pain, a palpable tendon gap, and extension weakness, while a pathognomonic flake sign may be seen on radiographs. The patient describes often an unexpected "pop" or giving way. Subsequently the patient has pain and weakness in the extremity. [2] Magnetic resonance imaging is widely accepted as the gold standard to evaluate the size and extension of the tear: triceps lesions often occur at the tendon insertion and result in either partial or total tears. [5]



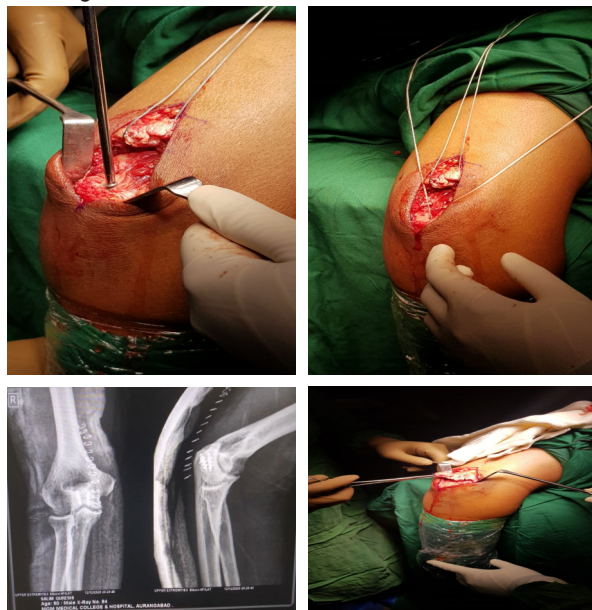
CASE REPORT

A 52 yr old male came to MGM casualty with history of fall 5 days back. Patient had fall on outstretched hand. Patient had complain of pain over posterior aspect of right arm which was non progressive non radiating in nature, increased on all movements. Patient had difficulty in extending elbow against resistance and even against gravity. Patient was able to extend elbow after eliminating gravity.



No previous history of trauma/fall/jerk was given by the patient. Patient did not have any history of steroid injection or previous surgery over tear site. Patient was taken for xray and MRI was also done. After confirmation of findings patient was advised triceps tendon repair to olecranon. Patient was taken to OT where in lateral position under tourniquet midline incision was taken 3 cm proximal to elbow joint and extended distally. Soft tissue dissection was done. Triceps tendon was identified. Both ends were degenerated at their respective ends. The degenerated ends of each of the proximal and distal part of the triceps were cut. Olecranon head was denuded and

two anchor sutures were put in it. Both the stripped and plain ends of the fibrewires were identified. The plain thread of one anchor suture was tied to the stripped end of other giving a proper criss cross appearance. Remaining distal end of triceps was identified and tied to proximal end using ethibond. Elbow had to be kept in 100 degree of flexion to allow proper approximation of both cut ends. Above elbow slab was given after closure was done in layers and aseptic dressing was done.



DISCUSSION

Untreated triceps tendinitis can result in increased triceps tendon and elbow pain and difficulty extending your arm fully. Left untreated, partial tears can continue to tear until they are complete tears. A fully ruptured triceps tendon can weaken your arm and cause significant disability. Surgery to repair a torn triceps tendon can also result in complications, such as post-surgical infection, elbow bursitis, re-rupture of the tendon, and difficulty fully extending your arm. To conclude, triceps rupture is a rare injury and classical clinical findings may not be always present. Classical flake sign may not be present in cases of rupture at musculotendinous junction. Palpable gap may not be present in the triceps in cases of near complete or incomplete rupture. However active extension is nearly always affected irrespective of site of rupture. Diagnosis may be easily missed in case of rupture at musculotendinous junction and muscle belly due to swelling, pain and absence of flake sign in radiographs. If diagnosis is in doubt after clinical examination, X rays and ultrasonography may be a useful to confirm the diagnosis. Once the diagnosis is made, immediate repair with nonabsorbable transosseous sutures may result in good functional outcome and early rehabilitation.

CONCLUSION

Triceps tear is a rare injury for which conservative management can be done in partial tear cases. However for complete tears, surgical management using suture anchors with post immobilisation should be the method of choice as it has better functional outcome for patient.

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