

NEGLECTED MONTEGGIA. DONT MISS. OUR EXPERIENCES

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INTRODUCTION:

Monteggia fracture-dislocation is an unusual incident (<1%) commonly seen in children 4-10 years old¹. However, almost 50% patients were missed or 20% of the cases loss of initial reduction, leads to chronic monteggia (CM)¹.

CASE REPORT:

Case 1: 9 years old boy, came in 4-month post fall with right monteggia fracture. Initial right ulnar corrective osteotomy was done using LLRS. Follow-up in clinic revealed radial head still dislocated.

Case 2: 17 year-old, boy came in 3 month after motor vehicle accident with right monteggia fracture. Examination revealed limited supination and pronation with neurovascular intact.

Both cases underwent annular ligament reconstruction using extensor carpi radialis longus (ECRL) tendon fascia. The fixation and graft was harvested via Kocher approach. Anchor sutures were used to bind the intermediate section of the graft to the bone. Next, the graft was wrapped around the radial neck from posterior to anterior and medial to lateral. After precise tension evaluation in flexion-extension and pronation-supination, the tendon graft was finally attached at the level of the posterior footprint. Case 1 have iatrogenic radial head fracture which fixed by K wire intraoperative. K wire was removed at 3 weeks post operative. During follow-ups, there were no re-dislocation of the radial head for both patients. At 6-month follow-ups, the range of motion for the elbow appears to be within normal limits: flexion and extension are presumably without any significant restrictions.

For forearm rotation, pronation is limited to 0-45 degrees, and supination is limited to 0-90 degrees.



Figure 1: Pre fixation X-rays, clinical picture, post operative X-rays for Case 1



Figure 2: Pre fixation and post operative X-rays for Case 2



Figure 3: Intra-operative annular ligament reconstruction with ECRL tendon fascia

CONCLUSION:

Monteggia fracture-dislocation is a rare occurrence but easily missed or loss of primary reduction which leads to CM. Annular ligament reconstruction plays an important role to improve elbow ROM in CM.

REFERENCES:

1. Soni Jf, Valenza Wr, Matsunaga Cu, Costa Acp, Faria Ff. Chronic Monteggia Fracture-Dislocation In Children Surgical Strategy And Results. *Acta Ortop Bras.* 2019 Sep-Oct;27(5):244-247. Doi: 10.1590/1413-785220192705215273. Pmid: 31839731; Pmcid: Pmc6901151
2. Wang, J., Jiang, Ld., He, Ay. Et Al. Annular Ligament Reconstruction By Suture Anchor For Treatment Of Radial Head Dislocation In Children. *Bmc Musculoskelet Disord* 16, 181 (2015). <https://doi.org/10.1186/S12891-015-0642-Y>