

## Trouble Couple – Combined Monteggia And Galeazzi Fracture

<sup>1</sup>Mohd Saidudin, Nur Sa'idah; <sup>1</sup>Muhammad Abdul Jamil, Muhammad Kamal; <sup>1</sup>Ibrahim, Sharaf  
<sup>1</sup>Orthopaedic & Traumatology Department, HCTM UKM, Jln Yaacob Latif, Kuala Lumpur, Malaysia

### INTRODUCTION

Combined Monteggia and Galeazzi fractures on the same forearm is unstable and rarely encountered. Since 1994, only nine cases were reported worldwide with two of them from pediatric age group<sup>1,2</sup>. This case report revealed early intervention resulted in good range of motion (ROM), function and maintained the length of the affected limb.

### REPORT

A three year-old girl accidentally fell onto an outstretched left hand while playing. Post trauma, she developed pain, diffuse swelling and tenderness over her left forearm with limited ROM of left wrist and elbow. At casualty, no wound noted, and neurovascular examination was intact.



**Figure 1: Combined Bado Type III Monteggia and Galeazzi (palmar subluxation) fracture dislocations detected from plain radiograph.**

Left above elbow backslab is applied at 90 degrees flexion and forearm pronation prior to emergency surgical reduction<sup>1,2</sup>. First, radial head is reduced, followed by ulnar intramedullary Kirschner wire (K-wire). Next, CMR and K-wire of left wrist is done under image intensifier<sup>2</sup>. Above elbow backslab is reapplied to protect fixation. These wires are kept for a month prior to removal.



**Figure 2: Check radiograph showed good reduction (a) and union at 10 weeks post-reduction (b).**

After three months, she achieved full ROM of left wrist and elbow, plus supination and pronation of left forearm. No abnormalities were detected and child is able to perform daily chores as usual without limitation or difficulty.



**Figure 3: One year review shows the limb length and joints ROM are comparable to the right side.**

### CONCLUSION

In this extremely rare case, one must be vigilant for early detection as neglected fracture dislocation may result in disastrous complications such as deep branch of radial nerve injury<sup>3</sup>, fracture non-union<sup>1</sup>, arthritis, chronic pain, and functional disability (resulted from limb length discrepancy and limited ROM). Urgent reduction attempt is necessary as early as in the casualty, followed by surgical intervention as the reduction deemed unstable with conservative management.

### REFERENCES

1. Jafari,D;et al.,Bilateral combined Monteggia and Galeazzi fractures:A case report.Med J Islam Repub Iran.2012Feb;26(1):41-4.PMID:23482937; PMID:PMC3587892.
2. Maeda,H.;et al.,Combined Monteggia and Galeazzi Fractures in a Child:A Case Report and Review of the Literature,Journal of Orthopaedic Trauma:February2003-Volume17-Issue2-p128-131
3. Perron AD,et al.,Orthopedic pitfalls in the ED:Galeazzi and Monteggia fracture-dislocation.Am J Emerg Med.2001May;19(3):225-8.doi: 10.1053/ajem.2001.22656. PMID: 11326352.