

## Posterior interosseous nerve [PIN] palsy associated with Bado Type-III Monteggia fracture

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### INTRODUCTION:

Monteggia fracture defined as fracture over proximal third of the ulna with associated radial head dislocation. It is commonly associated with neurovascular injury and PIN palsy is the most common injuries which accounts for 10% in acute injuries.

### REPORT:

A 27-year-old gentleman with no underlying medical illness presented to the emergency department with left elbow pain after an alleged road traffic accident.

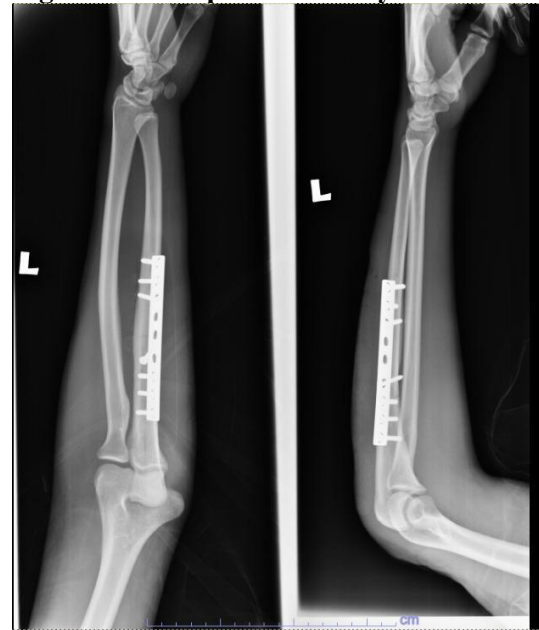
Upon examination, his elbow was swollen and he was unable to extend his fingers. Otherwise, sensations over left hand were intact with palpable arterial pulse. Plain radiograph revealed a fracture of the proximal third of ulna and a radial head dislocation, known as Bado Type-III Monteggia fracture.

He was then treated with open reduction and internal fixation to obtain anatomical reduction. Postoperatively, he could dorsiflex his wrist but still unable to extend his fingers. As the reduction position was anatomical, hence, we decided to carefully follow up for the palsy.

### Figure 1: Preoperative X - ray



### Figure 2: Postoperative X-ray



### CONCLUSION:

With the dislocation of radial head, PIN can be easily injured via compression and excessive traction. Therefore, main goal of treatment is the anatomical reduction of the ulna fracture and restoration of radiocapitellar joint.

### REFERENCES:

1. Yoshida, N., & Tsuchida, Y. (2018). Posterior interosseous nerve palsy due to Bado Type-III Monteggia fracture. *BMJ Case Reports*. <https://doi.org/10.1136/bcr-2018-226254>