

## Case Report: Monteggia Equivalent

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### INTRODUCTION

Monteggia fracture is a fracture-dislocation which consist of a fracture of the ulna and proximal radial dislocation. Apart from established 4 types of Bado's classification, a group of lesions with similar characteristics is termed as Monteggia equivalents.

### REPORT

A 17-year-old boy fell during sport activity with right elbow in flexed position. He complained of pain and deformity over right elbow. Clinical examination revealed swelling at the proximal right forearm and elbow with bony tenderness at the proximal shaft of the right ulna. X-ray showed proximal 3rd right ulna and radial neck fracture (figure 1). Under general anaesthesia, open reduction and plating was performed with a small dynamic compression plate (DCP) of the left ulna and a mini-locking plate of the left radial neck. The proximal ulna was approached posteriorly, while a lateral approach was chosen for the radial neck fracture. Intraoperatively, the radial neck was found to be broken with the radial head still in position and surrounded by an intact annular ligament. Postoperatively, radiograph showed good reduction with intact elbow joint (Figure 2). The patient was discharged well postoperatively and regain his normal elbow motion and union during subsequent follow up.



Figure 1



Figure 2

### CONCLUSION

Bado has classified certain injuries as equivalents to true Monteggia lesions based on similar injury mechanisms, radiographic appearances or treatment methods. Injury mechanisms include direct blow theory, hyperpronation theory and hyperextension theory. The direct blow theory could lead to radial neck fracture before the annular ligament ruptures especially in paediatric case. This could explain the finding in this case, where the radial neck break with annular ligament remain intact and head not dislocated. Based on this, we conclude that this case is a Bado equivalent which achieved good reduction by surgical intervention as the unstable nature of the fracture.

### REFERENCES

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