

# **Monteggia Fracture With Posterior Interosseous Nerve Palsy And Compartment Syndrome In A Snowboarder**

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## **Introduction**

Monteggia fracture is considered proximal one third ulnar fracture with radial head dislocation and more common in children. A snowboarder who sustained Monteggia fracture with posterior interosseous nerve palsy and compartment syndrome was treated surgically.

## **Case**

A 25-year-old man fell during snowboarding. The patient had the left elbow pain and deformity. Radiograph revealed the ulnar fracture in the proximal one third and radial head dislocation. The pain of the forearm was severe and the patient could not extend or flex the left fingers; therefore, we diagnosed the injury with Monteggia fracture causing forearm compartment syndrome and performed emergent surgery. After open reduction and internal fixation for the ulnar fracture and fasciotomy for the forearm, the severe pain alleviated dramatically. However, posterior interosseous nerve palsy was disclosed. For the nerve palsy, conservative treatment was chosen.

## **Results**

The fracture achieved complete bone union and the nerve palsy recovered fully. Muscle strength and range of motion became normal, and the patient has no complaint of the injury.

## **Conclusion**

Monteggia fracture typically occurs from a fall on an outstretched arm with the arm in pronation. Posterior interosseous nerve palsy or forearm compartment syndrome is one of possible complications after the fracture-dislocation. However, since the current case had both complications, initially the nerve palsy was concealed by the compartment syndrome. Surgeons need to be careful for not only the fracture-dislocation but also complications of Monteggia fracture.