

Galeazzi Fracture

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History of present illness: A 19-year-old male presented to the ED with right forearm pain after being struck in the forearm by a baseball. The patient then threw the ball and felt a sharp “pop” in his arm. The patient complained of sharp pain, worse with movement. Upon examination, the patient was neurovascularly intact.

Significant findings: The X-ray showed an acute comminuted fracture of the distal diaphysis of the radius with disruption of the distal radioulnar joint, consistent with a Galeazzi fracture. The patient was then splinted and taken for operative reduction and internal fixation the following day.

Discussion: Most forearm fractures are caused by a sudden force, such as a fall on an outstretched arm.¹ Bones of the forearm (radius and ulna) lie in parallel and are connected by joint capsules at the elbow and wrist, with the shafts interlocked by a fibrous interosseous membrane. Due to this, multiple fractures and concurrent dislocations may be present. A Galeazzi fracture is a distal radial shaft fracture with concurrent distal radioulnar dislocation. They are two to three times more common than Monteggia fractures (which is a proximal ulnar fracture with dislocation of radial head)² and have a potential for higher morbidity. Disruption of the radioulnar joint must be suspected in patients with a fracture of the ulnar styloid, midshaft radius, or those with shortening of the radius or widening of the radioulnar joint.³ Galeazzi fractures require

orthopedic consultation as they will likely require open reduction and internal fixation (ORIF) for repair, since anatomic reduction of the distal radial-ulnar joint is required.³

Topics: Forearm fracture, Galeazzi fracture.

References:

1. Williams DT, Kim HT. Wrist and forearm. In: Marx J, Hockberger RS, Walls RM, eds. *Rosen's Emergency Medicine: Concepts and Clinical Practice*. 8th ed. Philadelphia, PA: Elsevier; 2014:570-596.
2. Mills TJ and DeBlieux P. Forearm fracture, shaft/distal. In: Rosen P, Barkin R, Hayden S, Schaider J, Wolfe R, eds. *Rosen & Barkin's 5-Minute Emergency Medicine Consult*. 4th ed. Philadelphia PA: Lippincott Williams & Wilkins; 2011:418-419.
3. Mills TJ. Forearm fractures. In: Adams JG, Barton ED, Collings JL, DeBlieux PM, Gisondi MA, Nadel ES, eds. *Emergency Medicine: Clinical Essentials*. 2nd ed. Philadelphia PA: Elsevier; 2013:776-780.