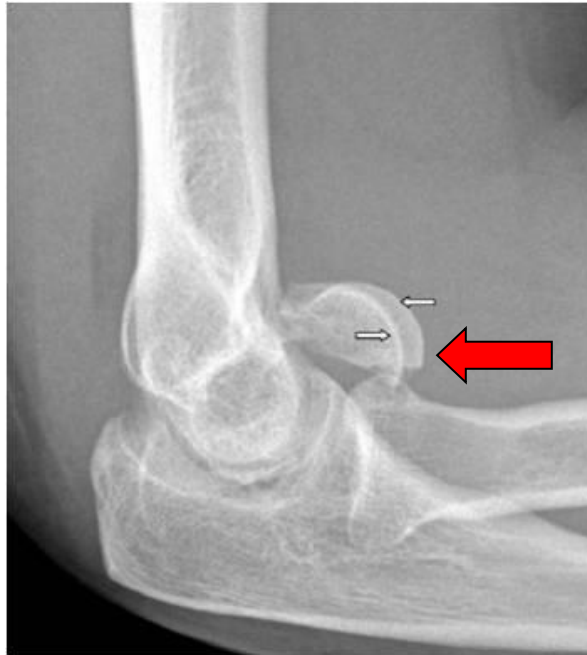


## **Capitellum Elbow Fracture**

A capitellum elbow fracture is a fracture (broken bone) in the elbow involving the distal humerus. The capitellum articulates with the radial head to form the radiocapitellar joint. Capitellum fractures are rare. The radiocapitellar articulation is essential to longitudinal and valgus stability of the elbow.



Displaced Capitellum fracture

### **Frequent Signs and Symptoms**

- Severe elbow pain at the time of injury
- Tenderness, swelling, and bruising of the elbow
- Visible deformity if the fracture is complete and bone fragments separate (are displaced) enough to distort normal body contours
- Numbness, coldness, or paralysis in the elbow, forearm, or hand from pressure on the blood vessels or nerves (uncommon)



# STEVEN CHUDIK MD

---

## SHOULDER, KNEE & SPORTS MEDICINE

### Etiology (Causes)

- Direct blow or force to the elbow
- Twisting injury to the elbow
- Indirect stress due to falling on an outstretched hand
- Violent muscle contraction
- Associated elbow dislocation

### Risk Factors

- Contact sports, such as football, hockey, and rugby
- Sports in which falling is likely (basketball, skating)
- Children under 14 years of age
- History of bone or joint disease
- Poor physical conditioning (strength and flexibility)

### Prevention

- Appropriately warm up and stretch before practice or competition.
- Maintain appropriate conditioning:
  - Cardiovascular fitness
  - Elbow strength and flexibility
  - Endurance
- Wear protective equipment, such as elbow pads for football.

### Outcomes

With appropriate treatment and normal alignment of the bones, healing can be expected. Surgery may be necessary to realign fractures that are displaced. Average fracture healing time is 4 to 6 weeks but recovery of elbow range of motion, strength, and function can require 4 to 6 months.

### Potential Complications

- Nonunion (fracture does not heal) or malunion (fracture heals in a bad position)
- Chronic pain, stiffness, loss of motion, or swelling of the elbow
- Excessive bleeding in the elbow or at the fracture site, causing pressure and injury to nerves and blood vessels (uncommon)
- Heterotopic ossification (calcification of the soft tissues about the elbow)



# STEVEN CHUDIK MD

---

---

## SHOULDER, KNEE & SPORTS MEDICINE

- Weakness of the wrist muscles
- Unstable joint following repeated injury or malunion of the bony attachment of muscle or delayed treatment
- Arrest of normal bone growth
- Abnormal angulation of the elbow

### Treatment Considerations

If the bones are in appropriate alignment (position), the initial treatment consists of ice and elevation of the injured elbow at or above heart level to reduce swelling. Medications are prescribed to help relieve pain. Immobilization by splinting, casting, or bracing for 4 or more weeks is recommended to protect the bones while they heal. A sling may afford comfort while in the cast or splint. Fractures that are displaced (not in appropriate alignment) may require surgery to restore its normal position. Surgery usually includes repositioning the bones and holding the position with screws or pins. After immobilization (with or without surgery), stretching and strengthening of the injured and weakened joint and surrounding muscles (due to the injury and the immobilization) are necessary. These may be performed with the assistance of a physical therapist or athletic trainer.

### Possible Medications

- Strong pain relievers may be prescribed as necessary. Use only as directed and only as much as you need.

### Modalities (Cold Therapy)

- Cold is used to relieve pain and reduce inflammation. Cold should be applied for 15 to 20 minutes every two to three hours for inflammation and pain and immediately after any activity that aggravates your symptoms. Use ice packs or an ice massage with a cloth between the ice and your skin to prevent burning /freezing your skin.

## Notify My Office If Symptoms Worsen



Orthopaedic Surgery & Sports Medicine  
Teaching & Research Foundation  
[otrfund.org](http://otrfund.org)

630-324-0402 • [contactus@chudikmd.com](mailto:contactus@chudikmd.com)  
[stevenchudikmd.com](http://stevenchudikmd.com)



Schedule online now