

# Olecranon Fracture Treatment Handout

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Olecranon fractures, which occur at the tip of the ulna, can vary in severity and treatment approaches. The management of these fractures depends on factors such as displacement, stability, and the patient's overall health. Here's an overview of the treatment options:

## Nonoperative treatment

Nonoperative management is typically reserved for nondisplaced fractures or those with minimal displacement (less than 1-2 mm) where the patient can actively extend the elbow. The standard approach includes:

- **Immobilization:** To allow initial healing, the elbow is immobilized in a splint or cast, usually at a flexion angle of 45-90 degrees, for about 7-10 days.
- **Physical therapy:** After immobilization, patients often undergo supervised physical therapy to regain range of motion and strength, as prolonged immobilization can lead to stiffness.

This approach is particularly suitable for elderly patients or those with significant comorbidities, where the risks of surgery may outweigh the benefits.

## Surgical treatment

Surgical intervention is indicated for displaced fractures, fractures associated with elbow instability, or when nonoperative treatment fails. Common surgical procedures include:

- **Open reduction and internal fixation (ORIF):** This is the most common surgical procedure. It involves repositioning the bone fragments (reduction) and securing them with hardware such as screws, plates, or wires.
- **Tension band wiring:** This technique is often used for isolated olecranon fractures. It involves using wires to hold the fragments together, allowing for early mobilization post-surgery.
- **Bone grafting:** If there is significant bone loss, a bone graft may be necessary to fill gaps created by the fracture.

## Complications of surgery

Surgical treatment can lead to complications, including:

- **Elbow stiffness:** A common issue post-fracture, requiring diligent physical therapy.
- **Infection:** As with any surgical procedure, there is a risk of infection.
- **Hardware irritation:** Some patients may experience discomfort from the metal implants used in the repair.
- **Nonunion:** In some cases, the fracture may not heal properly, necessitating further intervention.

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## References

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