

---

# DR BOB JANG

---

Orthopaedic Surgeon

Patient Name \_\_\_\_\_

Follow-Up Appointment: \_\_\_\_\_

## RADIAL HEAD FRACTURES

### What is a Radial Head Fracture?

A radial head fracture is a type of injury that occurs when the elbow joint experiences a forceful impact, resulting in a break in the radial head bone. The radial head is located at the top of the radius bone in the forearm, near the elbow joint. Fractures can vary in severity, ranging from small cracks to complete breaks or associated with a dislocation of the elbow (see Terrible Triad Elbow Injuries information sheet).

### Causes

Radial head fractures are commonly caused by the following factors:

- Direct impact to the elbow, such as during a sports-related injury or accident
- Falling onto an outstretched hand
- Twisting or wrenching motions of the forearm



### Symptoms

Symptoms of a radial head fracture may include:

- Pain and tenderness around the elbow joint
- Swelling and bruising
- Limited range of motion and stiffness in the affected arm
- Difficulty in bending or straightening the elbow
- A popping or cracking sensation at the time of injury
- Weakness or numbness in the hand or fingers

### Diagnosis

To diagnose a radial head fracture, Dr Jang may perform the following:

- Physical examination: Assessing the range of motion, tenderness, and swelling.
- X-ray: Imaging tests to visualise the fracture and determine its severity.
- MRI or CT scan: In some cases, additional imaging may be required to evaluate the extent of the injury.

---

# DR BOB JANG

---

Orthopaedic Surgeon

## Treatment Options

Treatment for radial head fractures depends on the severity of the fracture. The options may include:

- 1. Non-Surgical Treatment:**
  - Immobilisation: Wearing a sling, splint or cast to keep the elbow stable and allow the fracture to heal.
  - Medications: Prescribing pain relievers or anti-inflammatory drugs to manage pain and reduce swelling.
  - Physiotherapy: Engaging in exercises to restore range of motion and strengthen the arm muscles.

## **2. Surgical Treatment**

- **Open Reduction and Internal Fixation (ORIF):** In severe cases, surgery may be necessary to realign the fractured bone and secure it with screws, wires, or plates. You may require repair of the ligaments around your elbow joint at the same time.



- **Radial head replacement** may be required In cases where the fractured bone is severe (highly comminuted) a repair of the bones is not possible.

**Recovery and Rehabilitation:** The recovery period for a radial head fracture varies depending on the severity of the injury and the chosen treatment.

- Immobilisation: If you are wearing a cast or splint, it is important to follow my instructions regarding duration and care.
- Physiotherapy: I may recommend physiotherapy sessions to help restore strength, flexibility, and range of motion in your arm.
- Follow-Up Appointments: Attend all scheduled appointments to monitor your progress and ensure proper healing.

Yours sincerely,

**Dr Bob Jang**

Orthopaedic Surgeon.

*BMed FRACS (Ortho) FAOrthA*

---

# DR BOB JANG

---

Orthopaedic Surgeon

## Non-Operative Radial Head Fracture (Conservative Management)

Typically for minimally displaced fractures. Early mobilisation is key to avoid stiffness.

- **Weeks 0–1 (Immobilisation/Protection Phase):** Sling for comfort (often 3–7 days only). Focus on pain/oedema control (ice, elevation). Immediate active range of motion (AROM) for wrist/hand/fingers and grip/putty exercises. Gentle shoulder ROM to avoid developing shoulder capsulitis or stiffness.
- **Weeks 1–2 (Early ROM Phase):** Discontinue sling as tolerated. Begin passive/active elbow flexion/extension and pronation/supination as pain allows (often 5 times a day). Goal: 15–115° flexion/extension by week 2. Start isometric strengthening for elbow/wrist.
- **Weeks 2–6 (Increasing ROM & Function Phase):** Continue active/active-assisted ROM (AAROM) for all planes. Achieve full flexion/extension by week 6. Begin light isotonic strengthening (flexion/extension). Maintain shoulder/wrist strength. Full pronation/supination targeted by week 8.
- **Weeks 6–12 (Strengthening & Functional Phase / Up to 3 Months):** Progressive isotonic strengthening in flexion/extension, pronation/supination (e.g., light weights, Theraband). Address deficits with stretching/self-mobilisation. By 3 months most patients achieve near-normal function, full ROM (or close to it), and return to daily activities. Gradual heavy lifting introduction; avoid contact sports until 6 months.

## Post-Operative Radial Head Fracture (ORIF or Replacement)

- **Weeks 0–2 (Early Protection & ROM Phase):** Post-operative plaster/hinged elbow brace (often full-time if I've recommended it for you). Passive/active elbow flexion/extension as tolerated (goal: 15–105° by week 2). Immediate grip/putty and wrist/hand AROM. Isometrics for elbow/wrist. Avoid varus/valgus forces (often until 3 months).
- **Weeks 2–6 (ROM & Function Phase):** Continue active/active assisted ROM for flexion/extension (full by week 6). Add passive/active supination/pronation as tolerated. Light isotonic strengthening begins.
- **Weeks 6–12 (Strengthening Phase / Up to 3 Months):** Wean brace (often 6–8 weeks onward). Gradual strengthening (isometrics → light dumbbells 1-2kg maximum for wrist/elbow). Add Passive ROM if needed. Resume normal activities; avoid heavy lifting (>5kg) or high-compression activities (e.g., push-ups) until later (often 6 months). Full pronation/supination by week 8–12. By 3 months: Focus on functional strengthening, proprioception, and return to activities. Aim return to contact sports 6 months. In complex cases (e.g., with ligament repair), no weight-bearing or heavy use until 12 weeks, and precautions may be longer.