

# Arthritis of the elbow

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Rheumatoid arthritis Surgery may be required, especially in end-stage disease ( Figure 38.29 ). Arthroscopic or open radial head excision and synovectomy are effective for painful, restricted pronation and supination. Elbow arthroplasty is effective for pain relief and functional restoration. Osteoarthritis Osteoarthritis of the elbow is usually primary ( Figure 38.30 ) or secondary to trauma. ). -

Figure 38.29 Typical end-stage unstable and destroyed rheumatoid elbow.

Typical patients are middle-aged men in manual occupations. Symptoms can include pain, locking, crepitus and painful motion with loss of terminal flexion and extension. Ulnar nerve entrapment symptoms may be present. Examination There is restriction of extension and flexion with impingement pain as osteophytes and soft tissues are pressed together at the end of the available range. Pronation and supination tend to be spared in comparison with rheumatoid arthritis but there may still be crepitus felt over the radiocapitellar joint on rotation and pain when this is done with the fist clenched ('grip and grind' test). Treatment Surgery should be considered only if medical treatment fails. Arthrodesis may very rarely be offered for those performing heavy manual work ( Figure 38.31 ) but is associated with significant residual functional loss. However, joint replacement will not survive long under heavy loading. Surgical debridement alleviates pain and increases range of motion by removing anterior and posterior osteophytes, the thickened capsule and loose bodies through a lateral approach (lateral column procedure). In earlier stages the olecranon osteophytes can be accessed through the triceps tendon, creating an olecranon foramen by drilling through the olecranon fossa to access the coronoid tip osteophyte and any loose bodies (the so-called 'OK' procedure). Interposition arthroplasty (for example, Achilles tendon allograft) may be considered in younger patients, although it can be associated with significant bone loss with time, possibly restricting future treatments. Prosthetic joint arthroplasty provides more predictable symptomatic relief ( Figure 38.32 ) but high activity levels are associated with early loosening. Summary box 38.9 Arthritis of the elbow /uni25CF /uni25CF /uni25CF

(b) Figure 38.30 (a, b) Radiographs showing osteoarthritis of the elbow joint. (b) (a) Figure 38.31 (a, b) Ankylosed elbow after tuberculosis. Arthrodesis is a surgical procedure to achieve the same end result, by excising the articular surfaces and compression plating across the joint. Excision of the radial head and synovectomy improves pain and pronation-supination in rheumatoid arthritis Total elbow replacement gives good results in rheumatoid and low-demand osteoarthritic patients Arthrodesis may be the only surgical option in a high-demand manual labourer

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Revision #1

Created 2025-12-31 15:15:28 UTC by Omar Ayman

Updated 2025-12-31 15:15:28 UTC by Omar Ayman