• Anterior osteophytes of the coroid and distal humerus
• Posterior osteophytes of the olecranon process and distal humerus
  □ Anteroposterior x-rays commonly reveal the following:
  • Ossification and osteophyte formation of the olecranon and coroid fossa
  □ Broberg and Morrey and Hastings and Rettig radiographic classification systems have shown good intraobserver and interobserver reliability (Table 6-1) for both OA and post-traumatic arthritis.10
  □ More recently, a computed tomography scan has been recommended after an increased appreciation of the 3-dimensional nature of the disease process.
  • Computed tomography scan as well as 3-dimensional reconstructions (Figure 6-2) are helpful when planning surgical resection of impinging osteophytes.11

Recommended reading for important change in best practices

• Inflammatory arthritis
  □ The most common and well-described inflammatory arthritis of the elbow is RA, which is considered to be the most common cause of elbow arthritis.
  □ Unlike primary OA, RA frequently affects the elbow and can be bilateral.
  □ The underlying etiology of RA is that of a synovitis that leads to progressive destruction of the elbow joint.
    ▪ RA primarily involves the ulnohumeral joint early in the disease process, with the remaining segments of the elbow joint becoming involved as the disease progresses.
  □ Most patients with RA of the elbow have painful loss of motion and function.
    ▪ Patients will often demonstrate a mild but persistent flexion contracture due to effusion and synovitis, which causes patients to adopt an obligate flexed position to minimize painful joint capsule distention.12
    ▪ Neuropathy may be present because inflamed synovium can invade the soft tissues and directly or indirectly lead to compression of the radial and ulnar nerves.
    ▪ With disease progression, ligamentous destruction can also occur, leading to instability.
    ▪ X-rays are diagnostic and several radiographic staging systems have been described: