Indications

This prosthesis is intended for total elbow arthroplasty. Prosthetic replacement with this device may be indicated to relieve severe pain or significant disability following the effects of primary or secondary osteoarthritis and rheumatoid arthritis. It may also be used to correct functional deformities or in revision procedures where other treatments or devices have failed.

The indications for use of the Kaufmann Total Elbow (KTE) replacement are identical to those for others designs and include:

Elbow instability and arthritis
Posttraumatic osteoarthritis
Chronic inflammatory arthropathies
Acute distal humerus fractures
Distal humerus nonunions
Extreme intrinsic stiffness/ankylosis
Large posttraumatic bone defects
Primary osteoarthritis
Haemophilic arthropathy
Reconstruction after tumor resection

Radiographically, the patients need to have adequate bone for intramedullary screw purchase, which promotes bone incorporation. It is, furthermore, imperative that the medial and lateral epicondyle bone be sufficiently present for successful ligament to bone healing.

The patient should be able to follow instructions, including weight control. The patient should have a good nutritional state and must have reached full skeletal maturity. The patient needs to avoid the placement of excessive loads on the implant understanding that there is a 16 x weight in hand multiplier. The patient should avoid placing their full body weight on the operated arm.

A historical perspective regarding total elbow arthroplasty indications finds its origin in the treatment of inflammatory arthropathies such as rheumatoid arthritis. Substantial clinical success in the 1980s was experienced and may have been influenced by the patient's polyarticular joint involvement, which limited the patient's overall activity level and durability requirements. Successful outcomes in inflammatory conditions led to a broadening of indications and expanded use. Unfortunately, with increased use, more and more complications arose. Indications began to include the salvage of distal humerus nonunions in elderly patients, large post traumatic defects, as well as elbow reconstruction after tumor

resection. A trend to treat acute comminuted distal humerus fractures in elderly patients or those with previous articular degeneration has emerged. Inflammatory arthritic patients are receiving immune modulating medication with increasing frequency, which is improving their joint degeneration and pain substantially. They are currently placing greater demands on their joint replacement efforts due to other joints now hurting them less. Increased durability requirements directly correlate with total elbow arthroplasty failure. It is not surprising then that patients with posttraumatic elbow osteoarthritis represent one of the most difficult groups to treat. In these often younger, more active patients, mechanical failure may occur. For these reasons, a total elbow arthroplasty is best suited for patients that are older than sixty years of age and who have realistic durability requirements.