

Elbow Arthritis Treatment Guidelines Handout

Arthritis is a common condition that affects the joints, causing pain, stiffness and swelling. Elbow arthritis specifically refers to inflammation in the elbow joint, which can be caused by various factors such as injury, overuse or underlying medical conditions.

Treatment options

The goal of treatment for elbow arthritis is to reduce pain and improve function. Depending on the severity of the condition, different treatment options may be recommended by a healthcare professional. These may include (Ravilli et. al, 2019):

Nonsteroidal anti-inflammatory drugs (NSAIDs)

The goal of treatment is to alleviate pain and enhance joint function and overall stability. In the early stages of elbow osteoarthritis, physicians focus on mitigating pain by advising patients on which movements to avoid, prescribing nonsteroidal anti-inflammatory drugs (NSAIDs) like aspirin and ibuprofen, and/or administering intra-articular glucocorticoid injections and visco-supplementation directly to the affected area.

Rehabilitation

Rehabilitation is vital for slowing the progression of osteoarthritis in the elbow. The primary goal of therapy should be to educate patients about their symptoms and teach them how to manage these symptoms effectively. This approach helps reduce pain and preserve elbow health. However, implementing beneficial changes in daily activities can be challenging for physically active athletes. To alleviate pain and reduce inflammation, patients may need to limit certain movements.

Range-of-motion and stretching exercises

Range-of-motion (ROM) and stretching exercises should be started at the earliest pathological signs. These exercises can improve elbow flexibility, increase stability and protect the joint from mechanical stress.

Joint protection plan

A joint protection plan is designed to assist patients in performing activities of daily living (ADLs) by controlling pain, minimizing further joint damage, and conserving energy. It also plays a crucial role in preventing non-physiological positions and maintaining balance during weightlifting.

Night splints

Night splints can be beneficial in protecting the elbow during sleep. The main goal of treatment, especially for young patients, is to minimize pain, maintain proper joint function, and prevent the need for future surgical interventions, thereby delaying arthroplasty as long as possible.

Surgical treatments

Surgery is often the best option when symptoms reach an advanced stage. Factors such as the severity of degeneration, patient age, and level of physical activity must be considered to determine the most appropriate procedure for each individual.

Surgical options, ranging from open surgery to minimally invasive arthroscopy, aim to remove osteophytes and release contracted soft tissue. These interventions are designed to improve range of motion and alleviate pain.

- **Open debridement:** Open debridement of the elbow yields favorable outcomes, notably an improved range of motion, with reliable and consistent long-term results. However, potential risks include infection, injury to nearby neurovascular structures, stiffness, and thrombosis. Persistent ulnar neuropathy can adversely affect the success of this procedure. Therefore, in many cases, particularly for young athletes, a less invasive approach such as arthroscopy might be more appealing.
- **Elbow arthroscopy:** Elbow arthroscopy provides significant benefits, such as diminished post-operative pain, reduced risk of arthrofibrosis, and a smoother rehabilitation process, ultimately promoting quicker recovery. This is especially beneficial for athletes who engage in daily sports activities.

Although generally safe, arthroscopy carries some risks common to open procedures, including infection and heterotopic ossification. Additional complications may involve the development of fistulae, the need for ongoing drainage, and potential neurovascular damage.

- **Interpositional arthroplasty:** Interpositional arthroplasty offers a viable alternative to total elbow arthroplasty (TEA) for young adults. This technique involves resurfacing the elbow joint using autograft materials, such as fascia lata or cutis, or allograft materials, like the Achilles tendon or dermis. By introducing a cushion of thick, resilient tissue between the bones, it effectively restores the articular surface of the elbow.

Reference

Ravalli, S., Pulici, C., Binetti, S., Aglieco, A., Vecchio, M., & Musumeci, G. (2019). An overview of the pathogenesis and treatment of elbow osteoarthritis. *Journal of Functional Morphology and Kinesiology*, 4(2). <https://doi.org/10.3390/jfmk4020030>