

ARTHROSCOPIC MANAGEMENT OF STIFF ELBOW

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Stiff elbow is a common clinical consequence in the elbow joint. Impairment in active daily living is noted in flexion-extension stiffness as well as rotational stiffness.

Elbow stiffness can be divided into 3 different types: intrinsic, extrinsic and mixed type. The intrinsic type is referred to as articular deficit and loss of conformity resulting from trauma, infection or arthritic changes of intra-articular origin. The extrinsic stiffness is caused by fibrotic changes or scar formation of surrounding muscles, ligaments or skin. Ectopic ossification is a typical example of the extrinsic type of stiff elbow. The mixed type is defined when both intrinsic and extrinsic causes are combined, and is most common among post-traumatic elbow stiffness.

Arthroscopic release of the anterior capsule for flexion contracture can be done in a safe way. In cases of severe joint contracture, however, it is safe to release and isolate the ulnar nerve with minimal incision before the arthroscopic capsular release; otherwise sudden gain of flexion after extensive release of the capsule may tether the ulnar nerve around posterior aspect of the medial epicondyle.

A recent trend of arthroscopy is to draw equal clinical outcomes compared to existing open surgery by incising minimally and starting early rehabilitation to lessen patients' pain and achieve better range of motion. But a thoughtful understanding of the elbow anatomy and skillful arthroscopic technique is essential to minimize neurovascular insult or other surgical complication caused by inexperience.

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