[Arthroscopic stabilization of the shoulder with suture anchors with special reference to the deep anterior-inferior portal (5.30 o'clock)]

Abstract:

OBJECTIVE: Arthroscopic (re)stabilization of the unstable shoulder by anatomic refixation of the detached capsulolabral complex with suture anchors or reduction of excessive capsule volume by capsule plication. INDICATIONS: Any type of shoulder instability (anterior, posterior, inferior, or multidirectional instability). Revision stabilization (even after primary open stabilization). Bone defects affecting 25% of the glenoid surface. "Engaging" Hill-Sachs defects: osseous defects of the humeral head that engage with the anterior glenoid rim in extreme external rotation/abduction and consequently lead to shoulder dislocation. Bone-related etiology, e. g., clearly increased glenoid retroversion/anteversion or glenoid dysplasias (e. g., inverse pear shape). Voluntary shoulder dislocation in young patients until the end of the growth period. SURGICAL TECHNIQUE: Diagnostic arthroscopy and additional procedures based on clinical and intraoperative findings. For anterior-inferior instability, an anterior-superior approach is made with mobilization of the labrum and decortication of the glenoid. Creation of deep anterior-inferior portal and insertion of the anchors in 5.30, 4.30 and 3.00 o'clock position. The sutures are pulled through the capsulolabral complex and tied arthroscopically. Reconstruction of the inferior glenohumeral ligament is especially important. Lesions of the superior biceps tendon anchor and/or posterior
labrum detachment can be treated by the same technique. Capsule plication with PDS sutures can be performed to decrease a large rotator interval or excessive capsule volume. The range of motion at the shoulder is limited for 6 weeks postoperatively (depending on the initial direction of the instability). RESULTS: At the authors’ hospital over 600 arthroscopic shoulder stabilizations using the deep anterior-inferior portal have been completed so far. The redislocation rate for the first 147 patients (average follow-up of 3 years) treated with the technique described here is 6.1% and is slightly higher for arthroscopic revision stabilizations (n=43; of these, redislocation n=3 and reinstability n=3). There were no instances of axillary nerve lesion.