

LATERAL EPICONDYLITIS: ARTHROSCOPIC TREATMENT

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Introduction

Lateral epicondylitis was first described by Runge in 1873 and later on by Major, who coined the term *tennis elbow*. It is a common complaint with a multifactorial etiology. From the anatomic-pathological standpoint, it stems from microscopic lesions giving rise to scar tissue affecting the attachment of the extensor carpi radialis brevis (ECRB) tendon (2). Conservative treatment is effective in 90-95% of cases (physiotherapy, bracing, infiltrations, shock waves), but obstinate chronic symptoms develop in 5-10% of cases and surgery becomes the best solution. Numerous techniques have been described, but none have become consolidated as the ideal solution for dealing with this difficult problem, since they all carry some complications. In open surgery, the complications derive from the demolition of the extensor mechanism and the surgical scar, while percutaneous methods make it impossible to treat any associated intra-articular pathologies, which occur in 11% of cases. The aim of the present paper was to assess the outcome of arthroscopic treatment in 10 patients suffering from lateral epicondylitis after a follow-up of at least 23 months.

Methods

From January 2000 to January 2002, arthroscopic ECRB tendon release was performed on the lateral epicondyle of 10 patients (5m, 5f), mean age 40 years (range 34-56), using two portals: the medioproximal and the lateroproximal. The inclusion criteria for surgical treatment were: pain lasting more than 2 years (range 24-36 months) and proving refractory to any conservative treatment. The symptoms affected the dominant arm in 7 patients (70%) and the contralateral arm in 3. During arthroscopy, the lesions were classified according to Baker (1) and treated by debridement of the attachment of the ECRB tendon to the lateral epicondyle. Any associated intra-articular lesions (eg: synovitis, loose bodies and bone spurs) was diagnosed and treated at the same time.

Outcome was assessed by means of the Mayo Clinic scorecard, applied before and after the surgical treatment, and the patient satisfaction. The scorecard considers pain, range of movement, joint stability and daily joint function on a scale with a maximum of 100 points, classifying the resulting scores as follows: excellent (≥ 90 points), good (75-89), adequate (60-74), poor (< 60).

Results

Among the 10 patients treated arthroscopically, a type I lesion was detected in 5 (50%), which is characterized by fibrillation of the deep surface of the ECRB; 3 patients (30%) had a type II lesion, featuring a linear laceration of the ECRB tendon; the remaining 2 patients (20%) had a type III lesion, with partial or complete tearing of the ECRB from its attachment. One patient had a synovitis that had already been treated arthroscopically. The 10 patients were reassessed after a mean 38 months of follow-up (range 23-47).

The scores recorded on the Mayo Clinic scorecards changed from a mean 36.6 (range 25-45) pre-operatively to a mean 95 (range 80-100) at follow-up.

All patients were satisfied with the surgical treatment, obtaining results classified as excellent in 8 cases (80%) and good in 2 (20%). No post-operative complications were reported.

The mean number of days elapsing before returning to normal work was 20 (range 13-28). All patients also returned to their previous sporting activities.

Conclusions

Arthroscopic ECRB tendon release is a safe and effective procedure (3) for dealing with lateral epicondylitis, enabling a 360° view of the articular cavity and the diagnosis and treatment of any associated lesions. Moreover, this minimally-invasive method ensures an early rehabilitation and a consequently rapid return to normal activities.

References

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