利用伸指肌韌帶內固定手術治療杵狀指併遠端指骨骨折

蔡明峰 張世幸 董光義 蕭弘道
馬偕紀念醫院 外科部 整型外科

Modified tenodermodesis of extensor tendon for treating mallet fracture

Ming-feng Tsai, Shih-Hsin Chang, Kwang-Yi Tung, Hung-Tao Hsiao
Division of Plastic Surgery, Department of Surgery, Mackay Memorial Hospital

Purpose: Closed treatment has provided good results in uncomplicated cases of mallet finger and surgical fixation is recommended when there is involvement of more than one third of the base of the distal phalanx. However, there were some complications associated with prolonged immobilization, especially DIP joint stiffness. The purpose of this investigation was to assess the results of tenodermodesis for the treatment of mallet finger with displaced fracture.

Material and method: Ten patients with established mallet finger deformity with fracture fragments were treated by tenodermodesis and immobilization with dorsal splint. There were 8 men and 2 women with a mean age of 23 years (range, 14–34). A transverse tunnel in the distal phalanx was created and the disrupted extensor tendon with fracture fragment was fixed by prolene stitches. The patients were followed for a mean of 10 months. The results were excellent in eight patients, good in one, and fair in one. The mean extension lag was decreased, but not at the expense of impaired flexion capacity.

Results: Tenodermodesis with our method allows anatomical reconstruction of the injured extensor mechanism with concomitant skeletal restoration. The clinical results with this procedure have been encouraging, with high patient/parent satisfaction and few complications. This procedure provided early motion of the DIP joint and adequate extension outcome. All patients were pleased with their resultant function and cosmesis. No complications were encountered.

Conclusion: In conclusion, tenodermodesis for the treatment of mallet finger with large displaced fracture is an effective method of treatment for displaced mallet finger fractures. We recommend the operation for passively correctable deformities with suitable joints; it is easy to do and yields consistently successful results.