

Analysis of the Effect of Rapid Rehabilitation of Knee Joint in Different Flexion Postures at Different Time After Operation for Lower Pole Fracture of Patella

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Abstract

Background The Patellar lower pole fracture, because of the difficulty of firm fixation, can not be strong early functional exercise after surgery, the function of the knee joint is difficult to recover normally after surgery, we found in our work that increasing the angle of knee flexion after surgery can significantly accelerate the rehabilitation of the knee joint. **Objective** To observe the effect of rapid rehabilitation of knee joint in different immobilization positions after operation of inferior patellar fracture. **Methods** From March 2021 to January 2023, 29 patients with inferior patellar fracture were divided into control group and experimental group according to the immobilization position of the affected limb. The control group (n = 14) was immobilized for 3 days with knee flexion of 15 to 20 degrees, and the experimental group (n = 15) was immobilized for 3 days with knee brace after knee flexion of 70 to 110 degrees. The time of active flexion from 0° to 120°, the VAS score of knee pain at 1 week, 2 weeks, 1 month and 3 months after operation, the time of normal walking and the postoperative complications were recorded. The curative effect was evaluated according to Bostman patellar fracture evaluation criteria at 3 months after operation. **Results** The time of knee active flexion to 120° in the experimental group was earlier than that in the observation group (P < 0.05). The VAS score of the control group was lower than that of the control group at 1 week after operation (P < 0.05); the VAS score of the control group was higher than that of the experimental group at 2 weeks and 1 month after operation (P < 0.05); there was no significant difference in the VAS score between the two groups at 3 months after operation (P > 0.05). The time of normal walking in the control group was later than that in the observation group (P < 0.05). There was no significant difference in fracture healing time between the two groups (P > 0.05). The excellent and good rate of the control group was lower than that of the experimental group 3 months after operation (P < 0.05). **Conclusion** Fixation and immobilization of the knee with flexion of 70 ~ 120° can promote the functional recovery of the knee joint after the operation of the lower pole of patella fracture.

Keywords

Patellar Lower Pole Fracture, Joint Immobilization, Pain, Knee Joint Function, Fast Track Surgery

Funding

Key Scientific Research Project of Orthopaedics Direction of China Association of Traditional Chinese Medicine Information (CACMS-KY-2023006); Chengdu Medical Scientific Research Project (2022650).