ABSTRACT

Objective: A retrospective study was performed in a general hospital to evaluate the range of motion after total knee replacement for osteoarthritis.

Patients and Methods: Knee motion after total knee replacement for osteoarthritis performed from January 1996 to June 2001 was evaluated.

Results: Flexion contracture was 1.5° or less at 1 year after operation for 91 knees with preoperative flexion contracture less than 15°. Twenty three knees had preoperative flexion contracture not less than 15°. After posterior stabilising total knee replacement, the flexion contracture improved to 3.5° at 1 year in 13 knees with good flexion, whereas there was residual 11° flexion contracture in the 10 knees with additional poor knee flexion. Seventeen knees had preoperative flexion less than 90°, with the average knee flexion at 1 year after posterior stabilising total knee replacement being 90°. For the 64 knees with satisfactory conditions, the average knee flexion at 1 year was 103.4° after posterior stabilising total knee replacement compared with only 95.0° after the 20 posterior cruciate retaining total knee replacements, given the comparable age and preoperative knee motion.

Conclusion: The preoperative range of motion of osteoarthritic knee predicted the postoperative range of motion.

Key Words: Flexion, Flexion contracture, Osteoarthritis, Range of motion, Total joint replacement

中文摘要

退化性關節炎在全膝關節置換術後的膝部活動
何相東、崔國榮

對1996年1月至2001年6月的膝部退化性關節炎，進行了全膝關節置換術後膝部活動的回顧性評估。91例術前屈曲損縮小於15°者，其一年術後屈曲損縮為1.5°以下。在後穩定全膝關節置換術中，23例術前屈曲損縮不小於15°者，其中13例術前屈曲良好，其一年術後屈曲損縮為3.5°；另10例術前屈曲不良者，其一年術後屈曲損縮剩餘11°。17例術前屈曲小於90°者，其一年術後平均膝部屈曲大約是90°。64例膝部狀況滿意者，經後穩定全膝關節置換術後，其一年術後平均膝部屈曲為103.4°。在可比較年齡和膝部狀況下，20例後十字韌帶保留全膝關節置換術，其一年術後平均膝部屈曲只能達到95.0°。