

언어구분 KOR 논문구분 원저/구연 논문분야 슬관절
 논문제목 슬관절 인공 관절 치환술 후 굴곡 구축의 빈도, 위험 인자 및 임상적 영향
 영문제목 **Incidence, Predictors and Effects of Residual Flexion Contracture on Clinical Outcomes of Total Knee Arthroplasty**
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서론 : Patients who present with large flexion contracture (FC) and yet well maintained maximum flexion tend to have a larger flexion gap than extension gap, and this flexion-extension gap mismatch can be a cause of residual FC or flexion instability after total knee arthroplasty (TKA). In theory, a polyethylene (PE) insert to fit the flexion gap in a knee with a larger flexion gap may lead to postoperative FC and one to fit the extension gap may lead to flexion instability. We routinely used posterior-stabilized implant, performed rigorous medial-lateral soft tissue balancing, additional distal femur resection and determined the thickness of PE insert with in-between size to flexion-extension gap difference to avoid postoperative FC and flexion instability. However, whether flexion-extension mismatch is a risk factor for development of postoperative FC and how effectively our surgical protocols including the choice of PE insert thickness between the flexion and extension gaps correct FC remain unclear. Furthermore, clinical outcomes of postoperative FC in Asian TKA patients have not been clearly defined.

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결과 : Of the 911 knees, 18 (2.0%) were found to have FC of 10o or greater (range, 10-15o). The presence of preoperative FC (odds ratio=1.75 per 5o increase; 95% CI, 1.4-2.2; $p < 0.01$) and anterior knee pain (odds ratio=0.5;

95% CI, 0.3-0.9; $p = 0.02$) was associated with the occurrence of postoperative FC, but not associated with the flexion-extension gap mismatch assessed. Compared to the knees with no postoperative FC, the knees with postoperative FC had smaller maximum flexion (123 vs. 132, $p = 0.03$), poorer AKS knee score (90 vs. 95, $p=0.01$), and poorer SF-36 scores (role physical: 36 vs. 42, $p=0.04$; role emotional: 36 vs. 43, $p=0.05$; and social functioning: 40 vs. 47, $p=0.003$).

결론 : This study demonstrates that our surgical protocol can successfully correct most of preoperative FC after TKA. Additionally, a patient with severe preoperative FC and anterior knee pain would be at risk for developing postoperative FC, despite surgically retained sufficient extension space. Finally, the occurrence of mild to moderate degrees of postoperative FC does not increase pain but may be somewhat detrimental to the emotional and social well-being of patients.

acknowledgment :

Total Knee Arthroplasty, Flexion Contracture, Clinical Outcome
