

Original Article

The Effect of Total Knee Arthroplasty on Body Mass Index—A Prospective Study

全膝關節置換術與身體質量指數之關係 — 一個前瞻性的研究

Shariff Raheel, Rathinam Manickam, Fahad Gulam Attar, Wainwright Olwyn, Michael James McNicholas

Abstract

Background/Purposes: Osteoarthritic patients, who need a total knee arthroplasty, usually complain of knee pain as the major reason to forbid them from exercising to lose weight. Weight gain, in turn, worsens the process of osteoarthritis as a vicious cycle. In our prospective study, we calculated the preoperative and 1-year post-operative body mass index (BMI) after total knee replacement.

Materials and Methods: We prospectively followed up 91 patients in the knee arthroplasty clinic. Height, preoperative weight, and post-operative weight at 12 months were measured, and the pre- and post-operative BMIs were calculated. All the perioperative factors of the patients were without any major change.

Results: The mean preoperative BMI was 31.08, and at 12-month follow-up, the mean BMI was 30.11. This difference was not statistically significant.

Conclusion: The results obtained in our study suggest that there is no statistically significant difference between the pre- and post-operative BMIs at 1-year follow-up.

中文摘要

背景: 退化性關節炎的病患者，當需要接受全膝關節置換術(TKA)時，通常抱怨主要因為膝痛以致不能透過運動去減輕他們體重，反而增加體重後令到退化性關節炎惡化，形成一個惡性循環。在我們的前瞻性研究中，我們計量全膝關節置換手術前和手術後受一年的身體質量指數(BMI)。

材料和方法: 我們前瞻性地追蹤在膝關節置換門診裡的 91 位病患者。測量 他們的高度，手術前和手術後受一年的體重並計算他們的 BMI。那些病患者的手術前後因素都沒有很大的變化。

結果: 手術前的 BMI 平均值是 31.08，12 個月後的 BMI 平均值是 30.11。這個差別在統計學是無效的。

結論: 我們的研究結果顯示手術前和手術後受一年的 BMI 平均值在統計學是沒有分別的

Keywords: *body mass index, total knee arthroplasty*