Predictive Factors in Selecting Patients with Knee Osteoarthritis for Knee Replacement: A Single Center Experience

Mohammed Lafi Al-Otaibi, MD, FRCSC*

ABSTRACT

Total knee arthroplasty (TKA) is gaining acceptance among patients worldwide, knowing who benefits from surgery and who does not is detrimental. Comorbid conditions are detrimental for joint replacement surgery, and patient medical optimization is critical and sometimes challenging. TKA surgery was first performed in 1968. Since then, improvement in many aspects of the procedure is reported. This study aimed to retrospectively evaluate the predictive factors for outcome in TKA done at Aseer central hospital. Retrospective study of TKA cases done at a tertiary care hospital in the Abha region, Saudi Arabia from January 2006 to January 2012 was included in the study. Knee function was evaluated using Knee Society scoring system and the percentage of each comorbidity in our study's patient was recorded. In our study group there were more females (83.33%) than males (16.67%) Whereas, comorbidities and their frequencies in the study group were: psychosocial factors (28.4%); severe joint disease (67%); additional joint disease (other knee, 59.4%; hips, 35.4%; spine, 34.2%); depression and anxiety (49.8%); hypertension (25%); asthma (14%); sleep apnea (8.4%); diabetes: HbA1c < 7 (82%); HbA1c > 7 (18%); obesity BMI < 30 (96.6%); BMI > 30 (3.4%); peripheral vascular disease (0.20%). Furthermore, comparative pre- and postoperative knee scores with observed correlation showed significant improvement. Isolating the predictive factors of unfavored outcome may help total knee results.

Keywords: Total knee arthroplasty, Saudi Arabia, osteoarthritis, predictive factors, knee scores

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^{*} Associate Professor Orthopedics Department, College of Medicine, King Khalid University, Kingdom of Saudi Arabia. E-mail: mlalotaibi@kku.edu.sa