

## Reasons and Factors Behind Post-Total Knee Arthroplasty Dissatisfaction in an Asian Population

Yilun Huang,<sup>1</sup> MBBS, MRCS, Merrill Lee,<sup>1</sup> MBBS, Hwei Chi Chong,<sup>1</sup> BAppSc (Physio), Yilin Ning,<sup>2</sup> BS, Ngai Nung Lo,<sup>1</sup> MBBS, FRCS (Edin), FAMS, Seng Jin Yeo,<sup>1</sup> MBBS, FRCS (Edin), FAMS

### Abstract

**Introduction:** Up to 20% of patients who underwent total knee arthroplasty (TKA) reported dissatisfaction with surgical outcome. Despite the multiple studies looking into the factors contributing to patients' dissatisfaction, little research has been done to examine the subjective reasons and complaints patients have post-arthroplasty. This study aimed to look at an Asian patient population which underwent TKA and examine the factors contributing to patient dissatisfaction and the reasons they were dissatisfied with their surgery. **Materials and Methods:** A total of 3069 TKAs were performed between January 2011 to April 2013 in a single institution. Preoperative and postoperative variables were prospectively captured, such as standardised knee scores, knee range of motion and patient satisfaction scores. These variables were then analysed with a multiple logistic regression model to determine the statistically significant factors that contribute to patients' satisfaction. Dissatisfied patients were individually interviewed to find the reasons for their unhappiness. Preoperative variables were then analysed to identify the statistically significant factors associated with these subjective complaints. **Results:** Minimum duration of follow-up was 2 years, with an overall patient satisfaction rate of 91.3%. Preoperative variables contributing to patient dissatisfaction included female gender and better knee flexion. Postoperative variables included lesser improvement in knee flexion at 6 months postoperatively, as well as poorer scores in various validated knee scores at both 6 months and 2 years postoperatively. The top reason for dissatisfaction was pain. Weakness, another reason for patient dissatisfaction, had statistically significant preoperative predictors of increased age and poorer Short-Form 36 Physical Component Score. **Conclusion:** Although TKA has an impressive patient satisfaction rate in this Asian population, factors contributing to postoperative dissatisfaction suggest a targeted group of patients would benefit from preoperative counselling. The top reason for postoperative dissatisfaction in the study was pain.

Ann Acad Med Singapore 2017;46:303-9

**Key words:** Outcomes, Quality of life, Satisfaction

---

<sup>1</sup>Department of Orthopaedic Surgery, Singapore General Hospital, Singapore

<sup>2</sup>Yong Loo Lin School of Medicine, National University of Singapore, Singapore

Address for Correspondence: Dr Merrill Lee, Department of Orthopaedic Surgery, Singapore General Hospital, 20 College Road, Academia, Level 4, Singapore 169865.

Email: merrilllee91@gmail.com