Background: Many patients in need of total knee arthroplasty (TKA) have bilateral knee symptoms and require surgery to both extremities. Performance of a bilateral procedure under a single anaesthesia provides a reduced hospitalisation time, an isolated anaesthesia risk, a single rehabilitation, and substantial cost savings. However, previous studies reports vary from unilateral TKA producing better outcomes than bilateral TKA, the 2 procedures producing no significant difference, and bilateral TKA producing a better outcome than unilateral TKA. There is a need for new studies to examine the differences between unilateral and bilateral TKA in terms of the early postoperative outcomes.

Objectives: The aim of this study was to compare the effect of the unilateral and bilateral TKA on the early postoperative outcomes.

Methods: The study group consisted of 71 patients (106 knees), who underwent primary TKA because of arthritis were stratified either unilateral or bilateral TKA status. The mean age of unilateral (n=36) subjects were 66.0±10.71 years, and the mean age of bilateral (n=35) subjects were 64.17±7.61 years. Patients were evaluated regarding the knee function score (Hospital for Special Surgery (HSS) score), pain (Numeric Pain Rating Scale (NPRS)), knee range of motion, length of hospital stay, the day of active straight leg raise, the day of knee flexion angle achieved 70 degrees, quality of life (Short-Form 12 Health Survey (SF-12)). Functional activities were evaluated using the Iowa Level of Assistance Scale and walking speed was evaluated using the Iowa Ambulation Velocity Scale. Patients were evaluated preoperatively and at discharge. All patients underwent the same rehabilitation program.

Results: At baseline, demographic and anthropometric characteristics were similar in both groups and there was no statistically difference between groups (p>0.05). When the patients’ knee range of motion was compared, there were statistically differences (p=0.027) between groups after surgery. The unilateral group had better results in terms of postoperative knee flexion degree. There were no statistical differences in terms of the pain degree, HSS score, length of hospital stay, the day of active straight leg raise, the day of knee flexion angle achieved 70 degrees, IOWA help level and IOWA walking speed, SF-12 score between groups before and after TKA (p>0.05).

Conclusions: According to our results, the unilateral group had better result in terms of postoperative knee flexion degree. On the other hand, the bilateral method may provide an advantage in terms of a single rehabilitation, and substantial cost savings. Therefore, in this comparison to obtain more comprehensive results studies on larger series are needed. In this way, a more uniform and objective results can be achieved.

Disclosure of Interest: None declared


Background: People with rheumatoid arthritis (RA) are recommended to participate in physical activity to improve or maintain their health. The intensity of the physical activity is important to gain the health benefits. One way for the individual to monitor the intensity of physical activity is to use the Borg scale for rating of perceived exertion (RPE), which is claimed to be strongly correlated to heart rate (HR). While this is true for healthy individuals, RPE in people with RA might how and is therefore to monitor the intensity of physical activity is to use the Borg RPE scale.

Methods: The study group consisted of 71 patients (106 knees), who underwent primary TKA because of arthritis were stratified either unilateral or bilateral TKA status. The mean age of unilateral (n=36) subjects were 66.0±10.71 years, and the mean age of bilateral (n=35) subjects were 64.17±7.61 years. Patients were evaluated regarding the knee function score (Hospital for Special Surgery (HSS) score), pain (Numeric Pain Rating Scale (NPRS)), knee range of motion, length of hospital stay, the day of active straight leg raise, the day of knee flexion angle achieved 70 degrees, quality of life (Short-Form 12 Health Survey (SF-12)). Functional activities were evaluated using the Iowa Level of Assistance Scale and walking speed was evaluated using the Iowa Ambulation Velocity Scale. Patients were evaluated preoperatively and at discharge. All patients underwent the same rehabilitation program.

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