Benefits of Standing Up on the Same Day after Primary Total Knee Arthroplasty: A Randomized Clinical Trial

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Purpose: This study aimed to investigate the effect of standing up on the same day after primary total knee arthroplasty (TKA).

Methods: Seventy-five patients with knee osteoarthritis participated in this study. They were randomized to one of three groups: standing, sitting, or bed rest. Three hours after surgery, patients in the standing group stood up, those in the sitting group sat up, and those in the bed rest group only performed calf pumps. Outcome measures included range of motion, quadriceps strength, 10-m walking test, Timed Up and Go test score, and D-dimer levels, both one month before and on the fourth day after surgery. In addition, we measured C-reactive protein (CRP) levels and performed ultrasonographic examination for deep vein thrombosis (DVT) on postoperative day 4.

Results: There were no differences in baseline variables and postoperative motor function and CRP among the three groups. The standing group showed a significantly lower incidence of DVT than the other two groups. In addition, the bed rest group showed higher D-dimer levels than the other two groups.

Conclusions: Standing up on the same day after primary TKA shows potential as a treatment for preventing DVT.