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Examination of the usefulness of whole body vibration training for functional improvement after total knee arthroplasty. *Japanese Journal of Rehabilitation*

We investigated the effectiveness of whole body vibration (WBV) after total knee arthroplasty (TKA). Patients were divided into the intervention group (WBV group n 15) and the control group (n= 15). As WBV intervention, we used a power plate (Power Plate International) at an frequency of 30 Hz at low amplitude. Postoperative physical therapy was performed five days a week by both groups. WBV was added before physiotherapy and done in 3 sets of 2 minutes in the first 1 week after surgery with sitting position. WBV was done in 2 sets of 30-second static squat and dynamic calf raise position after 1 week. Evaluation was performed preoperatively and postoperative at 2 weeks. We measured 7 items ; 10 in walking time. Timed Up and Go Test, climbing stairs time, perceived pain when climbing stairs, knee flexion and extension ranges of motion, and knee extensor strength. For statistical examination. The Mann-Whitney tI test was used. There was a significant difference in the pain. [This suggests that WBV intervention reduces pain during the early phase after TKA.](#)