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# Postoperative rehabilitation after total knee joint replacement

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**Keywords::** physiotherapy, muscle strength, pain, total joint replacement, knee joint.

### Objective:

The pilot study objective was to evaluate the effect of comprehensive post-operative physiotherapeutic treatment on the selected physiotherapeutic parameters as well as patients' quality of life after a total knee joint replacement surgery.

#### Results:

Thirty patients after total knee joint arthroplasty were enrolled into the pilot study. After completing the physiotherapeutic processes, we have observed among the patients who underwent a total knee replacement surgery, a significant increase in muscle strength as with the flexors as well as the extensors (p = 0.001), improvement in their range of motion in knee joint flexion, in comparison to its range before treatment (p = 0.001), knee pain reduction (p = 0.001) and post-operative swelling (p < 0.001), respectively. After undergoing the physiotherapeutic procedures, we recorded a statistically significant improvement in the monitored physical components: dressing (p = 0.008) and toilet use (p = 0.001), transfer from bed to chair (p = 0.008), walking on flat surface (p = 0.001), climbing stairs (p = 0.001). Passing the physiotherapy significantly reduced the degree of dependence of operated patients (p = 0.001).

### Conclusion:

Early post-operative physiotherapy treatment positively affects patients' general condition. In addition, it improves muscle strength, range of motion of the operated joint, eliminates postoperative pain and reduces swelling that improves patients' self-sufficiency. Standard physiotherapy nowadays and in the next few years will take a unique place in patients' management after total knee joint replacement.

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