

Evaluation Of Physical Therapy Effectiveness After ACL Surgery

Objective

The aim of the research was to compare the effectiveness of both intensive and traditional rehabilitation of the knee extensor and flexor muscle strength in patients after **anterior cruciate ligament** (ACL) reconstruction.

Results

The research results showed that participants who received physical therapy before surgery, and **electrostimulation** and intensive physical therapy program after surgery, achieved higher levels of knee extensor and flexor muscle strength than those patients who had only undergone traditional physical therapy after surgery.

Participants and Researchers

A total of 30 patients who had undergone ACL surgery were enrolled in the study.

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Methods

The subjects were divided into two groups; each group involved 15 participants. Different physical therapy techniques were applied by different protocols. Intensive physical therapy was applied for the first group of participants, which consisted of 13 men and two women. The second group, which also consisted of 13 men and two women, received standard physical activity.

Electrostimulation was applied to the first group, which received the intensive physical therapy. **Electrostimulation** was performed using the **NeuroTrac Sports XL** device (Verity Medical). Electrodes were fixed at the beginning of quadriceps muscle and in the end of the perpendicular to the muscle fibers.

To reduce post-operative pain and swelling, cold procedures were applied for both groups. Cryotherapy was performed immediately after surgery, for 15-20 minutes, three to four times a day.

The full abstract can be found at

https://www.researchgate.net/publication/333144335_Evaluation_of_Physical_Therapy_Effectiveness_after_Anterior_Cruciate_Ligament_Reconstruction

or

<https://pubmed.ncbi.nlm.nih.gov/21273649/>