Immediate Effect of Kinesio Taping on Knee Joint Proprioception after Anterior Cruciate Ligament Reconstruction

Abstrak :

Objectives: To evaluate the effect of Kinesio Taping on knee joint proprioception of patient with reconstructed anterior cruciate ligament.

Methods: Randomized trial, cross-over study design, was done in Rehabilitation outpatient clinic, Soetomo General Hospital, Surabaya, on 9 isolated anterior cruciate ligament (ACL) patients, which has underwent ACL reconstruction procedure. Each patient will become control for themselves. Subjects were treated with standardized Kinesio Taping technique for anterior cruciate ligament injury in addition to standard rehabilitation program for anterior cruciate ligament reconstruction. Response to treatment was evaluated with two evaluations: 1) Joint position sense of the knee for predetermined angle (30°, 45°, and 60°) 2) Threshold to detect of passive knee motion on 90°; moving into extension. Measurements were taken two times within 3 days of interval, with and without Kinesio Taping application. Error of angular displacement of active angle reproduction (joint position sense) and threshold to detect of passive motion (TTDPM) were measured in three conditions: before Kinesio Taping application, after Kinesio Taping application and without Kinesio Taping application.

Results: Nine patients (mean age 20.33 ± 4.062 y) who had anterior cruciate ligament reconstruction were included for this study. There were other knee ligament injuries. There were significant different in active angle reproduction (joint position sense) at 30° and 45° between affected and unaffected knee (p = .030 and p = .015 respectively). Kinesio Taping application showed significant effect in active angle reproduction at 30° of knee extension (p = 0.028). There were no significant different in TTDPM between all condition.

Keyword :
Kinesio Taping, rehabilitation, knee joint proprioception, anterior cruciate ligament reconstruction

Daftar Pustaka :


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