

ABSTRACT

THE EFFECT OF *SPHERICAL GRIP* RANGE OF MOTION (ROM) EXERCISE ON INCREASING MUSCLE STRENGTH THE EXTERMITY IN STROKE PATIENTS

Stroke patients require a rehabilitation by exercises range of motion / ROM. Exercises *spherical grip* to stimulate the movement of the hand which one form of the training is an practice in functional grasping hand. ROM spherical grip exercises performed in actively and assistively. The purpose of this study was to prove the effect of ROM spherical grip exercises on stroke patient. The sampling technique used was total sampling. Sample taken were 28 respondents by measuring muscle strength before and after intervention. The instrument used observation sheets for muscle strength assesment and *manual muscle testing (MMT)* physical examination in stroke patient. The results of this most of the muscle strength before presenting the ROM Spherical Grip exercise was poor (there was movement but could not fight gravity) as many as 13 respondents (46.4%). and most of the muscle strength after giving the *Spherical Grip* ROM exercise was good (can move and can fight light obstacles) as many as 14 respondents (50.0%). Study showed that there was an increase in muscle strength before and after being given ROM *spherical grip* training in stroke patient using. Giving exercise ROM spherical grip has an effect because it can support the restoration of the movement ability and hand function. By providing range motion exercise using *spherical grip*, it is hoped that it will be useful to improve tone that experiences weakness and and if done continuously can increase muscle strength in stroke patients.

Keyword : Range Of Motion, Spherical Grip, Muscle Strength, Stroke

ABSTRACT

PENGARUH LATIHAN *RANGE OF MOTION (ROM) SPHERICAL GRIP* TERHADAP PENINGKATAN KEKUATAN OTOT ESKTREMITAS ATAS PADA PASIEN STROKE

Pasien stroke memerlukan rehabilitasi yaitu latihan rentang gerak/ ROM. Latihan *Spherical Grip* untuk menstimulasi gerak pada tangan salah satunya berupa latihan menggenggam yang merupakan latihan fungsional tangan. Latihan ROM spherical grip dilakukan secara aktif- asistif. Tujuan dari penelitian ini adalah untuk membuktikan pengaruh latihan ROM *Spherical Grip* pada pasien stroke. Jenis penelitian ini adalah pra eksperimen dengan one group pre test-post test design. Teknik sampling yang digunakan adalah *total sampling*. Sampel yang diambil sebanyak 28 responden dengan mengukur kekuatan otot sebelum dan sesudah diberikan intervensi. Instrumen menggunakan lembar observasi penilaian kekuatan otot dan pemeriksaan fisik *manual muscle testing (MMT)* pada pasien stroke. Hasil penelitian ini menunjukkan sebagian besar kekuatan otot sebelum pemberian latihan ROM *Spherical Grip* adalah poor (ada gerakan tetapi tidak bisa melawan gravitasi) sebanyak 13 responden (46.4%). Dan sebagian besar kekuatan otot sesudah pemberian latihan ROM *Spherical Grip* adalah good (dapat bergerak dan dapat melawan hambatan yang ringan) sebanyak 14 responden (50.0%). Terdapat peningkatan kekuatan otot ekstermitas atas sebelum dan sesudah diberikan latihan ROM Spherical Grip pada pasien stroke. Hal ini menunjukkan bahwa *Spherical Grip* dapat memperbaiki tonus yang mengalami kelemahan dan jika dilakukan secara terus-menerus dapat meningkatkan kekuatan otot pada pasien stroke.

Kata kunci : Range of motion *Spherical Grip*, kekuatan otot, stroke