

## “A COMPARATIVE STUDY ON THE EFFECTIVENESS OF OPEN KINEMATIC EXERCISES AND CLOSED KINEMATIC EXERCISES IN PATIENTS WITH OSTEOARTHRITIS OF THE KNEE JOINT”

V. RAJALAXMI, G. MOHAN KUMAR, K. FOUSIYATHASLIM & M. MANJU

Faculty of Physiotherapy, Dr Mgr Educational & Research Institute University, Chennai, Tamil Nadu, India

### ABSTRACT

#### Objectives

*To improve the functional activity in the knee joint and decrease pain and functional disability in patients with knee osteoarthritis*

#### Back Ground of the Study

*OA is characterized by degenerative changes in the articular cartilage of directional joints and subsequent new bone formation at the articular margins. It results from the rate of degeneration being greater than the rate of repair or regeneration of the articular cartilage. The physiotherapy modalities have been proposed to be effective in the management of osteoarthritis including short wave diathermy. This clinical trial compared the efficacy of open kinematic exercises and closed kinematic exercises in the treatment of osteoarthritis.*

#### Methodology

*The study was performed by 30 subjects and 15 in control and 15 in an experimental study design of pre and post type in out- patient department of ACS medical college and hospital for two weeks.*

#### Outcome Measure

*Visual analogue scale, Western Ontario and McMaster Osteoarthritis Index (WOMAC).*

#### Results

*The results shows that GROUP-B Patients who received Short wave diathermy with closed kinematic exercises shows more improvement than GROUP-A patients with short wave diathermy and open kinematic exercises.*

**KEYWORDS:** *Open Kinematic Exercises, Closed Kinematic Exercises, Short Wave Diathermy*

**Received:** Dec 22, 2015; **Accepted:** Dec 27, 2015; **Published:** Jan 22, 2016; **Paper Id.:** TJPRC:IJPOTJUN20161