### Manipal Academy of Higher Education

Impressions@MAHE

Manipal College of Health Professions, Manipal Theses and Dissertations

**MAHE Student Work** 

Spring 5-1-2021

# Immedidate effects of hip abductor kinesio taping on isokinetic strength, quality of movement and balance in healthy individuals

Omkar Anil Deshpande

Follow this and additional works at: https://impressions.manipal.edu/mcph

Part of the Medicine and Health Sciences Commons

## IMMEDIDATE EFFECTS OF HIP ABDUCTOR KINESIO TAPING ON ISOKINETIC STRENGTH, QUALITY OF MOVEMENT AND BALANCE IN HEALTHY INDIVIDUALS

Deshpande Omkar Anil

193417006

**MPT in Orthopaedics Sports Rehabilitation** 

Dr. H. Karvannan

**Associate Professor** 

Dept. of Physiotherapy

MCHP, MAHE

Bangalore

Dr. V. Prem

Associate Professor-Senior

Scale and Head

**Dept. of Physiotherapy** 

MCHP, MAHE, Bangalore

### Abstract

#### Study design: A Randomized Crossover Trial

**Background:** Gluteus medius is one of the most important muscle of the lower limb which helps in almost all movements. Reduced strength of the gluteus medius is associated with many pathologies. Taping is commonly used in the field of rehabilitation Therefore, this study aims to examine the effect of Kinesio taping (KT) on hip abductor strength, quality of movement, and balance.

**Methods:** Twenty-two asymptomatic individuals from Manipal hospital Bangalore participated in the study. Three taping conditions were tested in random order, using concealed envelope 1. No tape (NT), 2. Sham tape (ST), 3. Experimental tape (ET). Outcome measures were collected in a random order i.e., isokinetic hip abductor strength, quality of movement, and single leg stance of a dominant limb. Following this, KT tape, Sham tape, or No tape was applied by the therapist over the dominant gluteus medius and all outcomes were reassessed with the tape on. Later subjects were represented as their respective control and received sham or KT tape accordingly, all the outcomes were reassessed. Repeated measures analysis of variance was used to detect the difference in all the outcome variables within and between the three groups.

**Results:** Our study using RANOVA resulted in a p-value of (0.027) which suggests that there is a significant difference in the hip abduction mean strength under the three treatment conditions (p < 0.05).

**Conclusion:** Immediate effect of Hip abductor Kinesio taping improves hip abductor strength in asymptomatic individuals when compared to the No tape and Sham tape.

Keywords: Healthy individuals, Quality of movement, Hip abductor Strength