VOLUME-9, ISSUE-1, JANUARY-2020 • PRINT ISSN No. 2277 - 8160 • DOI : 10.36106/gjra Original Research Paper Physiotherapy A STUDY TO COMPARE THE EFFECTIVENESS OF PATELLAR K-TAPING AND MYOFASCIAL RELEASE ON PAIN AND KNEE FUNCTION AMONG KNEE OSTEOARTHRITIS PATIENTS D. Srinagalakshmi MPT student, Aarupadaiveedu College of Physiotherapy Pondicherry, India. K. S. I. Murali Principal & Professor Aarupadaiveedu College of Physiotherapy Sankar* Pondicherry, India, *Corresponding Author Assistant Professor in Physiotherapy, Aarupadaiveedu College of S. Subathra Physiotherapy Pondicherry, India Background: Osteoarthritis is a non inflammatory degenerative disorder of joint characterized by ABSTRACT progressive deterioration of the particular cartilage and formation of new bone known as osteophytes. It

is the most important cause of pain and disability. Estimated population prevalence for OA knee is 7.2% in those aged 40 year or older, 12.5% in those aged over 45 year and 14.8% in those aged 50 year or older. Osteoarthritis is second most common problem and is most frequently occurring joint disease and commonly affected with prevalence of 22% to 39% in India. The patella K-taping is designed to support the patella, correct abnormal patella alignment (lateral tracking) band reduce stress on the knee during activity. It can be used for both treatment and prevention of knee injuries, particularly those associated with abnormal patella tracking such as osteoarthritis knee. Myofascial release is a safe and very effective hand-on technique that involves applying gentle sustained pressure into the Myofascial connective tissue restrictions to eliminate pain and restore motion.

KEYWORDS : Osteoarthritis , patellar K-taping, Myofascial release , KOOS scale.

Study Purpose:

The purpose of the study is to find out compare the effect of patellar kinesio taping and myofascial release in the management of pain and knee function among osteoarthritis patients.

Study Design:

Pre and Post-test, randomized control study

METHOD:

20 Subjects were randomly selected who fulfilled the inclusion and exclusion criteria and divided into 2 groups. Group A was treated with Patellar K-taping a 3 inch elastic tape measuring slightly larger than the circumference of the knee was used The edges of the "uncut" center piece were folded inward to from a strong narrow band. The narrow band was placed directly over the tendon below the patella. And then the top two half strips of the tape were attached loosely at the side (above the knee) and the bottom two half strips firmly and attach them behind the knee just below the popliteal fossa.and the tape was applied for a period of one week and Group B with Myofascial release ask the patient to lie on side lying at the edge of a bed or table with patients bottom knee bent. Move patients top leg backwards so it hang down over the edge of the bed. Gradually try and let the leg droop down more to increase the stretch. Hold for 30 seconds repeat it for 2 or 3 times daily for one week, pain was assessed by VAS scale and knee function by KOOS(The Knee Injury and Osteoarthritis Outcome Score)

RESULTS:

Analysis of Dependent variable pain in Group A: The calculated paired't value is 6.48 and't table value is 3.250 at 0.005 level. Since the calculated't value is more than't table value, it shows that there is significant difference in pain following patellar k-taping in osteoarthritis subjects.

Analysis of Dependent variable pain in Group B: The calculated paired't value is 7.57 and't table value is 3.250 at 0.005 level. Since the calculated't value is more than't table value, it shows that there is significant difference in pain following myofascial release in osteoarthritis subjects.

Group B: The calculated unpaired't value is 1.18 and't table value is 2.278 at 0.005 level. Since the calculated't value is more than't table value, it shows that there is significant difference between patellar k-taping and myofascial release in osteoarthritis subjects.

When comparing the mean values of Group A and Group B, Group A subjects those were treated with kinesio-taping shows more difference than Group B treated with myofascial release. Hence it is concluded that patellar k-taping is more effective than myofascial release in reducing pain among osteoarthritis patients.

Analysis of Dependent variable knee function in Group A: The calculated paired't value is 3.84 and that table value is 3.250 at 0.005 level. Since the calculated't value is more than't table value, it shows that there is significant difference in knee function following patellar k-taping in osteoarthritis subjects.

Analysis of Dependent variable knee function in Group B: The calculated paired't value is 12.37 and't table value is 3.250 at 0.005 level. Since the calculated't value is more than't table value, it shows that there is significant difference in knee function following myofascial release in osteoarthritis subjects.

Analysis of Dependent variable pain between Group A and Group B: The calculated unpaired't value is 6.64 and't table value is 2.278 at 0.005 level. Since the calculated't value is more than't table value, it shows that there is significant difference between patellar k-taping and myofascial release in osteoarthritis subjects.

When comparing the mean values of Group A and Group B, Group A subjects those were treated with kinesio-taping shows more difference than Group B treated with myofascial release. Hence it is concluded that patellar k-taping is more effective than myofascial release in reducing pain and knee function among osteoarthritis patients

CONCLUSION:

From the statistical results, it can be concluded that there is improvement in both the groups. But when comparing both it

Analysis of Dependent variable pain between Group A and

was found that patellar k-taping is more effective than myofascial release.

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