

**EFFECTIVENESS OF KINESIOTAPING ON LOW BACK PAIN IN IMMEDIATE POST-VAGINAL DELIVERY FEMALES.**<sup>1</sup>\*Mansi N. Modi and Dr. Anand Gangwal<sup>2</sup><sup>1</sup>Sancheti Institute College of Physiotherapy.<sup>2</sup>Associate professor & Head of Sports Department Sancheti Institute College of Physiotherapy.**Corresponding Author: Mansi N. Modi**

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**ABSTRACT**

**Objective:** To find effect of kinesiotaping on low back pain in post-vaginal delivery females. **Study Design:** Randomized control trial. **Background:** This study will help to plan the treatment protocol for reducing post-vaginal delivery LBP and will provide them with immediate help to get back to their activities of daily living more quickly and comfortably. **Methods and Measures:** Study population: Post-vaginal delivery females having immediate low back pain. Outcome measures. (A) Roland-Morris Low back pain and Disability Questionnaire., (B) Visual analogue scale. **Intervention:** The intervention period was of 48 hours wherein kinesiotopeing was done in experimental group with exercise and only exercise in control group and both outcome measures were documented. **Results:** Wilcoxon Signed Rank Test was used to compare inter-group values of VAS and RMDQ. Mann-Whitney Test was used to compare the intra-group data. The baseline intra-group values of VAS and RMDQ were analysed to be non-significant. The study results shows significance when pre and post values of VAS in control and experiment group were compared independently with  $p=0$  and also when comparison was done intra-group  $p=0.02$ . There is significance difference seen when pre post values of RMDQ were compared independently with  $p=0$  but when comparison was done intra- group  $p=0.8$  was the value which did not show significance. **Conclusion:** The study concludes that kinesiotaping can be used as an adjunct to exercises in treatment for low back pain reduction but is not effective in improving functional disability in immediate post-vaginal delivery females.

**KEYWORDS:** Post-pregnancy, Functional disability, pelvic floor exercises, post-natal care.**METHOD AND MATERIALS****Study design:** Comparative study**Place of study:** Pune**Type of sampling:** Randomized sampling.**Study population:** Post-vaginal delivery females having immediate low back pain.**Inclusion criteria**

- Females having immediate low back pain following delivery that is day 1 females.
- Females post-delivery having low back pain residing in Pune.
- Females who have underwent a normal delivery without any epidural analgesia injection.
- Females having rating higher than 3 in numerical rating scale.

**Exclusion criteria**

- Females with unstable vitals or having any post pregnancy serious complications.
- Females having history of any injury fracture or surgery related to back.

**METHODOLOGY**

- Study and study design were approved by the institute's ethical committee.
- Written consent was taken from the subjects.
- The examiner had explained the purpose and general procedure of the research protocol to the subjects and had answered all the questions before beginning.
- The subject's general evaluation was documented.
- 60 females having immediate low back pain post-vaginal delivery were selected out of which 30 were given tapping along with pelvic floor muscle and static back core exercises and remaining 30 will be given only pelvic floor muscle exercises.
- All the data was properly documented.

**Objective Assessment:** All the patients included in the study were assessed for.

- Visual analogue scale.
- Roland-Morris Low Back Pain and Disability Questionnaire.

**Procedure:** General evaluation of all the patients was noted and all the selected patients were divided into two

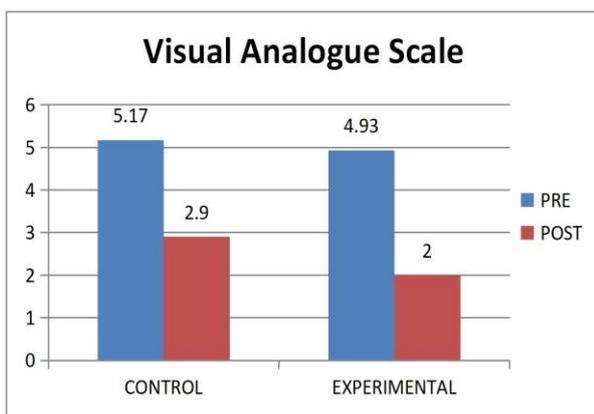
groups with 30 in each. All of them were asked to fill Roland-Morris low back pain questionnaire and has rated their pain on visual analogue scale shown to them on day 1. Than after this procedure was done and documented well group 1 was given pelvic floor muscle exercise and static back core exercises and then they were immediately tapped using kinesiotape in I-band manner and group 2 was given only pelvic floor and static back core exercises. Later on the second day also they were given all the same exercises and taping was again done to the group 1 and at end of 48 hours again they rated their pain on the visual analogue scale and filled the Roland-Morris low back pain questionnaire. On basis of these outcomes effectiveness of kinesiotaping on low back pain in females immediate post-vaginal delivery were analysed.

## RESULTS

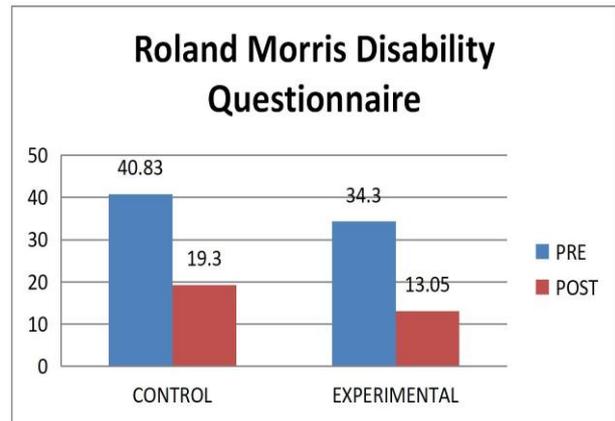
The baseline values intra-group for vas as well as RMDQ were analysed and compared and were seen to be non-significant. The study results shows significance when pre and post values of VAS in control and experiment group were compared independently with  $p=0.000$  and  $p=0.000$  respectively and also when comparison was done within the control and experimental groups with  $p=0.027$ .

There is significance difference seen when pre post values of RMDQ were compared independently with  $p=0.000$  and  $p=0.000$  respectively but when comparison was done in RMDQ within control and experimental group  $p=0.888$  was the value which did not show significance.

The changes in the mean value for visual analogue scale and RMDQ are seen in graphical data form in GRAPH NO.1 and GRAPH NO.2 respectively.



Graph NO.1.



Graph No.2.

## DISCUSSION

- Kaplan S et al in his study on short-term effects of kinesiotaping in women with pregnancy-related low back pain in which kinesiotaping was given along with paracetamol to experimental group and only paracetamol to the control group. The outcome measures were same as in the present studies which were visual analogue scale for pain and RMDQ for assessing functional disability. The study concluded that kinesiotaping is effective as an adjunct to treat pregnancy related low back pain for pain reduction as well as for reduction in functional disability but the present study concluded effectiveness for pain reduction but not significant change was noted from reduction in functional disability point. The intervention period was taken to be of 5 days whereas in the present study the intervention period was taken as of 48 hours which can be one of the reasons why no significance was shown on functional disability as the present study showed immediate effects on acute low back pain.<sup>[3]</sup>
- Payares K et al, studied effect of Kinesiotaping on pain and functional disability in chronic nonspecific low back pain by comparing conventional physical therapy and therapy along with kinesiotaping for chronic low back pain which had an intervention period of<sup>[4]</sup> weeks with session trice a week and which proved significance within the groups but not much difference was noted when intra-group comparison was done which is quite similar to the present study.<sup>[6]</sup>
- There have been studies which have been showing conflicting results between whether kinesiotaping is effective or not post-pregnancy but no studies are done showing its effects immediate post-vaginal delivery and thus this study will be providing a valuable contribution to existing studies and will serve as a help for further studies.
- Studies have shown that kinesiotaping stimulates mechanoreceptors and through pain gait mechanism it helps in pain reduction which may be the result that the present study has shown significance in visual analogue scale. But functional disability has shown effect due to stretching of muscles which will

be same in both groups and thus there may be no great difference in functional disability.

- The visual analogue scale used was numbered from 0 to 10 which was measureable and constrained which could note small changes which can be the reason that pain reduction showed significant difference. Roland-Morris Disability Questionnaire is an open ended questionnaire which was not able to note if there was any improvement or reduction in functional difficulty by 25% or 50% and since even the baseline values were not significant this could be the reasons that RMDQ did not show significance when comparison was done intra-group.

### CONCLUSION

The study concludes that kinesiotopeping can be used as an adjunct to exercises in treatment for solely low back pain reduction but is not effective in improving functional disability in immediate post-vaginal delivery females with LBP.

### CLINICAL IMPLICATIONS

It adds as an adjunct to treatment of low back pain relief along with exercises in post-vaginal delivery females.

### FUTHER SCOPE OF STUDY

1. Different techniques of kinesiotopeping can be tried.
2. The intervention period can be increased.
3. Comparison between kinesiotopeping and electrotherapy modalities as an adjunct treatment method in treating low back pain immediate post-vaginal delivery can be done.

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