

Role of Kinesiophobia in Lowback Pain

Agnihotri Manoj¹ Mahabal Gaurav²

1 (Physiotherapy Dept Terna Physiotherapy College, Navi Mumbai , Muhs, India)

2 (Physiotherapy Dept Cmf Physiotherapy College Pune, Muhs , India)

Abstract: *KINESIOPHOBIA* is the phobia of physical movement and activity resulting from a feeling of vulnerability to painful injury or reinjury.

AIM: To find out the role of kinesiophobia in patients having low back pain.

OBJECTIVES:

1. To compare the effect of Kinesiophobia in both acute and chronic low back pain patients.
2. To compare effect of Kinesiophobia in males and females.
3. To find out the relation between Kinesiophobia and previous exercising status of patients.
4. To find out correlation between Numerical rating scale (NRS) and score of Tampa Scale.

METHODOLOGY

STUDY SET UP: In P.C.M.C area.

STUDY DESIGN: Cross sectional

SAMPLE SIZE: 40

MATERIAL: 1. Tampa Scale for Kinesiophobia.

2. Evaluation Performa, which includes likert scale, NRS.

▪ **INCLUSION:**

Patients (both males and females) in age group of 20-70 who has low back pain (Acute and Chronic).

▪ **EXCLUSION:**

1. Patients having previous psychiatric disease.
2. Patients having secondary back pain due to pathology like carcinoma, T.B, R.A, and Fractures of spine.
3. Patients having any major neurological deficit including higher functions deficits.

PROCEDURE: Before undertaking the study, an evaluation Performa was made including 17-items Tampa Scale of Kinesiophobia in both English and Marathi language and pre-tested by pilot study. Forty patients satisfying the criteria were included.

The patients were evaluated thoroughly and Tampa Scale was given to them. Final score was calculated after the inversion of items 4, 8, 12, 16. The total score varies from minimum 17 to maximum 68.

Data was collected and analyzed.

DISCUSSION: TSK is one of the reliable measures to find out kinesiophobia in acute and chronic LBP.

TSK scoring for chronic LBP is more compared to acute LBP

Females were having slightly higher scores as compared to mean scores of males

CONCLUSION: It can be concluded that kinesiophobia plays major in low back pain especially chronic low back pain. Small sample size.

Key Words: Tampa Scale Of Kinesiophobia , Acute Back Pain, Chronic Back Pain, Nrs Scale, Likert Scale

I. Introduction

Fear makes the wolf bigger than he is."

Fear is unpleasant sensation caused by nearness of realistic danger or pain. It is one of the oldest and strongest emotions of mankind potent than the snake or terrible than rack. To every physical and mental activity it acts as dictator or ruler.

There is strong relationship between fear and pain. Fear may motivate avoidance, which can be avoidance of pain experience- cognitive avoidance, or avoidance of painful activities- behavioral avoidance.

Whereas Phobia is intense, persistent, irrational fear of specific object, situation or activity. For e.g. acrophobia-fear of high places, zoophobia- fear of animals, algophobia- fear of pain. It is out of proportion of dangerousness perceived.

KINESIOPHOBIA is the phobia of physical movement and activity resulting from a feeling of vulnerability to painful injury or reinjury. It is salient predictor of pain disability in chronic pain population. It is more predictive than biomedical status and pain intensity. Kinesiophobia can be accessed by psychometrically based instruments like Tampa Scale (TSK), Fear-Belief questionnaire (FBQ) etc.

Miller, Kori and Todd presented Tampa Scale for Kinesiophobia. It is a 17-item scale rated by 4-point Likert scale ranging from “strongly disagree” to “strongly agree.” With scores ranging from minimum 17 to maximum 68.

Low back pain is one of the commonest musculoskeletal conditions. It occurs mainly due to poor postures and improper ergonomics at workplace. It affects 85% of adults at some point during their lives resulting in work absenteeism's.

Low back pain is usually managed conservatively. Physical therapist plays major role in low back pain treatment with therapeutic exercises as one of the tools used. Kinesiophobia is having negative influence on outcome of rehabilitation. So in patients with Kinesiophobia systemic application of graded exposure to movements is prescribed to avoid pain related fear. This also helps therapist to differentiate between actual physical disabilities and disabilities driven by fear avoidance.

AIM AND OBJECTIVES

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Data was collected and analyzed.

III. Discussion

Kinesiophobia plays major role in chronic low back pain (LBP). The study was conducted with sample size of 40. The finding of the study showed that Tampa scale for kinesiophobia (TSK) scoring for chronic LBP is more compared to acute LBP (graph). The findings were in accordance with available literature, which shows that kinesiophobia is less in acute LBP, and TSK is one of the reliable measures to find out kinesiophobia in acute and chronic LBP.

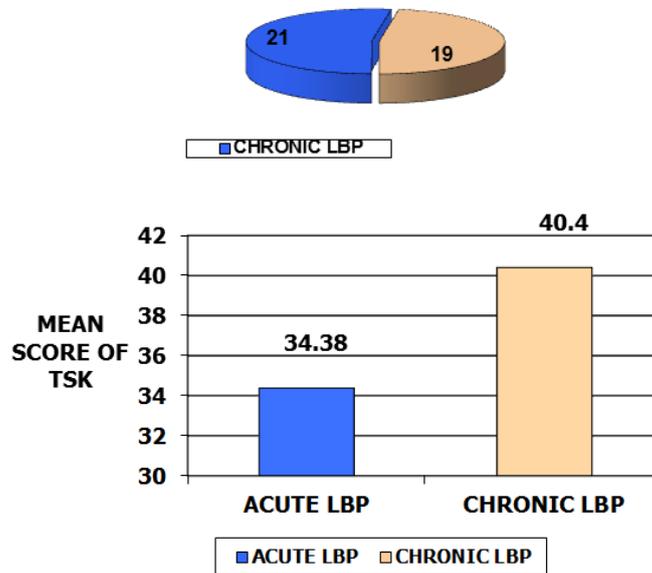
When the same data was analyzed to know whether the males or females are having higher score of TSK, it was found out that females were having slightly higher scores. Even in literature, there was no significant difference were found out between males and females score of TSK.

The finding of the study also showed those people who were exercising was having less kinesiophobia as compared to non-exercising. This in accordance with literature shows that persons who are doing exercises and are functionally active will be having less score of kinesiophobia.

When TSK was compared with numerical rating scale for pain (NRS), it has been found out that as NRS score increases even TSK score also increases, but not in linear fashion, as it is also seen from literature that TSK and NRS are related to each other.

When the data was analyzed to know about TSK scoring in different age group, it is been seen that as the age increases scores of TSK also increases as supported by literature that scores of TSK are at higher side in geriatric patients

GRAPHS



IV. Conclusion

It can be concluded that kinesiophobia plays major in low back pain especially chronic low back pain

LIMITATIONS

Small sample size
No specific pathology is considered

CLINICAL SIGNIFICANCE

In patients with Kinesiophobia systemic application of graded exposure to movements can be prescribed to avoid pain related fear.

It also helps therapist to differentiate between actual physical disabilities and disabilities driven by fear avoidance.

“ONLY WHEN WE ARE NO LONGER AFRAID DO WE BEGIN TO LIVE.”

References

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