

## In Symptomatic Patients, Ankle Pain, Foot Mobility and Clinical Activity were Investigated

Anum Mohiuddin\*

Department of Rheumatology, Science & Technology, Pakistan

**Corresponding author:** Anum Mohiuddin

✉ anum@gmail.com

Department of Rheumatology, Science & Technology, Pakistan

**Citation:** Mohiuddin A (2023) In Symptomatic Patients, Ankle pain, Foot mobility and Clinical activity were investigated. Acta Rheuma, Vol. 10 No. 1: 01.

### Abstract

The main objective of this study was to determine the relationship between kinesiophobia and pain (generally and in the feet), foot function, and disease activity in patients with rheumatoid arthritis (RA). A total of 124 interviews were conducted with RA participants. Participants were recruited from the Virgen de las Nieves de Granada University Hospital in Spain. Participants completed the following questionnaires during their rheumatologist. The Foot Function Index (FFI), the Tampa Scale for agoraphobia (TSK-11) and the Foot Pain Visual Analogue Scale (VAS Pain). In addition, the Simplified Disease Activity Index (SDAI) was used to measure disease activity. Were obtained between the variables TSK-11 and VAS (associated with general pain or leg pain) and FFI (in its three sub-ranges). ). In addition, a negative correlation between TSK-11 and educational attainment was demonstrated. This study provides information on the relationship between foot function and pain with varying degrees of agoraphobia in patients with RA. In addition, the patient's educational history is considered to be a predictor of whether the patient has kinesiophobia.

**Keywords:** Kinesiophobia; Rheumatoid Arthritis; Foot; Pain; Function

**Received:** 01-February-2023, **Manuscript No.** ipar-23-13423; **Editor assigned:** 03-February-2023, **Pre QC No.** ipar-23-13423(PQ); **Reviewed:** 17-February-2023, **QC No.** ipar-23-13423; **Revised:** 21-February-2023, **Manuscript No.** ipar-23-13423 (R); **Published:** 28-February-2023, **DOI:** 10.36648/ipar.23.10.1.01

### Introduction

Kinesiophobia is defined as restriction of motor activity due to fear of movement. In 1990, was considered a debilitating, destructive, and irrational fear of movement and activity based on the belief of being vulnerable and vulnerable. This fear of movement causes self-defense; As a result, the patient avoids or limits movements that require the impact of the affected body part [1].

Patients with rheumatoid arthritis (RA) experience joint pain, especially in the small joints of the hands and feet. Rheumatoid arthritis causes pain, bone erosion, chronic synovitis, and increased ligament stretching. These signs and symptoms cause more stress and stiffness. Over the course of the disease, 90% of patients develop foot symptoms, which are often severe. These symptoms are related to osteoarthritic deformities that alter the symmetry of the foot. As a result, RA patients experience impaired quality of life and lower leg function. In a high proportion of patients, even during periods of remission, joint destruction has been observed. This leads to joint deterioration, instability, and reduced mobility. Additionally, the leg symptoms

associated with rheumatoid arthritis can lead to biomechanical changes, as well as a general lack of cognitive ability [2]. Physical activity levels may also be lower in people with RA than in healthy people. As a result, patients with RA are at higher risk for falls, show decreased postural stability, and have difficulty maintaining postural control during daily activities [3]. Previous studies on agoraphobia have focused on the involvement of the foot and ankle, showing that people with ankle instability have a higher degree of agoraphobia. However, studies on kinesiophobia and foot and ankle involvement in RA patients are lacking. Several previous studies have looked at motor fear in RA patients through TSK-17 but at a general level. From another angle, several previous studies have been published on the relationship between kinesiophobia and the following areas: upper extremities in osteoarthritis, osteoporosis, and knee and hip surgery. Some studies have focused on patients with chronic pain, fibromyalgia, and musculoskeletal disorders. To date, and to our knowledge, there are no published articles identifying predictive factors associated with agoraphobia in patients with RA. This main objective of this study was to determine the relationship between kinesiophobia and pain (general and leg

pain), leg function, and disease activity [4].

## Participants

The patient must have leg pain and meet the 2010 RA classification criteria (validated by the American College of Rheumatology and the European League against Rheumatology)

Participants were excluded if they had concomitant musculoskeletal disease, central or peripheral nervous system disease, endocrine disorders (eg, diabetes), or psychiatric disorders (eg, depression) [5].

Participants were recruited from the Virgen de las Nieves University Hospital in Granada, Spain, in the rheumatology department. They received a fact sheet and were invited to participate in the study. The participants who consented were interviewed and provided further details about the study. All participants provided written consent to participate in the study [6].

## Data collection

The following demographic information has been collected Age, sex, education, treatment and duration of disease. The following scales are used to collect clinical information to assess disease activity and effects. Image analog scale (VAS) for generalized pain (VAS-g) and leg pain (VAS-f), with a range of 0 to 100 where 0 is no pain and 100 is the most severe pain and the Activity Index Simplified Disease Activity (SDAI) to measure disease activity for RA, which is a scoring system that has been validated in both research and clinical settings [7]. Remission was defined as SDAI <3>26. SDAI is the sum of the five resulting parameters number of painful and swollen joints (based on an assessment of 28 joints), overall patient and physician assessment of disease activity (VAS 0-100 mm) and C-reactive protein levels (mg/dl, normal < ;1 mg/dl). In addition, the Spanish version of the Tampa Scale for agoraphobia (TSK-11) was collected to measure agoraphobia. TSK-11 is an 11-item self-assessment checklist using a 4-point Likert scale, with 1 being strongly disagree and 4 strongly agreeing [8]. A low score means no fear of movement and a high score indicates agoraphobia. TSK-11 exhibits good consistency (0.68–0.80), check-retest reliability (intraclass correlation coefficient [ICC] 0.72) and structure validity. (the latter being tested against fear, pain, avoidance, and catastrophic beliefs) [9].

Finally, the Foot Function Index (FFI) was collected, which was developed to measure the impact of foot pathology on function in terms of pain, disability, and activity limitation. The FFI is a self-managed index consisting of 23 items divided into 3 sub-ranges. Total points and sub-ranges are generated. A higher FFI score indicates poor foot health. The test-retest reliability of the total FFI scores and sub-ranges ranged from 0.87 to 0.69. Internal consistency ranges from 0.96 to 0.73 [10].

## Discussion

The main objective of this study was to determine the relationship between kinesiophobia and pain (general and leg pain), leg function, and disease activity.

Our results suggest a relationship between foot function and pain with a high degree of agoraphobia in RA patients. The patients

had a very high degree of motor fear (TSK-11 = 31.77) and general and specific leg pain. In addition, the patients had poor foot function (FFI=39.72), that is, there was an association between the results obtained.

Previous studies are consistent with current findings, such as those of Kinikli et al., in which pain and function are considered predictors of agoraphobia. Demonstrated an association between kinesiophobia and musculoskeletal pain (mainly in the shoulders, neck and back). The authors all suggested that the intensity of pain may lead to avoidance of movements that might increase pain.

Previous studies analyzed pain in the upper extremities, unlike the current study that analyzed both general and specific pain related to the foot, one of the most affected areas in patients. GO OUT. Previous studies of RA have shown that patients experience pain and structural deformities associated with the disease, which causes physical harm to patients with RA. It should be emphasized that the feet are one of the most important parts of the human body due to their role in the musculoskeletal system and thus in the performance of physical and other activities. This means that if the patient has leg pain, activities will be reduced. This claim was confirmed by Palomo Lopez et al., where the degree of agoraphobia was studied in healthy participants with hallucinogenic valgus (TSK-11 = 26.36) and included those patient with chronic instability of the ankle. demonstrated that acute musculoskeletal pain can induce disabling chronic pain in patients with high levels of agoraphobia. suggests that greater pain-related motor/injury fear is associated with lower levels of physical activity, more sedentary behavior, and lower physical functioning in adults. These results suggest a potential negative impact of kinesiophobia in older adults without chronic pain.

However, in the results presented, kinesiophobia is not directly related to disease activity. Our results are supported by a previous study by Kinikli et al., in which no statistically significant relationship was found between RA activity, analyzed with DAS28, and physical activity levels. In addition, it was concluded that physical activity level was not a predictor of agoraphobia.

The present study shows a significant and inverse relationship between the education level of RA patients and the degree of kinesiophobia. Patients with a high level of education have low levels of motor anxiety. This fact can be explained by the fact that highly educated patients can understand the information provided, such as the instructions provided regarding conservative treatment regarding their disease. In addition, unlike patients with low levels of education, highly educated patients have access to tools to help manage their pain, such as databases of scientific articles like PubMed, where they can read the most about their illness, improving their lives and pain levels. In addition, social activities can also have an influence. Likewise, outcomes for pain and agoraphobia have been shown to be related to socioeconomic variables, depression and/or anxiety, and patient education.

Patients with musculoskeletal pain in general or foot pain in particular have been shown to have a high degree of fear of movement. Therefore, the most appropriate conservative

treatments for musculoskeletal problems, including supervised physical activity and orthopedic treatments (eg, foot braces), can be recommended when the degree of agoraphobia is known. This more targeted conservative treatment can help improve a patient's range of motion. In addition, a better quality of life will be ensured on a psychological and physical level, which will reduce treatment costs and improve pain perception. There are several recommendations to guide future research, such as increasing sample size to ensure uniformity of the patient's gender, the patient's education level, the techniques used to control pain, and the use of conservative treatments prescribed by medical professionals for the purpose of improving the perception of pain, awareness of pain and agoraphobia. Future research should also include patients' psychosocial and emotional perceptions to study their long-term quality of life. Alternatively, this study may have collected selected questionnaires as part of the rheumatology

appointment, making the sample size more representative; Information on targeted therapies such as foot orthotics or similar foot disease interventions can also be collected to test for a statistically significant relationship between agoraphobia and acrophobia. Movement and whether or not the patient has been treated for foot disease.

## Conclusion

Disease activity, general VAS, leg VAS, physical activity FFI, body mass index, and age were all associated with the degree of motor fear in patients with RA. This study provides information on the relationship between poor foot function and high levels of leg pain and agoraphobia in patients with RA. In addition, lower educational attainment is considered to be a predictor of agoraphobia.

## References

- Chick JF, Chauhan NR, Madan R (2013) Solitary fibrous tumors of the thorax: nomenclature, epidemiology, radiologic and pathologic findings, differential diagnoses, and management. *AJR Am J Roentgenol* 200: 238-248.
- Fletcher CDM, Bridge JA, Hogendoorn P, Mertens F (2013) WHO Classification of Tumours of Soft Tissue and Bone. IARC, Lyon 4.
- Gengler C, Guillou L (2006) Solitary fibrous tumour and haemangiopericytoma: evolution of a concept. *Histopathology* 48: 63-74.
- Flint A, Weiss SW (1995) CD-34 and keratin expression distinguishes solitary fibrous tumor (fibrous mesothelioma) of the pleura from desmoplastic mesothelioma. *Hum Pathol* 26: 428-431.
- Hasegawa T, Matsuno Y, Shimoda T, Hirohashi S, Hirose T, et al. (1998) Frequent expression of bcl-2 protein in solitary fibrous tumors. *Jpn J Clin Oncol* 28: 86-91.
- Doyle LA (2014) Sarcoma classification: an update based on the 2013 World Health Organization classification of tumors of soft tissue and bone. *Cancer* 120: 1763-74.
- Dalton WT, Zolliker AS, McCaughey WT (1979) Localized primary tumors of the pleura: an analysis of 40 cases. *Cancer* 44: 1465-1475.
- England DM, Hochholzer L, McCarthy MJ (1989) Localized benign and malignant fibrous tumors of the pleura. A clinicopathologic review of 223 cases. *Am J Surg Pathol* 13: 640-658?
- Briselli M, Mark EJ, Dickersin GR (1981) Solitary fibrous tumors of the pleura: eight new cases and review of 360 cases in the literature. *Cancer* 47: 2678-2689.
- Witkin GB, Rosai J (1989) Solitary fibrous tumor of the mediastinum: a report of 14 cases. *Am J Surg Pathol* 13: 547-557.