A Single Centric Retrospective Study to Find the Prevalence of Fibromyalgia in Patients with Spondyloarthropathy.

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ABSTRACT

Introduction: Fibromyalgia and spondyloarthropathy are both chronic musculoskeletal conditions that often present with overlapping symptoms, making accurate diagnosis and management challenging. Identifying the prevalence of fibromyalgia in patients with spondyloarthropathy is crucial for optimizing patient care and treatment strategies.

Methods: This single-centric retrospective study aimed to determine the prevalence of fibromyalgia among patients diagnosed with spondyloarthropathy. Medical records of patients seen at Daradia pain hospital between January 2023 to December 2023 were reviewed. Patients meeting the criteria for spondyloarthropathy were included, and those with incomplete medical records were excluded. The diagnosis of fibromyalgia was based on AMOR criteria and sacroiliitis, and prevalence was calculated.

Results: A total of 210 patients diagnosed with spondyloarthropathy were included in the study. Among them, 39 (18.57%) were male and 171 (81.42%) were female. Fibromyalgia was found in 80 (38.09%) patients among the diagnosed spondyloarthropathy patients.

Conclusion: This study provides valuable insights into the prevalence of fibromyalgia among patients diagnosed with spondyloarthropathy, highlighting the importance of considering and managing concurrent fibromyalgia in this population.

INTRODUCTION

Spondyloarthritis (SpA) represents a range of chronic inflammatory conditions impacting both the axial skeleton (including the sacroiliac joints and spine) and peripheral joints. It exhibits various clinical manifestations such as arthritis, enthesitis, uveitis, dactylitis, psoriasis, and inflammatory bowel disease. These conditions are linked by a shared genetic factor, the human leukocyte antigen HLA B27. In 2009, the Assessment of the Spondyloarthritis International Society (ASAS) introduced novel classification criteria to identify individuals with early axial Spondyloarthritis (axSpA). This classification was groundbreaking as it incorporated magnetic resonance imaging (MRI) assessment of the sacroiliac joints (SIJ) and abnormal levels of C-reactive protein (CRP) for the first time. SpA can be classified as axial spondyloarthritis (axSpA) with radiographic changes and non-radiographic axSpA without definite signs of structural damage in X-ray or MRI. It also involves organs such as bowel, skin and eye. Musculoskeletal pain is a key symptom in SpA. Spondyloarthropathy and fibromyalgia may share common features as wide spread pain and enthesis which may interfere...
Study to Find the Prevalence of Fibromyalgia in Patients with Spondyloarthropathy

Fibromyalgia is a multifaceted chronic ailment whose exact cause remains elusive. It is often conceptualized as a pain amplification syndrome linked to a mechanism of central nervous system sensitization. It’s been approximated that FM affects approximately 2–7% of the worldwide population, with a higher predominance observed among women. Characteristic symptoms of FM include persistent musculoskeletal pain across multiple body regions and the presence of tender points throughout the body. Additionally, individuals may experience symptoms such as fatigue, disrupted sleep patterns, and stiffness. These symptoms often contribute to considerable physical impairment and a diminished quality of life.

Studies have shown that FM in spondyloarthropathy patients is been associated with peripheral enthesitis and it is more common among female sex. Fibromyalgia is a common comorbidity in axSpA, experienced by more than one in every six patients.

Our objective is to identify the prevalence of fibromyalgia among individuals already diagnosed with Spondyloarthropathy and offer an overview of existing data concerning the coexistence of FM in SpA.

METHOD

A study was done after the approval of institutional ethical committee of Daradia Pain hospital. As this study was retrospective, so we used existing data from past records. In such cases, the sample size was determined by the available data rather than a pre-calculated formula. So the study included data of patients from January 2023 to December 2023. The age group of 30-60 years likely encompasses many individuals who were either in the early stages of the disease or are managing it in a chronic phase so we included patients of age between 30-60 year. Patient diagnosed with Spondyloarthropathy after meeting the AMOR criteria or having radiological evidence of sacroiliitis, bone marrow edema or sclerosis in sacroiliac joint were included. Scores of wide spread pain index (WPI) and symptoms severity score (SSS) were recorded to diagnose fibromyalgia in patient with Spondyloarthropathy. Patient diagnosed with spondyloarthropathy but not meeting the AMOR criteria or not having radiological finding of sacroiliitis were not included in this study.

This study included 210 patients who were diagnosed with SpA following AMOR criteria radiological evidence of sacroiliac joint involvement. Presence of FM was based upon WPI and SSS score according to 2010 ACR criteria.

Fig 1: AMOR Criteria for Spondyloarthropathy
RESULT

In this study patient included were 210, out of which 39 (18.57%) were male and 171 (81.42%) were female. The range of age was between 30 - 60 years and the mean age was 48 years (Table 1).

Fibromyalgia was found in 80 (38.09%) patients among the diagnosed 210 spondyloarthropathy patients.

In our study population of 210 patient 80 were to meet the criteria of Fibromyalgia with high WPI and SSS. Similar study was conducted with 125 patients diagnosed with axial SpA which showed fibromyalgia in 29.6% patient diagnosed with SpA. Higher incidence was in female patient with 55%.

Salaffi F et al.11 conducted a study to assess the prevalence of fibromyalgia syndrome (FMS) in 402 patients diagnosed with ankylosing spondylitis (AS) based on Modified New York (MNY) criteria or axial spondyloarthritis (SpA) according to Assessment of Spondyloarthritis International Society (ASAS) criteria. Utilizing the 2010 American College of Rheumatology (ACR) diagnostic criteria for FMS, they reported a prevalence rate of 14.9% in their patient cohort. The study also revealed a significantly higher prevalence of FMS among female patients (31.3%; P < .001), while disease duration was comparable between genders. Similarly, our study also shows that higher prevalence of fibromyalgia with SPA among female patients.

DISCUSSION

This study was conducted to see the occurrence of fibromyalgia in patient diagnosed with spondyloarthropathy. In this study we found significant number of patients suffered with fibromyalgia who were diagnosed with spondyloarthropathy. Fibromyalgia has become very common condition to visit pain clinic with wide spread pain symptoms that are associated with fatigue, non-refreshed sleep, mood disturbance and cognitive impairment.

The coexistence of fibromyalgia and spondyloarthropathy presents a diagnostic challenge due to overlapping clinical features and potential confounders. Fibromyalgia is characterized by widespread musculoskeletal pain, fatigue, sleep disturbances, and cognitive dysfunction, while spondyloarthropathy encompasses a group of inflammatory rheumatic diseases primarily affecting the spine and peripheral joints.

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In another study by Wach et al.12 fibromyalgia syndrome (FMS) was investigated as a comorbidity in a group of patients with spondyloarthritits (SpA). Utilizing the 1990 American College of Rheumatology (ACR) criteria, this study identified concurrent FMS in 13 out of 103 patients diagnosed with SpA.

Given the heightened sensitivity of the 2010 criteria for diagnosing fibromyalgia syndrome (FMS), our study likely captured more patients within the FMS.
diagnosis category. Consequently, this contributed to the higher prevalence rate observed in our study. Considering this context, we propose that our findings serve as valuable guidance for future research endeavors utilizing the 2010 American College of Rheumatology (ACR) diagnostic criteria for FMS. These findings underscore the importance of utilizing updated and more sensitive diagnostic criteria to accurately identify and characterize the prevalence of FMS in various patient populations.

The coexistence of fibromyalgia in patients with spondyloarthritis poses diagnostic and therapeutic challenges that require a comprehensive and multidisciplinary approach. Recognition of fibromyalgia as a comorbidity in spondyloarthritis patients is essential for implementing appropriate management strategies and optimizing clinical outcomes. Limitation of our studies we could consider that the sample size was too small to draw definite conclusions.

CONCLUSION

The study highlights the significant prevalence of fibromyalgia among patients diagnosed with spondyloarthritis, underlining the critical need to recognize and manage fibromyalgia in this patient population.

REFERENCES


