Mind and Spine: The Prevalence of Psychiatric and Sleep Disorders in **Patients with Ankylosing Spondylitis**

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Background

- ✓ It has been previously established that patients with autoimmune conditions have a higher prevalence of comorbid depression and anxiety.
- ✓ The prevalence of other psychiatric disorders and their burden in a specific inflammatory condition such as ankylosing spondylitis (AS) has not been well studied, however.
- ✓ In this project, we performed a nationwide population-based study to investigate the relationship and prevalence of psychiatric diagnoses, sleep disorders, and suicidal ideation in patients with AS.

Purpose

- ✓ To understand the psychiatric comorbidities that affect patients with AS
- ✓ To address the psychiatric needs of AS patients and create an effective therapeutic approach in treating the condition to improve patients' overall lifestyle and well-being

Methods

- ✓ We analyzed the 2021 data from the Nationwide Inpatient Sample (NIS) and Healthcare Cost and Utilization Project (HCUP) databases.
- Psychiatric and sleep disorders along with AS were identified using the International Classification of Diseases, 10th revision, Clinical Modification (ICD-10 CM) codes.

References

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Methods (cont.)

✓ We performed weighted analyses using chi-squared tests. Multivariable survey logistic regression was used to assess the association between ankylosing spondylitis and each of the psychiatric disorders (major depressive disorder, generalized anxiety disorder, bipolar I and II disorder, schizophrenia, and suicidal ideation) and sleep disorders (insomnia and narcolepsy) while adjusting for age, sex, and race.

Results

✓ Out of 6,666,752 total adult patients, ages 18 years and older, admitted to a US hospital in 2021, we identified 3,163 patients diagnosed with AS

DSM-5 Diagnosis	Prevalence in AS Patients (%)	Prevalence in Non- AS Patients (%)	p-val
Major Depressive Disorder	17.9	10.7	0.001
Generalized anxiety disorder	3.89	2.37	0.001
Narcolepsy	0.19	0.04	0.001
Schizophrenia spectrum disorder	0.76	1.18	0.0249
Bipolar I and II disorder	2.85	2.36	0.0728
Suicidal ideation	1.93	2.26	0.2106
Insomnia disorder	0.06	0.04	0.4607

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Conclusion ✓ Patients with AS have a significantly higher prevalence of depression and anxiety and a marginally significant higher prevalence of bipolar disorders. ✓ For sleep disorders, there was a significantly higher prevalence of narcolepsy in patients with AS and no significant difference found in the prevalence of insomnia. ✓ We found no significant prevalence of suicidal ideation in patients with AS. **Clinical Significance** ✓ This study's findings support the need for routine screening for psychiatric conditions, establishment of psychiatric care, and the possible need for sleep studies in patients being managed for AS. Addressing these comorbidities could lead to better disease outcomes and improved quality of life for patients. ✓ This study also brings awareness to the need for a multidisciplinary care for these patients. **Future Directions** ✓ Future analyses will focus on additional comorbidities that may increase the risk of developing psychiatric disorders. These include chronic medical conditions (e.g., cardiovascular disease, diabetes), substance use disorders, and genetic predispositions to gain a more comprehensive understanding of their contributory roles





