Headache Medicine

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Association between migraine and autism spectrum disorder: a case series of 10 patients

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Introduction
Migraine is a common neurological disorder marked by severe headaches, nausea, and sensitivity to light and sound. Autism Spectrum Disorder (ASD) Level 1 support is characterized by difficulties in social interaction, communication, and restricted behaviors, often accompanied by sensory hypersensitivity and emotional dysregulation. This case series explores the overlap between migraine and ASD Level 1 support in 10 patients, emphasizing sensory hypersensitivity and emotional dysregulation.

Objective
This study aims to explore the association between migraine and subsequent diagnosis of ASD Level 1 support, with a focus on sensory hypersensitivity and emotional dysregulation observed during clinical follow-ups. The coexistence of migraine and ASD Level 1 support, with pronounced sensory hypersensitivity and emotional dysregulation, suggests a potential interrelation between these conditions. Understanding the overlap in symptoms can facilitate early identification and comprehensive management, improving patient outcomes. The findings underscore the importance of recognizing sensory and emotional symptoms in patients with migraine, which may indicate an underlying ASD diagnosis.

Methods
We included 10 patients with a confirmed diagnosis of migraine. These patients were followed up regularly and assessed for symptoms indicative of ASD Level 1 support. The focus was on identifying signs of sensory hypersensitivity and emotional dysregulation, which are common in both migraine and ASD.

Results
The study included 10 patients, with a mean age of 32 years, comprising 7 females and 3 males. Migraine with aura was present in 60% of cases, with an average duration of migraine diagnosis of 5 years. The average time to ASD diagnosis was 2 years after the migraine diagnosis. All patients exhibited heightened sensitivity to light and sound during migraine episodes, and these sensory sensitivities persisted as characteristics of ASD. Additionally, 100% of the patients showed aversion to certain textures, sounds, and lights. Emotional dysregulation, including difficulties in managing emotions, frequent mood swings, and episodes of anxiety and irritability, was reported by 90% of the patients. This emotional instability significantly affected their social interactions and daily functioning.

Conclusion
Identifying ASD in patients with migraine, particularly considering sensory hypersensitivity and emotional dysregulation, can significantly influence treatment strategies and improve quality of life. Further research is essential to elucidate the mechanisms linking these conditions and develop integrated therapeutic approaches. Early intervention and multidisciplinary care are crucial for managing these overlapping conditions effectively.

Keywords:
Migraine
Autism Spectrum Disorder (ASD)
Case series

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