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Status Migrainosus and Ischemic Stroke: Clinical and Pathophysiological Connections

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Introduction

Migraine is one of the most common neurological conditions, affecting a significant proportion of the global population. Within the spectrum of migraines, status migrainosus represents a particularly debilitating and prolonged form, defined by attacks lasting more than 72 hours, with additional neurological risks, particularly ischemic stroke (IS). Objectives: The objective of this review is to synthesize the relationship between status migrainosus and IS, highlighting the underlying mechanisms, risk factors, and clinical implications.

Methods

A detailed search was conducted in the PubMed database using the terms "status migrainosus" and "ischemic stroke" to investigate the connection between these two conditions. Thirty-two relevant articles published between 2010 and 2023 were reviewed, exploring the relationship between status migrainosus and IS, including shared pathophysiological mechanisms and common risk factors.

Results

Migraine with aura was significantly associated with an increased risk of IS due to mechanisms such as endothelial dysfunction and hypercoagulability. Additionally, blood-brain barrier dysfunction and vascular inflammation were identified as further factors linking aura to IS. Women showed an elevated risk of migraine with aura and IS, which may be attributed to hormonal factors. A shared genetic predisposition between migraine and IS was identified, suggesting that genetic variants may influence the risk of IS in individuals with migraine. Pharmacological therapies have proven effective in the prophylaxis of migraine and reduction of IS risk. Furthermore, lifestyle changes and control of vascular risk factors were highlighted as complementary preventive measures.

Conclusion

Although not all articles specifically address status migrainosus in detail, the interconnection between migraine and ischemic stroke is clearly evidenced in the literature. The identification of shared risk factors and common pathophysiological mechanisms underscores the need for an integrated approach in managing patients with migraine, particularly those with prolonged attacks. Continued research in this area is crucial to enhance preventive and therapeutic strategies aimed at reducing the incidence of ischemic events in predisposed individuals.

