



# Diagnosis and Treatment of Migraine

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1. Introduction

Migraine is a common neurological disorder characterized by recurrent attacks of moderate to severe headache, often associated with nausea, vomiting, and photophobia. The pathophysiology of migraine is complex, involving genetic and environmental factors, as well as dysregulation of the trigeminovascular system and the hypothalamic-pituitary-adrenal axis.

The diagnosis of migraine is primarily clinical, based on the International Classification of Headache Disorders (ICHD-3) criteria. Key features include the presence of at least two of the following symptoms: unilateral and/or throbbing pain, moderate to severe pain, and pain aggravated by routine physical activity. The attacks must be recurrent and last for at least 5 minutes to 72 hours.

Treatment of migraine aims to relieve the acute symptoms and prevent future attacks. Acute treatment options include non-steroidal anti-inflammatory drugs (NSAIDs), triptans, and ergotamines. Preventive treatment is indicated for patients with frequent or disabling attacks and includes beta-blockers, calcium channel blockers, and anti-epileptics.

Recent advances in the understanding of migraine pathophysiology have led to the development of novel targeted therapies, such as calcitonin receptor-like receptor 1 (CRLR1) antagonists and 5-HT<sub>1B/1D</sub> receptor agonists. These treatments offer improved efficacy and tolerability compared to traditional therapies.

Conclusion

Migraine is a complex disorder with a multifactorial pathogenesis. Accurate diagnosis and individualized treatment are essential for improving patient outcomes. Continued research into the underlying mechanisms of migraine will likely lead to further advancements in treatment options.

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