Dynamic Chiropractic

HEADACHES & MIGRAINES

Basilar Migraine

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Basilar migraine was described by Bickerstaff in 1961 as a rare variant of migraine which frequently affects young women and girls and bears a strong relationship with menses.[1] The condition is also known as basilar artery migraine, Bickerstaff's migraine, and syncopal migraine. Migraine literature also groups basilar migraine in with hemiplegic migraine and ophthalmoplegic migraine under the heading of "complicated migraines." Basilar migraine has since been shown to affect all age groups and both sexes with the usual migraine female predominance.[2] The basilar migraine has been described by the Headache Classification Committee of the International Headache Society as "a migraine with aura symptoms clearly originating from the brainstem or from both occipital lobes."

The aura phase of the migraine is due to transient brainstem and cerebellar ischemia, which can be mistaken for a transient ischemic attack of the vertebrobasilar circulation. The symptoms noted in the aura phase of the basilar artery migraine are the result of a combination of disturbances in the cerebellum, brainstem, and occipital lobes, which generally last for less than one hour. The aura phase usually begins with a bilateral disturbance of vision that may occasionally progress to temporary blindness. Visual symptoms are followed by varying combinations of ataxia, dysarthria, bilateral vertigo, tinnitus, changing levels of consciousness, bilateral paresthesias of the limbs, face, and tongue, and quadriparesis. Other brainstem- related symptoms less commonly noted include nystagmus, diplopia, and decreases in hearing.[1-9]

The headache phase of the basilar migraine consists of a severe, throbbing, acute occipital headache that may be confused with tension headaches. The patient usually experiences nausea and vomiting which tend to relieve the headache symptoms.

A differential diagnosis for this condition should include cerebrovascular disease, Arnold-Chiari malformations, posterior fossa tumors, hyperventilation syndrome, and a variety of metabolic disorders. Metabolic disorders considered in the differential diagnosis include homocystinuria, pyruvate carboxylase deficiency, Hartnup's disease, and Leigh's disease.[9]

The Headache Classification Committee of the International Headache Society has proposed the following diagnostic criteria for basilar migraine:[2]

1. The patient must have two attacks that have three of the following four characteristics:

A. One or more reversible aura symptoms indicating cortical or brainstem dysfunction that --

B. Develop gradually over more than four minutes

C. There is a limit to each aura of 60 minutes

D. A headache that must occur within 60 minutes of the end of the aura, if it occurs at all.

2. The patient must demonstrate two or more aura symptoms of the following types:

A. Visual symptoms in both the temporal and nasal fields or both eyes

B. Dysarthria

C. Vertigo

D. Tinnitus

E. Decreased hearing

F. Double vision

G. Ataxia

H. Bilateral paresthesias

I. Bilateral paresis

J. Decreased levels of consciousness

Basilar migraines may be precipitated or exacerbated by ingestion of alcohol.[4] Complications of basilar migraines include the remote possibility of a basilar artery infarction. Cases of basilar artery infarction secondary to basilar migraines are documented in current literature. Infarctions are well-recognized complications of the more common forms of migraine and are among the most frequent causes of strokes in young adults. Patients with basilar migraines should be screened for the presence of additional stroke risk factors such as a family history of cerebrovascular accident, smoking, and the use of oral contraceptives.[8]

References

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