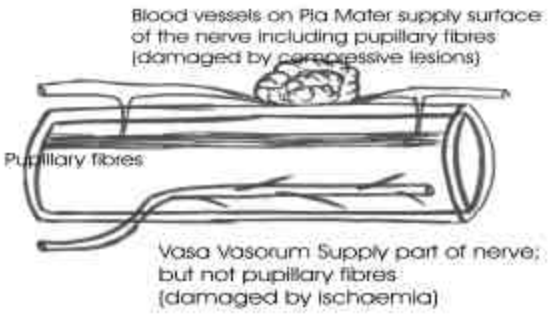
ischemic process is more likely than a compressive lesion.

Other theories of the pathogenesis of ophthalmolegic migraine are :

- Swelling of the posterior cerebral artery
- Pituitary swelling
- Unilateral brain swelling



SEQUELAE

As a rule oculomotor paresis recovers completely. Some children may have several attacks and may be left with permanent slight degree of ptosis, residual 3 rd nerve paresis with slight pupillary dilatation. However diplopia is rare because of visual suppression. Some patients may develop secondary oculomotor synkinesis.

DIFFERENTIAL DIAGNOSIS AND INVESTIGATIONS

Features favouring the diagnosis of ophthalmoplegic migraine include concomitant or subsequent headaches that fulfil the criteria for the diagnosis of migraine and a family history of migraine, along with elimination of other possible causes, which invariably requires a CT scan. Included under the differential diagnosis of ophtalmoplegic migraine are :-

- Tolosa Hunt syndrome
- Oculomotor nerve schwannoma
- Aneurysms
- Tumors
- Diabetes
- Sphenoidal sinus mucoceles
- Myasthenia gravis
- Intermittent angle closure glaucoma with mydriasis

When the oculomotor nerve only is affected, the primary concern is an Intracranial aneurysm; even in a young child. The most common site of such an aneurysm is at the junction of the internal Carotid and the posterior communicating arteries or at the junction of the Basilar and the superior cerebellar arteries, at the tip of the basilar artery, within the cavernous sinus. CT scan & MRI permit identification of an aneurysm; and cerebral angiography is not necessary when either CT or MRI studies give normal results, particularly in children.

Myasthenia can be ruled out if the pupil is involved and also to response to edrophonium (tensilon).

Increased intracranial tension can cause herniation of the hipocampal gyrus , producing an oculomotor paresis which maybe transient and recurrent and associated with severe headache. Diabetic ophthalmoparesis – rarely occurs in children, beside the ophthalmoparesis that occurs in patients with diabetes melliteus, hypertension, giant cell arteritis , other systemic vasculopathies persist longer than the ophthalmoplegia associated with migraine.

Mucocele of the sphenoidal sinus can cause painful ophthalmoplegia;as well as inflammatory lesions and tumors that invade the cavernous sinus.

In a few cases of ophthamoplegic migraine the MRI showed enhancement and enlargement of the cisternal portion of the oculomotor nerve which spontaneously resolved after two and four years. Persistence of clinical recurrences was associated with long lasting presence of MRI findings.

TREATMENT

Very little evidence is available that there is any effective treatment for a particular attack, which in any case is self limiting. Ergotamine preparations are of no value. Attempts to treat with steroids to reduce the endomural oedema have raised equivocal results, but if one started treatment at the very onset of an attack, this might constitute a measure for aborting the attack swiftly.

IS OPHTHALMOPLEGIC MIGRAINE MIGRAINOUS ?

The characteristics of headache and the frequent lack of associated symptoms during so called ophthalmoplegic migraine attacks indicate that the condition is not migrainous. The most likely possibility appears to be an orbital or retro- orbital inflammatory reaction – The Tolosa – Hunt Syndrome, which consists of recurrent attacks of orbital and periorbital pain and ophthalmoplegia.

When the clinical features of ophthalmoplegic migraine and Tolosa – Hunt Syndrome overlap, a positive MRI finding is one of the diagnostic criteria in the classification of Ophthalmoplegic Migraine and a trial of steroids is worthwhile in the