

PAINFUL HORNER'S SYNDROME AS A SIGN OF SILENT CAROTID DISSECTION

A 43-year-old white woman presented to the authors in July 2004 with pain in the left eye and left upper lid ptosis. She did not perceive any difference in perspiration between the two halves of her face. She was a non-smoker and had no history of head or neck trauma, or ocular, cardiac, vascular, or neurological disease. Neuro-ophthalmological examination was normal except for 1 mm of left upper eyelid ptosis, miosis, and mild enophthalmos consistent with classic left-sided Horner's syndrome. There was no carotidynia (a neck pain syndrome associated with tenderness to palpation over the carotid bifurcation) or carotid bruit. A chest X-ray obtained to rule out an underlying, left apical superior sulcus tumour was normal. Magnetic resonance imaging/magnetic resonance angiography of the brain with cross-sectional imaging of the neck was obtained, which revealed extracranial left internal carotid artery dissection. The patient was treated with unfractionated heparin and coumadin and made an uneventful recovery. She was seen in the clinic a few months later and did not have any complications at follow-up.

Horner's syndrome – characterised by the constellation of miosis, ptosis, anhidrosis, enophthalmos, and unequal pupil size – is present in up to 58% of internal carotid artery dissections. Most patients experience neck, facial, and head pain ipsilateral to the lesion because of ischaemia or stretching of the trigeminal pain fibres surrounding the carotid arteries. Ophthalmic manifestations have been reported to occur in up to 62% of patients with internal carotid artery dissection. Common findings in descending order of frequency are painful partial Horner's syndrome (due to disruption of the third-order neuron oculosympathetic fibres) as seen in this patient, transient monocular vision loss, and permanent visual loss.

De Bray *et al.* studied the prognosis of 90 cases of isolated Horner's syndrome due to internal carotid artery dissection. They found that 91% of such patients experienced pain. The risk of an early ischaemic stroke within the first 2 weeks was high (around 17%) without initial antithrombotic treatment.

Internal carotid artery dissection is a potentially life-threatening condition and carries a substantial risk of disabling stroke. Carotid dissection is under-recognised as a cause of Horner's syndrome and can be missed. It is important to diagnose dissection because anticoagulation can prevent carotid thrombosis and embolism. The investigation of choice is magnetic resonance imaging and angiography scan of the head and neck. The treatment advocated for dissection is anticoagulation for 3 - 6 months.

Nautiyal A, Singh S, DiSalle M, O'Sullivan J. Painful Horner syndrome as a harbinger of silent carotid dissection. *PLoS Med* 2005; **2**: e19.
DOI: 10.1371/journal.pmed.0020019

Bridget Farham

SINGLE SUTURE

THE SECRET OF AFRICAN HERBS

The secret of an African herb that is used to treat addiction has been found. Since the 1960s, many addicts have reported that even a single dose of ibogaine, a hallucinogenic alkaloid extracted from the root of an African shrub, helps them by reducing the craving for drugs. A team from the University of California looked at whether ibogaine affects glial cell-line-derived neurotrophic factor (GDNF). It is thought that becoming addicted to a substance lowers the production of this nerve growth factor. Researchers injected rats with ibogaine and found that production of GDNF increased. Even more interesting, they found that injecting ibogaine directly into the brain decreased alcohol cravings in addicted rats and injecting anti-GDNF antibodies eliminated the beneficial effects of ibogaine. Unfortunately, ibogaine has problems - causing heart problems and several deaths. So researchers are now concentrating on stimulating the production of GDNF instead.

New Scientist 2005; 22 January: 11.