Tolosa Hunt syndrome

Tolosa Hunt syndrome (THS) is an idiopathic inflammatory condition that involves the cavernous sinus and orbital apex and is essentially a clinical diagnosis of exclusion.

Clinical presentation

Clinically it refers to the presence of a painful ophthalmoplegia secondary to surrounding cavernous sinus inflammation. The Tolosa Hunt syndrome is essentially a clinical diagnosis of exclusion.

Pathology

The constant pain which characterises the disorder is due to infiltration of lymphocytes and plasma cells, along with thickening of dura mater within the cavernous sinus.

Radiographic features

CT

May show asymmetrical enlargement in the region of the cavernous sinus on the affected side +/- contrast enhancement 1.

The secondary criteria are internal carotid artery narrowing, extension towards the superior orbital fissure and orbital apex.

MRI

May show evidence of inflammatory changes in the region of the anterior cavernous sinus, superior orbital fissure +/- orbital apex. Signal characteristics are generally non specific 10 (clinical scenario essential to diagnosis) but may include

T1: involved region is isointense 2 to hyperintense compared with muscle

T2: involved region is hyper intense

T1 C+ (Gd): may show contrast enhancement during active phase with resolution of enhancement following treatment

Related conditions

inflammatory myofibroblastic tumour (IMT)

idiopathic hypertrophic pachymenigitis (IHP)

Treatment and prognosis

The condition is often successfully amenable to steroid treatment.

Differential diagnosis

Consider other pathological processes presenting with similar clinical features such as meningioma, sarcoidosis, pituitary tumours, tuberculous meningitis, lymphoma.

History and etymology

It was initially described by Eduardo Tolosa, a Spanish neurosurgeon, in 1954 and then by the American neurologist and neurosurgeon William Edward Hunt et.al, in 1961