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INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI:10.21474/IJAR01/17399
DOI URL: http://dx.doi.org/10.21474/IJAR01/17399

RESEARCH ARTICLE

TOLOSAHUNT SYNDROME: A RARE CAUSE OF OCULOMOTORPARALYSIS

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Manuscript Info

Manuscript History
Received: 10 June 2023
Final Accepted: 14 July 2023
Published: August 2023

Abstract

Tolosa-Hunt syndrome is related to an idiopathic granulomatous inflammatory process. Its clinical manifestation is painful ophthalmoplegia. We report the case of a young patient who presented with oculomotor paralysis, and whose diagnosis of Tolosa-Hunt syndrome was accepted, given the negativity of all the complementary examinations carried out. Treatment with corticosteroids led to a rapid regression of symptoms.

Introduction:-

Tolosa-Hunt syndrome isrelated to an idiopathicgranulomatousinflammatoryprocess, extendingfrom the sphenoidalcleft to the cavernouslodge and manifestingclinically as painfulophthalmoplegia (1). We report the case of ayoung patient whopresentedwithoculomotorparalysissecondary to Tolosa-Hunt syndrome.

Observation:-

This is a 30-year-old patient, with no notable pathologicalhistory, whoconsulted the ophthalmological emergency department for painfulleftdiplopia, associatedwithleftunilateralheadachesthathadappeared for 4 days. Ophthalmologicalexamination of the lefteyerevealedcompleteparalysis of the commonoculomotor nerve, withhomolateral ptosis, absence of photomotor reflex and exotropia. Anterior segment and fundus examinationswere normal in botheyes.

Neurologicalexamination and lumbarpuncturewith pressure measurementwerewithoutabnormalities. Cerebralmagneticresonanceimaging (MRI) and angio-MRIwereperformed, revealing no abnormalities. Biologicalinflammatory and infectious tests, conversion enzyme assays and blood glucose levelswere normal. Viral serologies, notably herpes, cytomegalovirus and HIV, werenegative.

Immunological tests (ANCA, native anti-DNA) and salivary gland biopsywereunremarkable. The diagnosis of Tolosa Hunt syndrome wasaccepted, and the patient received a bolus of generalcorticosteroidsfollowed by oral corticosteroids.The course improvedaftertendays of treatment, with no relapse duringfollow-up.

Discussion:-

Tolosa-Hunt syndrome is a rare idiopathicdiseasecaused by nonspecificgranulomatous inflammation of the cavernous sinus, superior orbital fissure and/or orbital apex.

It manifests as ipsilateralperiorbital or hemicranial pain and diplopia due to ocularmotorparesis, withpupil and eyelidinvolvement in many cases (3).

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Pathologicalexamination on biopsy shows non-specificgranulomatousinflammatory tissue infiltrating the cavernous sinus (2). Tolosa-Hunt syndrome must betreatedwithgreat caution, aftereliminatingdifferential diagnoses such as aneurysms, arteriovenous malformations, tumoral causes, sarcoidosis, etc. (4). It is a diagnosis of exclusion that must bethoroughlyinvestigated.

Diagnosisisbased on MRI. It shows the existence of an area of T1 and T2 iso-signal and deformation of the cavernous sinus, which are suggestive signs (7). Non-visualization of theseinfiltrates by MRI wouldindicate an early stage of the disease and therefore a betterresponse to treatment (6).

Treatmentconsists of the administration of systemicsteroids and otherimmunosuppressants if necessary, with the clinical course characterized by remissions and recurrences (5).

Conclusion:-

Tolosa-Hunt syndrome is a rare cause of painfulophthalmoplegia. Itsdiagnosis must be made after all otheretiologies have been ruled out. Treatmentisbased on corticosteroidtherapy, followed by long-term monitoring to prevent relapses.

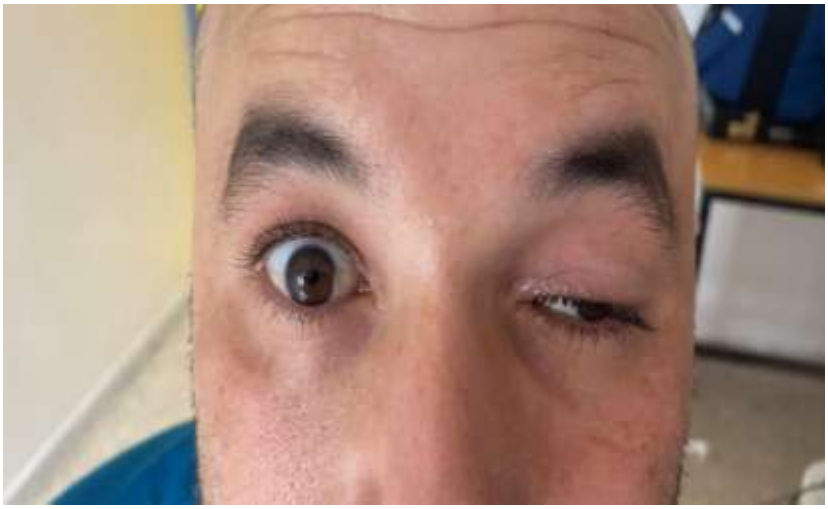

Figure 1:- Photograph of patient showingcompleteparalysis of leftcommonoculomotor nerve with ptosis, and exotropia.

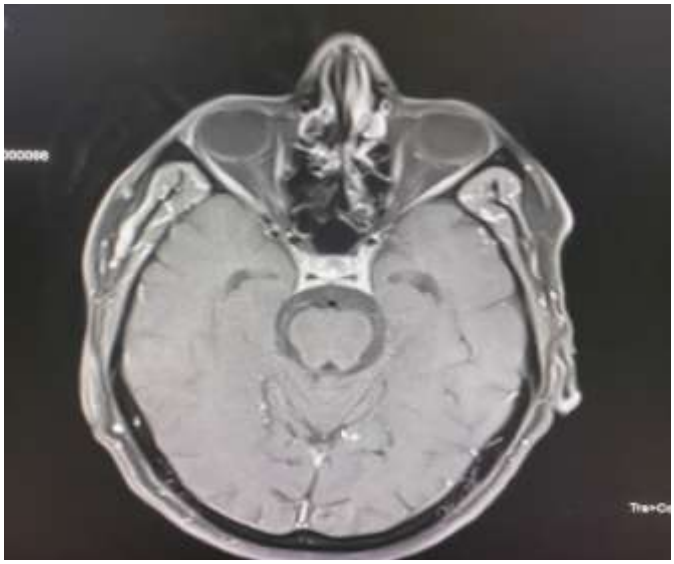

Figure 2:- Brain MRI of the patient showing no abnormalities.

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