

Pituitary apoplexy oculomotor nerve palsy

Etiology

Mechanical compression of the third cranial nerve against the unyielding [interclinoid ligament](#) of the cavernous sinus wall tends to bring about slow-onset nerve palsy.

Due to its location, the [third cranial nerve](#) is relatively more susceptible to the laterally transmitted pressure generated by an expanding pituitary mass abutting the cavernous sinus ¹⁾.

Sudden onset [oculomotor nerve palsy](#) results from hemorrhage or infarct in the pre-existing [pituitary](#) mass and is attributed to the compromising of the vascular supply of the nerve, due to compression of the vasa nervosum originating in the [internal carotid artery](#) ^{2) 3)}.

Case reports

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Saul RF, Hilliker JK. Third nerve palsy: the presenting sign of a pituitary adenoma in five patients and the only neurological sign in four patients. J Clin Neuroophthalmol. 1985 Sep;5(3):185-93. PubMed PMID: 2934421.

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¹⁾

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neuroendocrine tumor. J Neurosurg Sci. 1992 Apr-Jun;36(2):103-5. PubMed PMID: 1469470.

2)

Cahill M, Bannigan J, Eustace P. Anatomy of the extraneural blood supply to the intracranial oculomotor nerve. Br J Ophthalmol. 1996 Feb;80(2):177-81. PubMed PMID: 8814752; PubMed Central PMCID: PMC505413.

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