PUPIL INVOLVING COMPLETE III N PALSY IN PITUITARY ADENOMA

(Case Report)

Lt Col V BAIJAL^{*}, Lt Col VS GURUNADH⁺,
Col MG PALIT[#], Maj S SUNDER^{**},
Lt Col PK THAKUR⁺⁺

MJAFI 1999; 55 : 69-70

KEY WORDS :

Introduction

The neuro-ophthalmic hallmark of pituitary affections are the visual signs and symptoms. Pituitary adenomas do cause disorders of eye movements but even less commonly than they produce loss of visual acuity and visual field [1].

Case report

A 21-year-old male patient presented with headache and vomiting, which got relieved with symptomatic treatment. He continued to have headaches off and on. One and a half years after his initial complaints the patient presented with sudden drooping of the left upper eyelid. Examination at that time revealed a visual acuity of 6/9 in the right eye and 6/6 in the left eye. Neuro-ophthalmic examination revealed a divergent left eye with ptosis. Abduction along with intorsion were the only movements present in the left eye with all other movements including that of levator palpebrae superioris absent. Pupil was dilated with both direct and indirect reflexes absent. Examination of the right eye showed no abnormality. The enlargement of the blind spot was the only field deficit present. The clinical diagnosis, therefore, was of isolated complete III N paralysis with pupil involvement. (Fig 1)

A CT scan of the head revealed a pituitary macro-adenoma extending to the left parasellar region (Fig 2)

Discussion

Intracranial aneurysms are the most common cause of isolated pupil involving III N paralysis. The aneurysms usually arise from the junction of the internal carotid artery and the posterior communicating artery [2]. Involvement of ocular motor nerves in pituitary adenoma is however rare and complete ophthalmoplegia occurs in the setting of a pituitary apoplexy [1]. The prevalence of eye-movement disorders has varied with the studies ranging from 12 out of 851 (1.4%) [3], 2/200 (1%) [1] to 46/1000 (4.6%) [5]. Pupil may be involved. Robert has found that the oculosympa-

Fig. 1 : Divergent left eye with ptosis

Fig. 2 : CT scan showing pituitary macroadenoma extending to the left parasellar region

thetic pathway may be damaged and pupil may be smaller than the fellow eye and less reactive [6]. However, in this patient the pupil was completely paralysed. The findings in this case are similar to that reported by Siqueira EB et al [7].

^{*} Classified Specialist (Ophthalmology), [#] Senior Adviser (Ophthalmology), ⁺ Classified Specialist (Ophthalmology) Army Hospital (R & R) Delhi-10. ^{**} Graded Specialist (Ophthalmology), Military Hospital Jalandhar Castt. ⁺⁺ Classified Specialist Radiotherapy, Command Hospital (SC), Pune 40.

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