

Oculomotor paralysis in diabetics

Mehdi Khamaily¹, Joumany Brahim Salem¹, Imane Tarib¹, Sidi Dahi¹, Rachid Zerrouk¹, Yassine Mouzari¹, Fouad El Asri¹, Karim Reda¹, Abdelbarre Oubaaz¹

¹Department of Ophthalmology of the Mohammed V Military Teaching Hospital. Faculty of Medicine and Pharmacy, Mohammed V University Rabat, Morocco.

Abstract: Ophthalmoplegia in diabetes is an uncommon but not rare ocular complication. We report a case of abducens paralysis in a diabetic patient. Oculomotor paralysis is not uncommon in diabetes that should be systematically sought during any ophthalmological examination of the diabetic subject

Keywords: Diabetic neuropathy, ocular cranial nerve, diabetic, microangiopathy

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I. Introduction

Ophthalmoplegia in diabetes is an uncommon but not rare ocular complication affects 1 to 14% of diabetic subjects [1], 7 to 8 times more common in diabetics than in non-diabetics [2], The oculomotor nerves affected are essentially the common oculomotor nerve (III), the external oculomotor nerve (VI), and more rarely, the pathetic nerve (IV). [3]

II. Case Report

62-year-old patient, type 2 diabetic for 15 years on insulin, hypertensive on IEC, normal segmental and overall strength without motor deficit admitted in consultation for diplopia, followed for glaucoma under triple therapy: latanoprost, timolol, dorzolamide, balanced

AV: 8/10 Examining Diplopia and Ocular Motility Objectives Left Unilateral VI Paralysis(figure 1)

The pupil was of normal size and reactivity TO: 15mmHg, FO: Moderate diabetic retinopathy, C / D: 5/10 ODG. The Lancaster objectified a paralysis of the abductor of the left eye with hyperaction of the abductor of the right eye contralateral.(figure 2)

The MRI angiography was requested showing micro foci of sustentorial demyelination of vascular origin, with cortico-subcortical atrophy. (figure 3).

The patient was referred to the endocrinologist for glycemic control, with permanent occlusion of the left eye, and the functional signs as well as the ocular deviation gradually decreased over several months and the patient retained a slight exotropia which was adapted into an incorporated prism.

III. Discussion

J Hirshberg was the first to describe oculomotor involvement in diabetic patients in 1887 [4], several studies have followed, showing the frequency of paralysis of the nerve VI, followed by the nerve III, then the nerve IV [5]. The Ischemic phenomena secondary to diabetic micro-angiopathy are responsible for nerve damage and the direct cause of these paralysis is therefore a localized infarction in the midbrain (oculomotor nuclei), rather than a peripheral damage to the nerves. [6]

The etiological diagnosis of POM in diabetics is made by cerebral MRI which highlights the involvement of the oculomotor nucleus, [7] and the recovery from paralysis occurs on average after 4 months of treatment with alternate occlusion. [8]

IV. Conclusion

Oculomotor paralysis is not uncommon in diabetes that should be systematically sought during any ophthalmological examination of the diabetic subject. It is a mild condition requires magnetic resonance imaging of the brain in order to eliminate a neurosurgical emergency and, there's no correlation between the occurrence of oculomotor paralysis and the importance of diabetic retinopathy.

No conflict of interest

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Figure :

Figure 1 : Left eye abduction paralysis.

Figure 2 : Hypoaction of the left external right(A) with hyperaction of the right synergist (B) .

Figure 3 : The MRI angiography : micro foci of sustentorial demyelination of vascular origin, with cortico-subcortical atrophy

Figure1 :

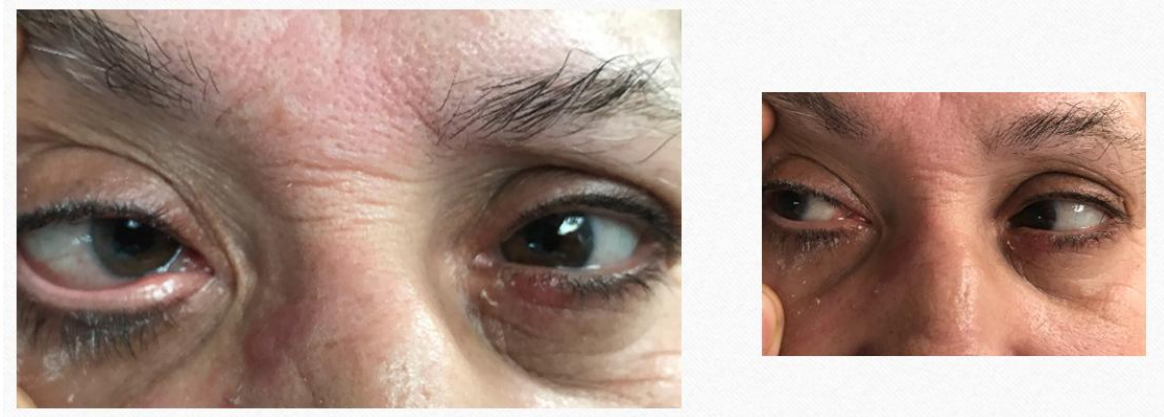


Figure 2 :

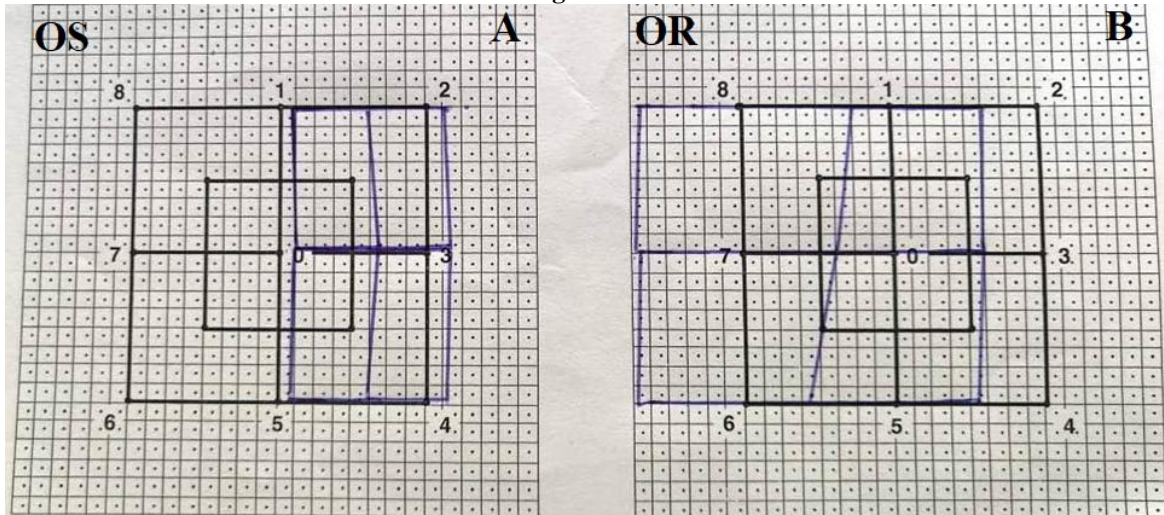
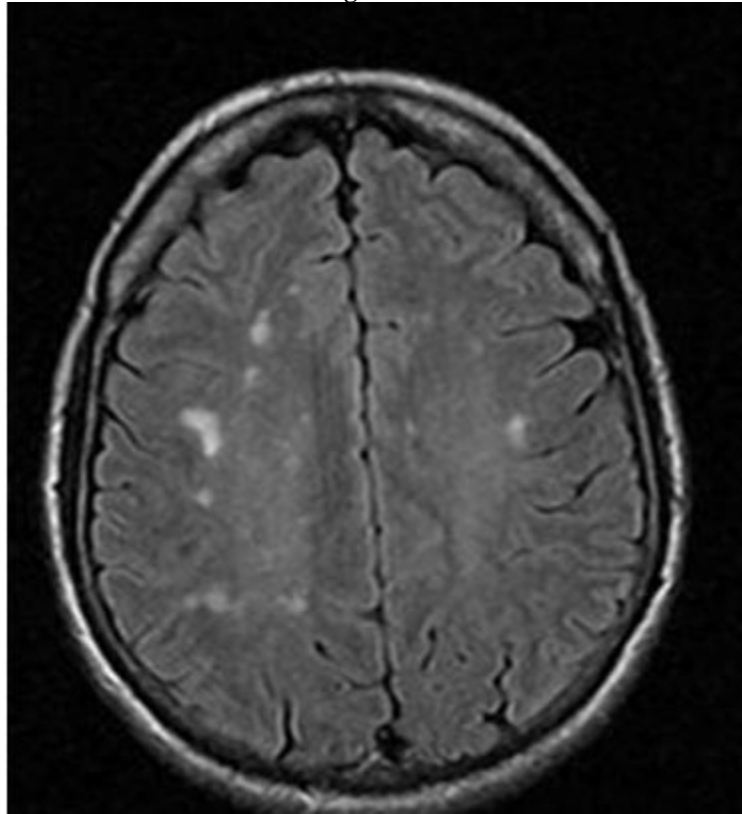


Figure 3 :



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