

REHABILITATION OF STROKE AND AMAUROSIS IN THE CONTEXT OF A SPHENOID MENINGIOMA

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Introduction: Visual deficits (VDs) are common consequences of brain injury and a factor of bad functional prognosis as they impair activities of daily living (ADL), increase fall risk and worsen the patient's quality of life. We report the rehabilitation of a patient with amaurosis and poststroke deficits. A 25-year-old woman, diagnosed with a right sphenoid wing meningioma was submitted to a pterional craniotomy and superolateral orbitotomy with sub-total resection. Postoperatively right amaurosis and left hemiplegia was observed. Computed tomography and transcranial Doppler demonstrated infarct of the deep territory of the right middle cerebral artery due to vasospasm. At the start of the rehabilitation program the patient had neuro-motor status of upper left limb hemiplegia (non-dominant), unstable gait due to right eye amaurosis and left eye nasal hemianopsia, and partial dependence for ADL (FIM 61/126).

Purpose: To show the importance of VDs in rehabilitation.

Method: We searched the PubMed database for Review articles in English, with up to 10 years, with the keywords: rehabilitation, stroke and amaurosis.

Results: We found 9 Review articles with full text in English. Spontaneous recovery of VDs after brain damage peaks at 1 month and diminishes 6 months afterwards. The studies on visual rehabilitation programs suggest partial recoveries, despite remaining controversial. We discussed the objectives with the patient and defined a personalized, multidisciplinary, neurorehabilitation program to optimize modified functional independence. Spatial references were reinforced, both in occupational and physical therapy. Gait training started in parallel bars and evolved onto use of a single walking pole in the upper right extremity, under supervision. Two months later, the patient graded 4/5 muscle strength in the upper left member. Gait pattern improved significantly, despite retaining variable dynamic orthostatic equilibrium (FIM 100/126).

Conclusions: The rehabilitation of patients with VDs expose challenges that can be successfully approached with directed treatment plans.