## Neuro-Ophthalmology

# PARINAUD SYNDROME: HOW TO MANAGE UPWARD GAZE PALSY – CASE REPORT AND REVIEW OF LITERATURE

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## **PURPOSE**

Parinaud syndrome is a rare neurologic condition of multiple etiologies affecting the dorsal midbrain. Usually its triad of symptoms disappears with etiologic treatment. However, there are cases where damage to the structures becomes permanent and deficit remains (mostly upward gaze palsy), with quality of life compromise. It is still controversial how much time one should wait before considering surgical treatment and which surgery to perform. Here we describe a case of Parinaud syndrome and its sequelae, reviewing literature on it.

#### **METHODS**

Case report.

## **RESULTS**

Case:  $55y \$ Q admitted for vertical diplopia, eyelid retraction and dizziness for several hours, with history of hypertension. On examination she had bilateral eyelid retraction, upward gaze palsy, convergence retraction nystagmus and light-near dissociation. A CT-scan was performed (normal), followed by an MRI-scan where a small ischemic lesion of the dorsal midbrain was seen. Aspirin and alternate occlusion were started and follow-up appointed. Three month after diagnosis lid retraction and light near dissociation resolved but upward gaze palsy and diplopia are still present.

Buckley et al. and Shields et al. both conducted studies on approach to Parinaud's upward gaze palsy, using surgical techniques such as horizontal muscle transposition, superior rectus resection and inferior rectus recession, with the first authors suggesting a 6 month period of conservative treatment before proceeding to surgery.

#### **CONCLUSION**

Parinaud syndrome is a rare disorder with incapacitating symptoms. Surgical approach is possible when they don't resolve, but timing of surgical approach is still controversial, with few studies on it.

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