



## Featured abstract

# Visual Outcome of Surgical Managed Patients with Pituitary Adenomas at the Yaounde Central Hospital

## *Résultats visuels des patients opérés et suivis pour adénomes pituitaires à l'Hôpital Central de Yaoundé*

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**Introduction.** Pituitary adenomas are benign brain tumours arising from the adenohypophysis; representing 10-15% of all intra cranial tumours. Despite improved management, they are still related to high morbidity. Visual impairment is a common presentation and visual field defects representing 37-96%. Vision compromise is the frequent indication for surgery. We aimed at describing the clinical presentation of operated patients and their visual outcome.

**Methodology.** We conducted a cross-sectional study for 6 months at the Yaoundé Central Hospital's Neurosurgery, Endocrinology and Ophthalmology departments. We included all patients with histopathologically confirmed pituitary adenomas with pre-operative visual assessment (automated visual field or visual acuity or funduscopy or oculomotor nerve testing results) operated from January 2010-June 2016.

**Results.** Twenty-five participants (50 eyes) were enrolled. All cases were macroadenomas with median duration of symptoms of 14 months. All participants presented with vision impairment and 80% with headaches. At presentation, bitemporal hemianopia was found in 10 patients with the temporal hemifield being the most quantitatively affected; 76% of eyes had a visual acuity (VA)<0.5 and 24% ≥0.5. Craniotomy was used in 88 % of cases versus 12% for the transsphenoidal approach. After surgery, there was a mild improvement of visual acuity with 62% of eyes having a VA<0.5 and 38% a VA≥0.5. The mean deviation an automated visual field index, improved though p=0.3.

**Conclusion.** Surgical management improved vision in three-quarters of participants. However, long delay before diagnosis and lag time between diagnosis and surgery was associated to poor visual outcome.

**Key words:** Pituitary Adenoma, Surgery, Vision Outcome.