



## Featured abstract

## Physiological Variations of Intra Ocular Pressure in Melanoderm Subjects

*Les variations de la pression intra oculaire chez le mélanoderme*

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**Background.** The intra ocular (IOP) is the only evidence to monitor the efficacy of anti-glaucoma therapy. There is lots of evidence indicating that it varies periodically both during the day and over periods of weeks or months. Little is known about these physiological variations in black African subjects, although this knowledge is useful to determine the proper timing of instillation of anti glaucoma eye drops in order to obtain the maximum therapeutic effect.

**Objective.** To evaluate the physiological variations of IOP in melanoderm subjects.

**Materials and methods.** This was a cross-sectional study carried out in 10 days at Clinique Médicale de Brazzaville. For recruitment, oral announcements on the study were done in one church and the sample was done on a voluntary basis. Inclusion criteria were: patients aged 18 years or more, absence of ocular or systemic disease, and no drug intake. Criteria of non-inclusion were: pachymetry < 500  $\mu$  or > 600  $\mu$ , papillary excavation > 0.6, difference of papillary excavation of more than 2 units even when it was < 0.6. The IOP was taken at three occasions: 8 AM, 2 PM and 8 PM. The data were collected and analyzed with Microsoft Excel software.

**Results.** Fifty people (corresponding to 100 eyes) were recruited. The mean age was 47 years (range: 18 years - 70 years). The age group 38-58 years accounted for 74% of cases. The curves of variation of the intra ocular pressure during the day were parallel and superimposable almost at all times.

**Conclusion.** In the absence of glaucoma IOP remains constant throughout the day.

**Keywords:** Intra ocular pressure, physiological variations, glaucoma treatment.