

## Abstract 108

### IMPACT OF POSTERIOR STAPHYLOMA ON MYOPIC MACULOPATHY AND VISUAL PROGNOSIS

Oral

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#### **Purpose:**

To analyze the impact of posterior staphyloma and its subtypes on incidence and severity of myopic maculopathy and visual prognosis.

#### **Methods:**

Cross-sectional, non-interventional study of 473 eyes of 259 consecutive high myopic patients (spherical equivalent  $>-6.0$  D and/or  $>26$  mm of axial length (AL)). Demographic data were retrieved from medical records. All patients underwent complete ophthalmologic examination and multimodal imaging. Eyes were graded based on ATN system and classified as pathologic myopia (PM) (if  $\geq A2$ ) or severe PM (if  $\geq A3$ ,  $\geq T3$ , and/or  $N2$ ). Posterior staphyloma according to Curtin' and Ohno-Matsui' classifications was analyzed.

#### **Results:**

Posterior staphyloma was present in 69.4% of eyes. Patients with posterior staphyloma were older, had greater AL, worse BCVA and higher stage in each ATN component ( $p<0.01$ ). Moreover, compound subgroup showed significant worse BCVA and greater stage in each ATN components ( $p<0.01$ ). Staphylomas with macular involvement presented worse visual acuity, higher AL and greater stages in ATN components ( $p<0.01$ ). The risk of posterior staphyloma presence increased by 8% every year-old increase in age ( $p<0.01$ ) and 70% for every mm in AL ( $p<0.01$ ). Posterior staphyloma was the best predictor for BCVA in myopic patients associating a BCVA' decrease of 0.24 logMAR-units ( $p<0.01$ ).

#### **Conclusions:**

Posterior staphyloma presence determines high risk of myopic maculopathy and therefore worse visual prognosis, especially those with macular involvement. Age and AL have been identified as risk factors for the presence of staphyloma. Posterior staphyloma represented the best predictor for BCVA in highly myopic patients.