

## Abstract 8

### PROGRESSION OF PACHYCHOROID NEOVASCULOPATHY INTO ANEURYSMAL TYPE 1 CHOROIDAL NEOVASCULARIZATION OR POLYPOIDAL CHOROIDAL VASCULOPATHY

Oral

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#### **Purpose:**

To describe the progression of pachychoroid neovascularopathy (PNV) into pachychoroid aneurysmal type 1 choroidal neovascularization (PAT1) / polypoidal choroidal vasculopathy (PCV).

#### **Methods:**

For this retrospective cohort study, the database of the Department of Ophthalmology, Ludwig Maximilians University, Munich, was screened for patients diagnosed with and treated for PNV with a follow-up of  $\geq 2$  years. Multimodal imaging, including optical coherence tomography and fluorescein and indocyanine green angiography, was reviewed for the presence of choroidal neovascularization (CNV), aneurysms within/at the margins of the CNV and sub-foveal choroidal thickness (SFCT) at first diagnosis and during follow-up.

#### **Results:**

In total, 37 PNV eyes of 32 patients with a mean follow-up of  $3.3 \pm 1.1$  (2.0–5.2) years were included in the study. At PNV diagnosis, mean age was  $59.7 \pm 8.7$  (38.5–78.0) years and mean SFCT was  $357 \pm 92$  (185–589)  $\mu\text{m}$ . During follow-up, 5 eyes (13.5 %) developed aneurysms after a mean  $3.4 \pm 0.8$  years (2.3–4.2 years) years, defining PAT1/PCV. Risk of PAT1/PCV conversion was 7.4 %, 13.6 % and 30.7 % at years 3, 4 and 5. Lower age at PNV diagnosis ( $p=0.025$ ) and sustained choroidal thickening ( $p=0.0025$ ) were identified as risk factors.

#### **Conclusions:**

PNV can develop aneurysms within its type 1 CNV, defining conversion to PAT1/PCV. In this study, Kaplan Meier estimates of risk for conversion were 7.4 %, 13.6 % and 30.7 % at years 3, 4 and 5. Younger age at PNV diagnosis and sustained choroidal thickening might represent risk factors.

