

## Abstract 152

### ADAPTIVE OPTICS IMAGING CHARACTERISTICS OF VARICELLA ZOSTER VIRUS NODULAR PERIARTERITIS

Oral

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#### **Purpose:**

Retinal segmental periarteritis is a rare condition in which white-yellowish exudates are placed in beaded pattern within the retinal arteries. The aim is to report the adaptive optics (AO) imaging characteristics of arterial vasculitis in Varicella Zoster Virus (VZV) related posterior uveitis and correlate it with other imaging modalities

#### **Methods:**

Patients diagnosed with VZV posterior uveitis and evidence of retinal segmental periarteritis underwent multimodal imaging including fluorescein angiography (FA), indocyanine green angiography (ICGA), optical coherence tomography (OCT) and AO

#### **Results:**

3 patients (1 female; median age 78 years) were recruited. In all cases, AO images showed arterial wall involvement, perivascular opacification, and focal lumen irregularities. However, the arterial walls were never disrupted. There was no vein involvement. In one case, glistening whitish spots were evident on the surface of the arterial wall, which corresponded to an intense hyperreflectivity on OCT and late focal hypofluorescence on FA and ICGA. In general, arterial plaques showed late iso/hypofluorescence on FA and ICGA. In all cases, arterial plaques modifications were far more evident on AO than angiographic exams

#### **Conclusions:**

AO imaging confirms that nodular periarteritis involves arterial walls, but it remains confined within them. Furthermore, AO seems more sensitive to detect vascular inflammation at microscopic level than traditional imaging. Additional studies will be needed to further explore the diagnostic and prognostic value of these findings