Genesis of Retinal-Choroidal Anastomosis in Macular Telangiectasia Type 2

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Disclosures

• None
Summary

• OCTA allows MacTel2 visibility in ways FA cannot
• Retinal-choroidal anastomosis (RCA) associated with DCP descent
• RCA occurs without exudation or subretinal/RPE NV
Background

- MacTel2 degenerative condition first described by Gass in 1977
- Direct vascular connection (retinal-choroidal anastomosis; RCA) thought only in end-stage cases, limited by FA
- OCTA reveals RCA may occur earlier

- *Can RCA be identified de novo?*
Methods

• MacTel2 patients with >1 visit minimum 2 months apart

• OCTA
  • Projection artifact removal
  • Volume rendering

• Longitudinal measurement
  • Change in retinal subsidence grade (descent of DCP, previously described)
  • New RCA
  • New hyperpigmentation
18 months later
Results

- 24 eyes (12 patients)
- Retinal subsidence increased in 9 (37.5%) eyes
- RCA diagnosed initially in 8 (33%), eventually 5 (20.8%) more
- Hyperpigmentation present in initial 8, but not new cases
- Pre-existing RCA expanded in size and number
VLDRL Knockout Pseudocorrelation

(Hua et al, IOVS 2008)
RCA in MacTel2

• Identification of RCA without any exudation, CNV, or pigment
• Associated with descent of the DCP
• Occurs over time without reversal
Summary

• OCTA allows MacTel2 visibility in ways FA cannot
• Retinal-choroidal anastomosis (RCA) associated with DCP descent
• RCA occurs without exudation or subretinal/RPE NV
Limitations

• Small numbers
• Combined retrospective and prospective
• Variable follow-up
Future directions

• Histopathologic correlation within human donors
• Detection of subsequent frank CNV (larger study)
Thank you

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