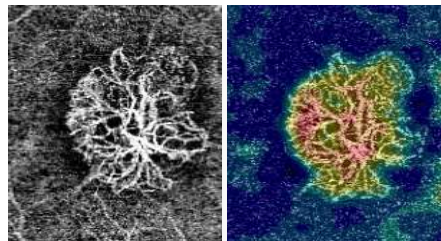


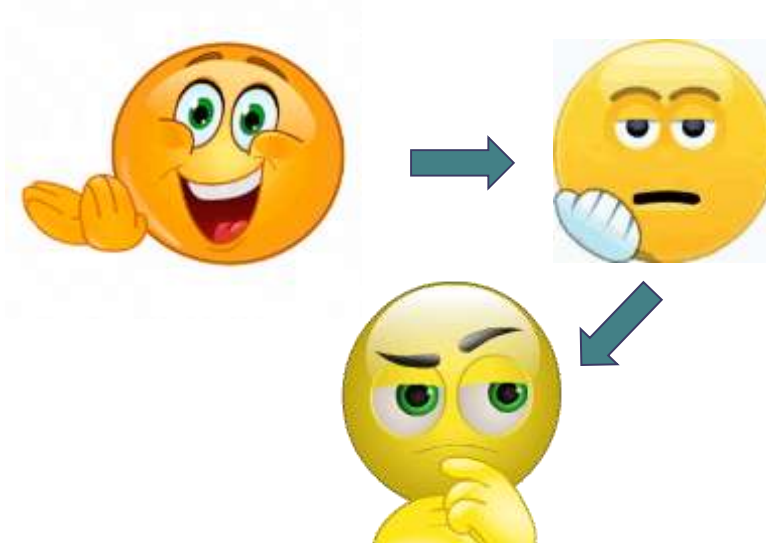
OCTA in Neovascular Age-Related Macular Degeneration (nAMD)

What we have learnt so far!

M. Sharaf eldin, MD
Faculty of Medicine
Assiut University Hospitals
EOS 2019

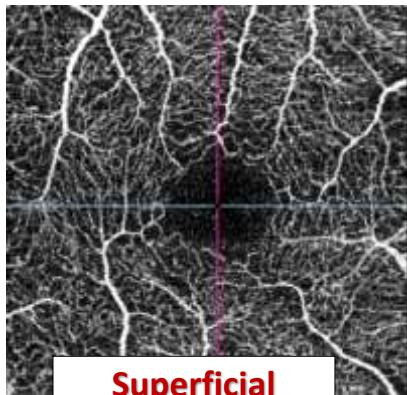


Effect of new technology

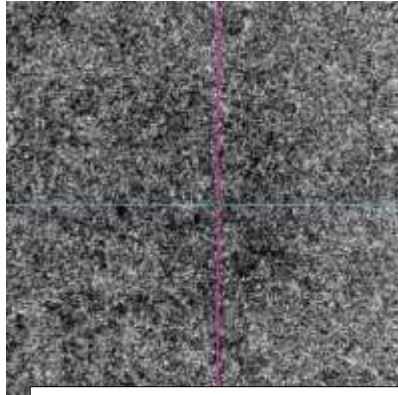


OCTA

Paradigm Shift



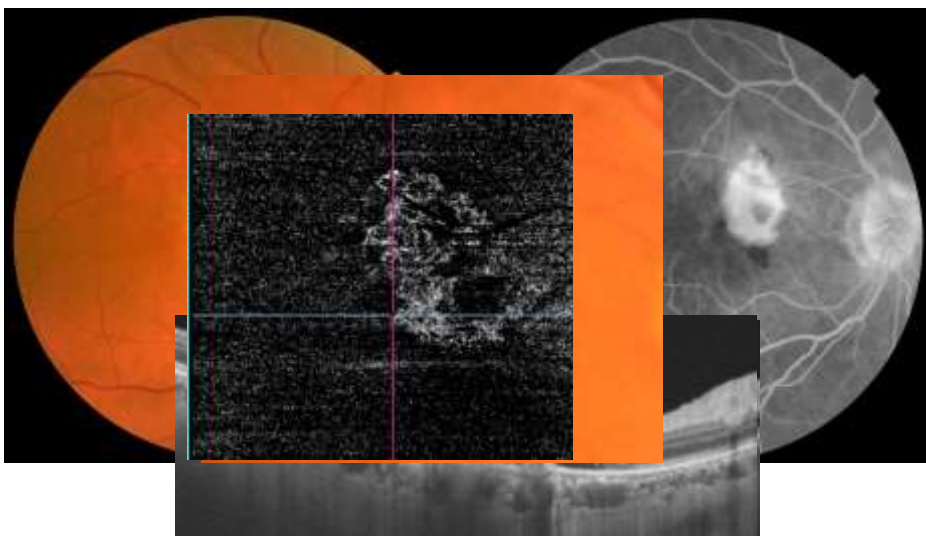
**Superficial
Capillary Plexus**



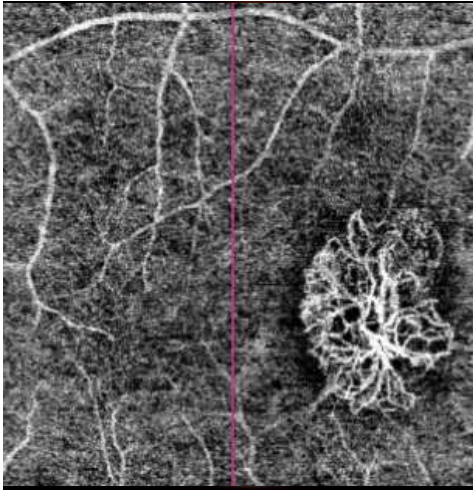
Choriocapillaries

OCTA in CNV

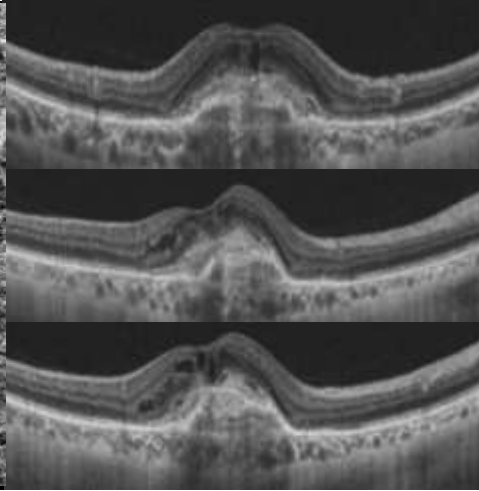
Paradigm Shift



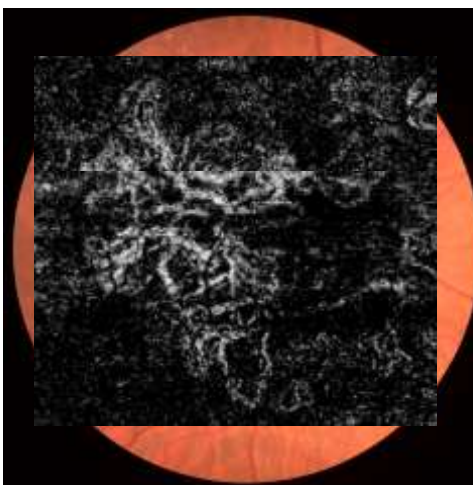
OCTA in CNV



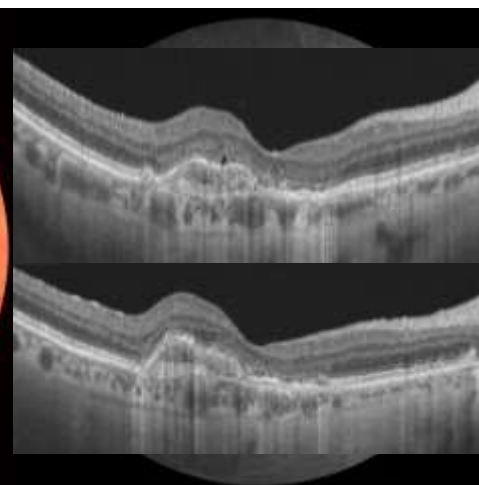
Paradigm Shift



OCTA in CNV



Paradigm Shift



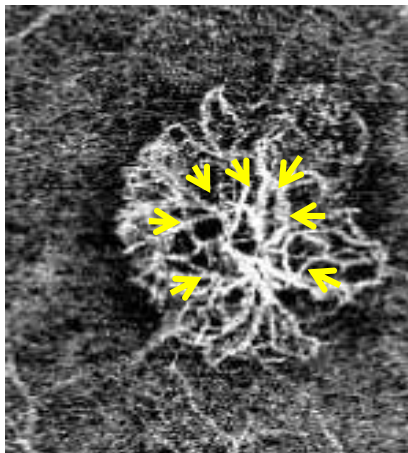
OCTA in CNV

ACTIVITY

Can we set accurate standards that
correlate with **ACTIVITY**?

OCTA in CNV

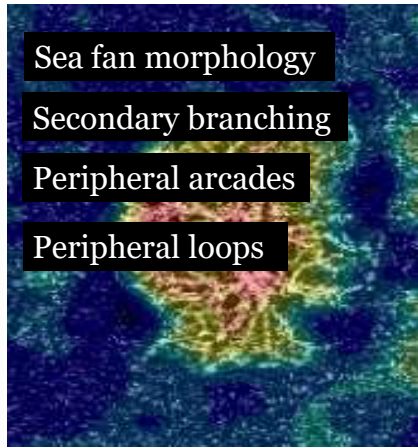
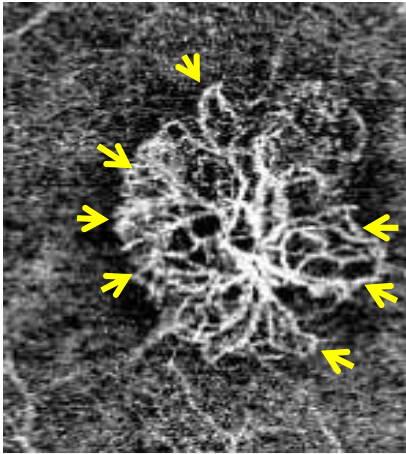
ACTIVITY



Coscas G, et al, 2015

OCTA in CNV

ACTIVITY



Sea fan morphology

Secondary branching

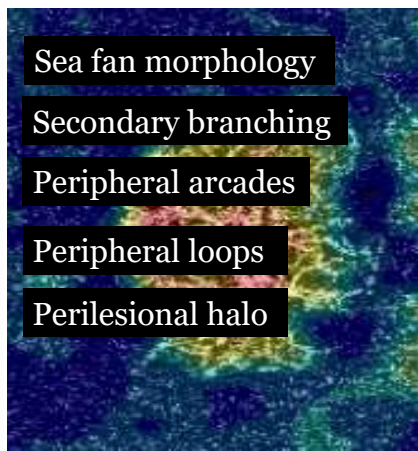
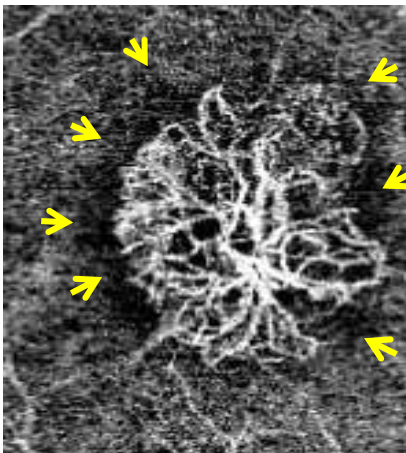
Peripheral arcades

Peripheral loops

Coscas G, et al, 2015

OCTA in CNV

ACTIVITY



Sea fan morphology

Secondary branching

Peripheral arcades

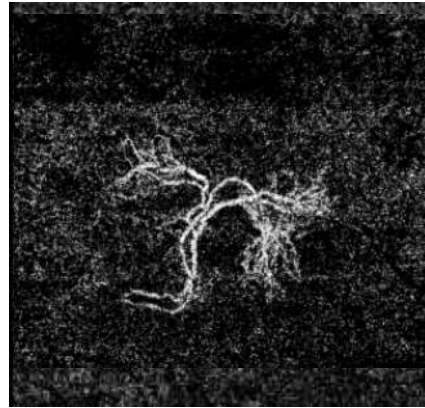
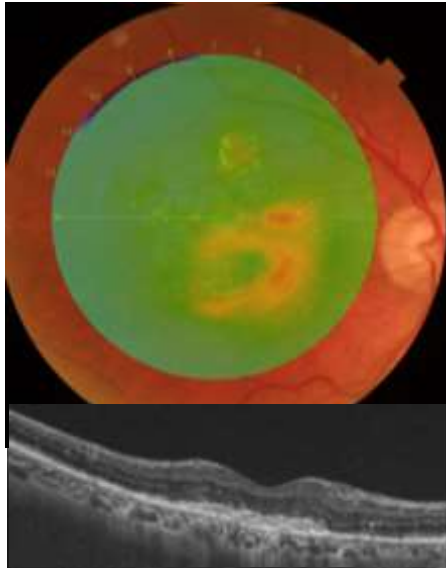
Peripheral loops

Perilesional halo

Coscas G, et al, 2015

OCTA in CNV

ACTIVITY

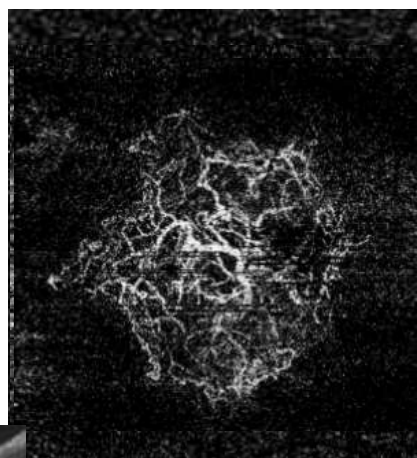


Immature CNV

David XU, et al, 2017

OCTA in CNV

ACTIVITY

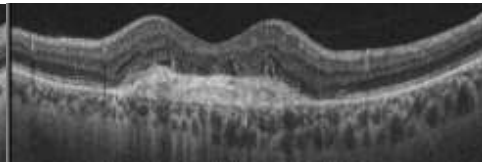
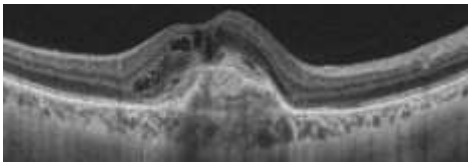
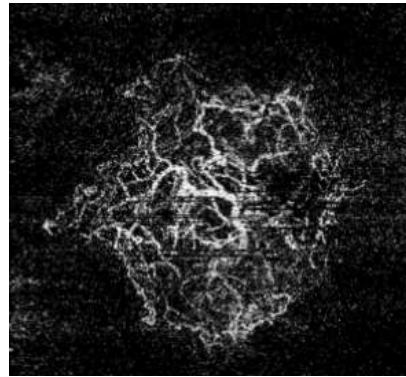
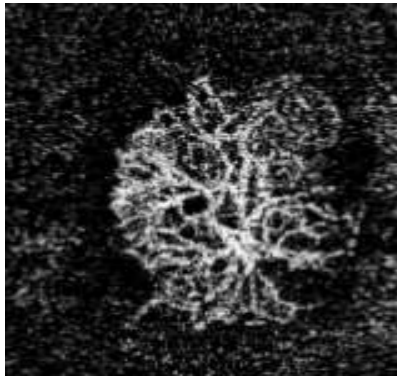


Mature CNV

David XU, et al, 2017

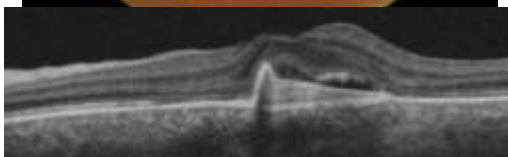
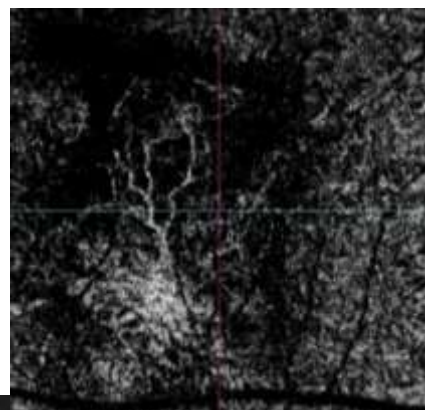
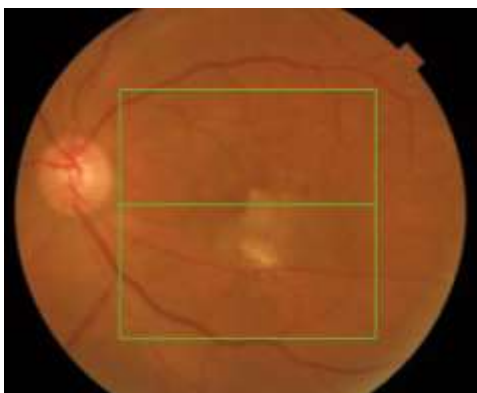
OCTA in CNV

ACTIVITY



OCTA in CNV

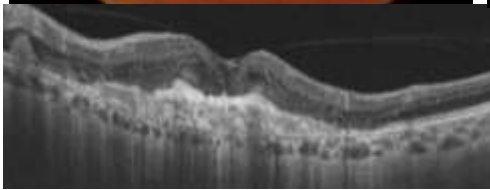
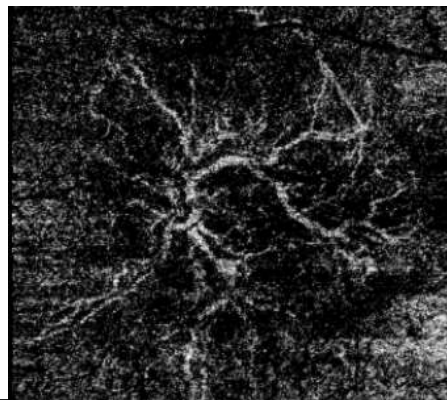
ACTIVITY



Hypermature CNV
“Dead tree”

OCTA in CNV

ACTIVITY

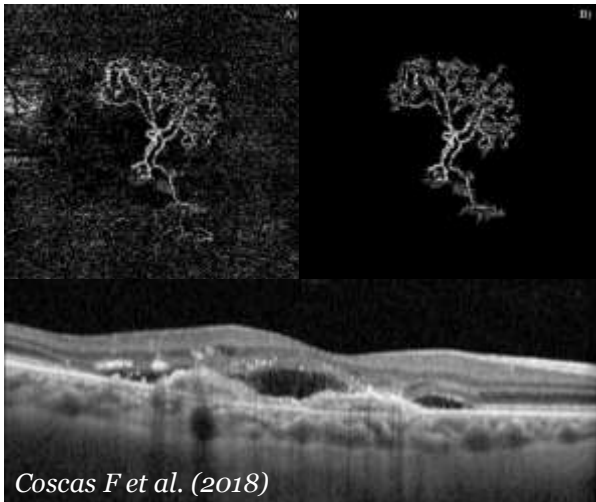


Hypermature CNV
"Dead tree"

OCTA in CNV

ACTIVITY

Quantitative Assessment

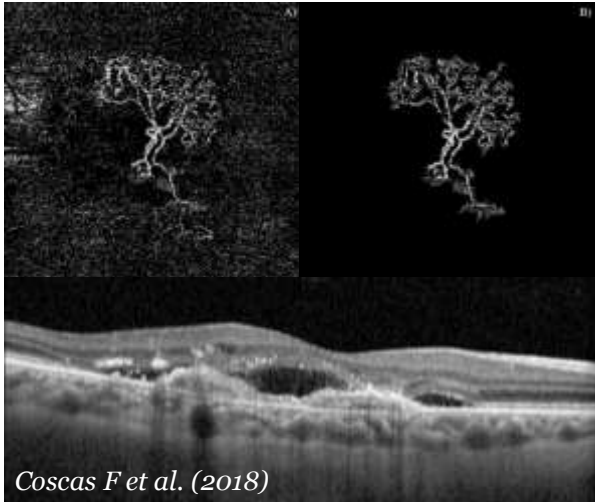


Fractal Dimension (FD)



STAT. description of morphological "vascular" complexity

OCTA in CNV **ACTIVITY** Quantitative Assessment

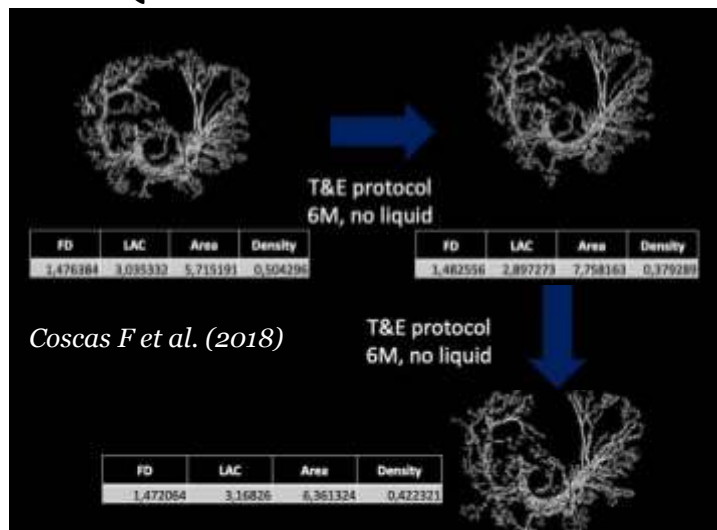


Lacunarity
(LAC)



STAT. description of
structural
"vascular"
non uniformity

OCTA in CNV **ACTIVITY** Quantitative Assessment



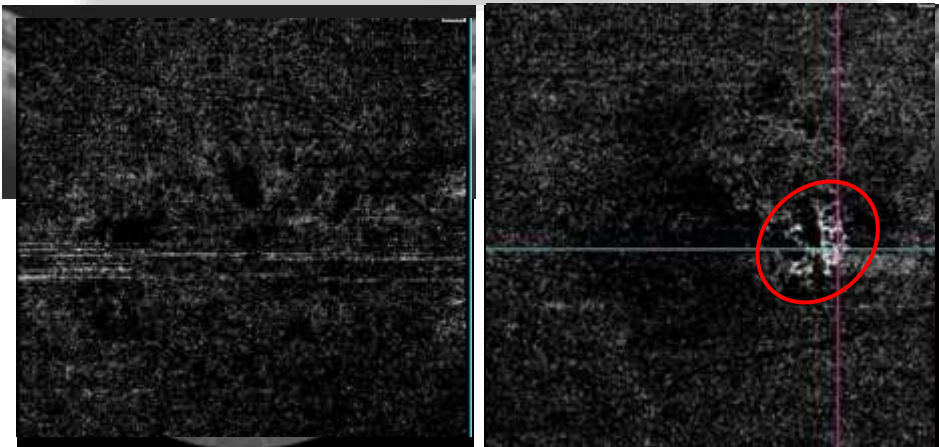
OCTA in CNV

Solving puzzles

OCTA in CNV

Solving puzzles

51 y female with bilateral drusen
os metamorphopsia



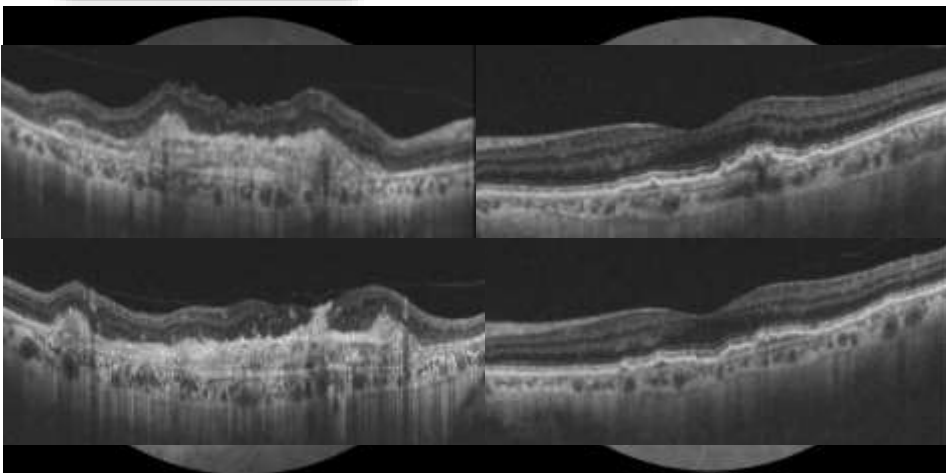
OCTA in CNV

unveiling the hidden

OCTA in CNV

unveiling the hidden

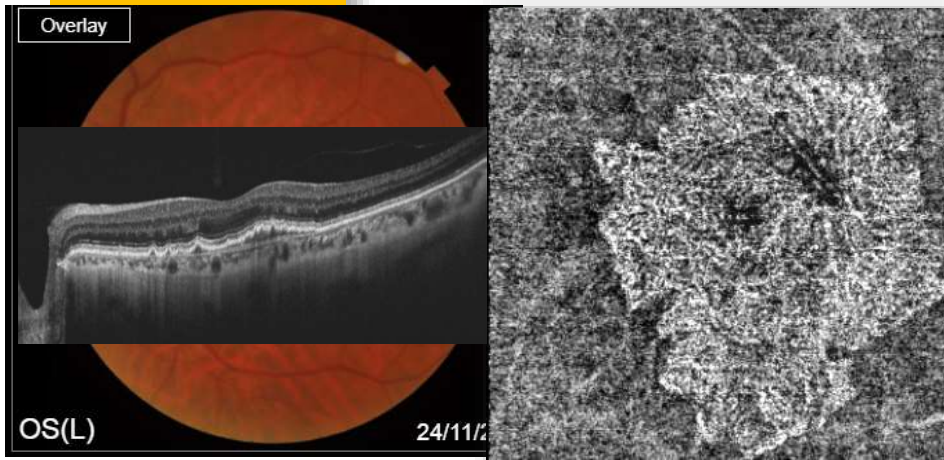
62 y female



OCTA in CNV

Unveiling the hidden

62 y female



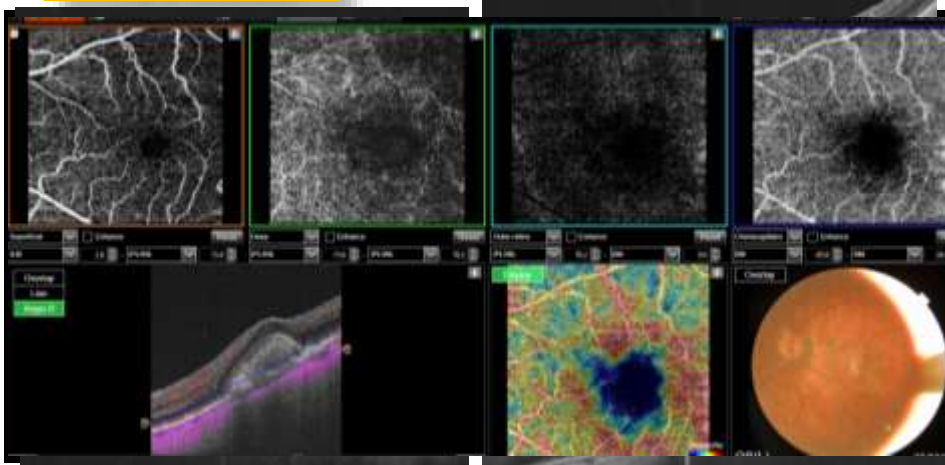
OCTA in CNV

Differentiating lesions

OCTA in CNV

Differentiating lesions

74 y female



Conclusion

“Standard of care” biomarkers of activity:

Clinical + fluid in OCT

OCTA helps in management plan:

T&E protocol

OCTA biomarkers :

Short term → **Peripheral arcades & looping**

Long term → **Size & Maturity pattern**

Thank You

