

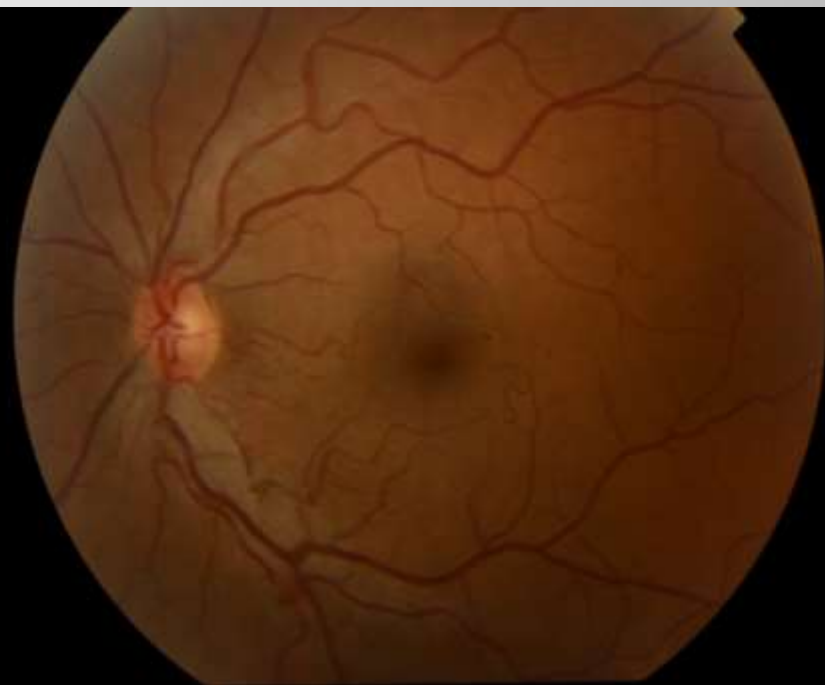
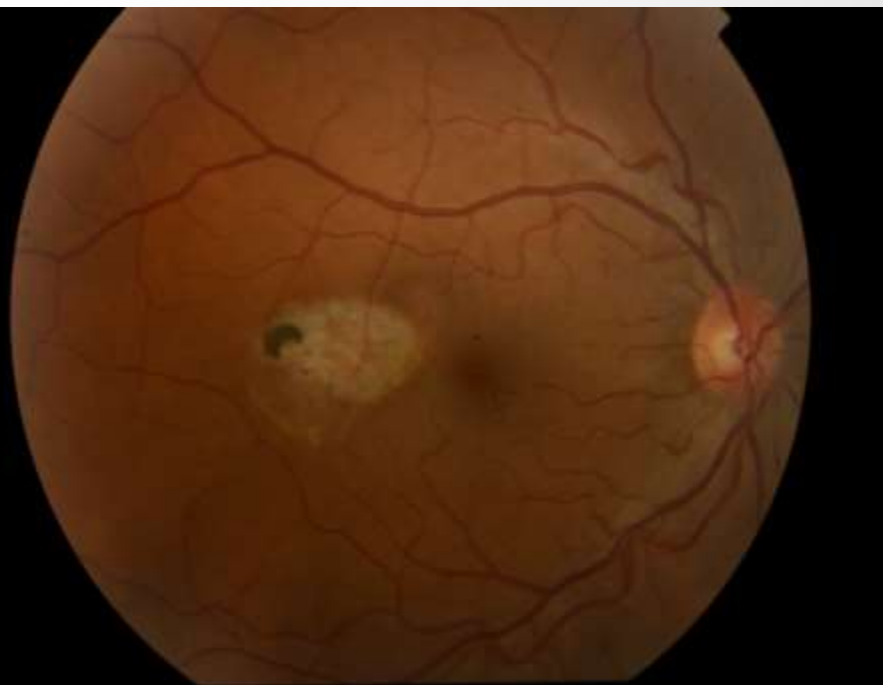
CASE REPORT

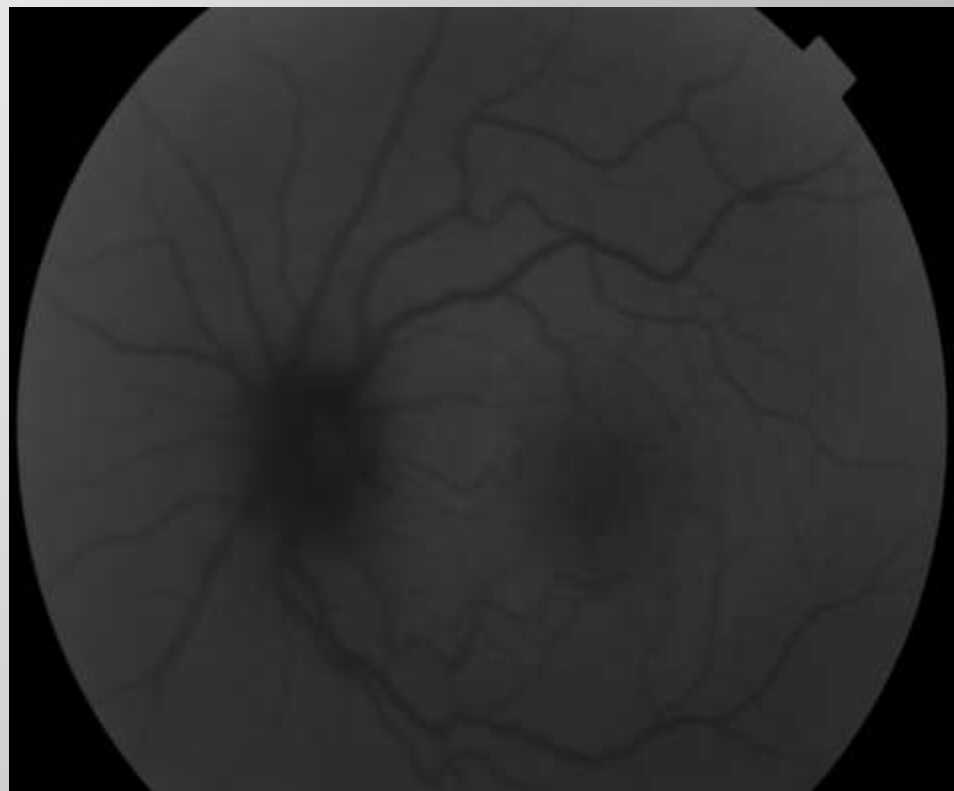
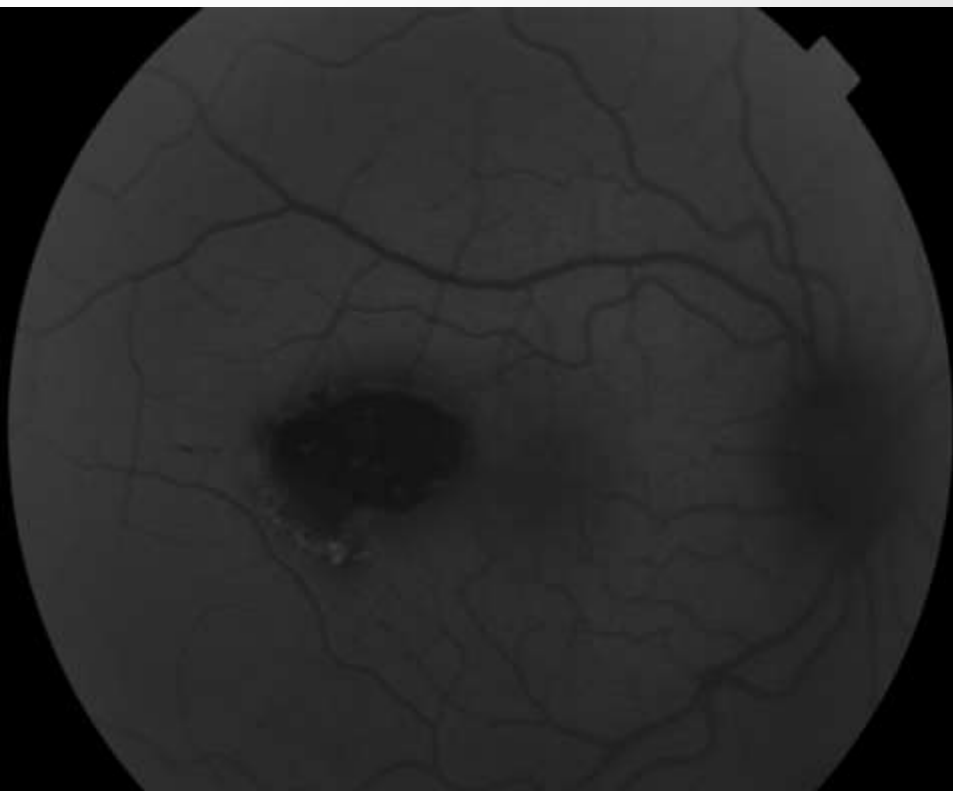
Georgios Sotiropoulos

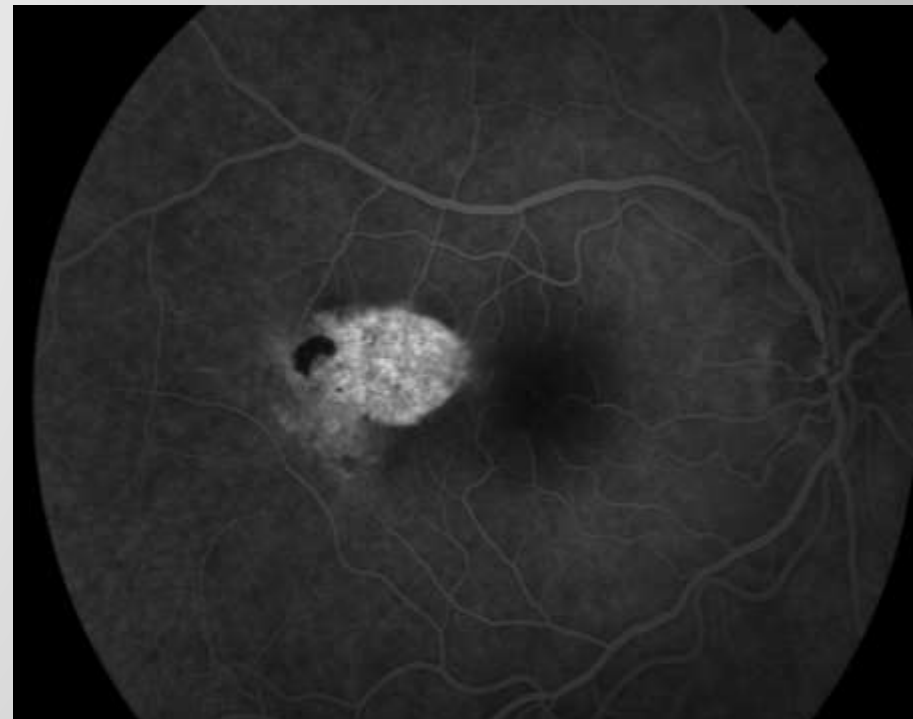
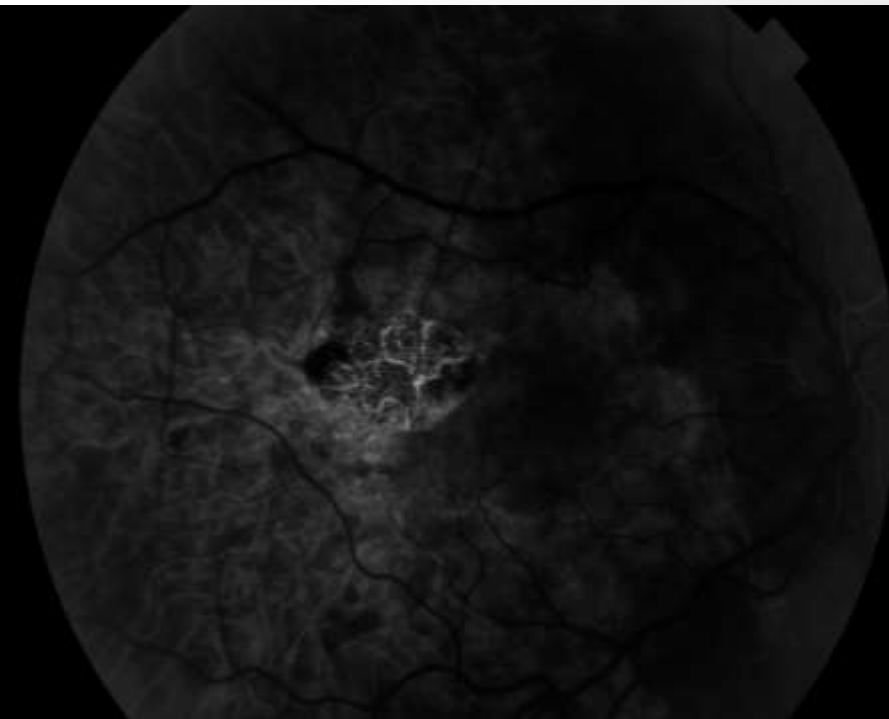
MR Fellow

Hillingdon Hospital



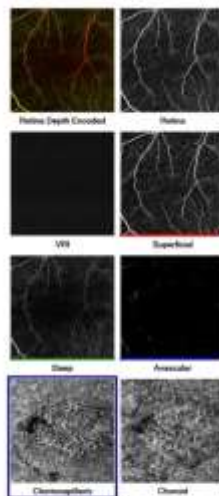






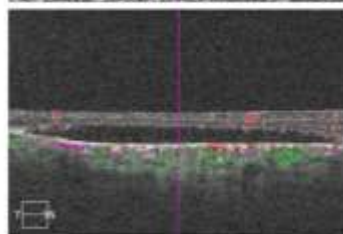
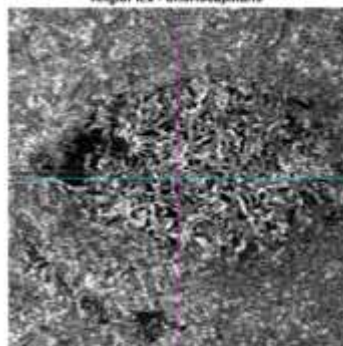
Angiography Analysis : Angiography 3x3 mm

OD OS



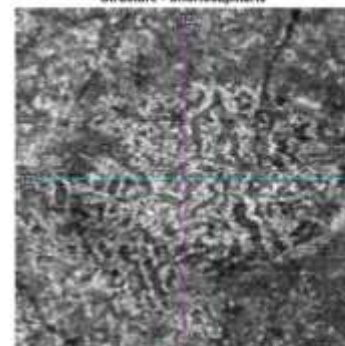
Create Custom Filter

AngioPlex - Chorocapillaris



Slice: 122

Structure - Chorocapillaris



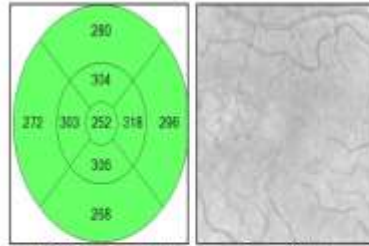
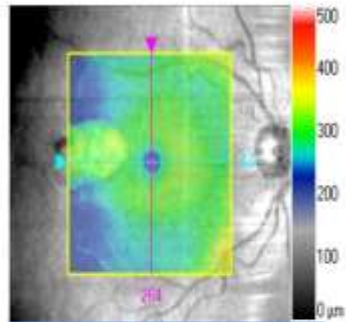
Current View Chorocapillaris

Reference	Offset
Top: RPE	29
Bottom: RPE	49

Tracked during scan

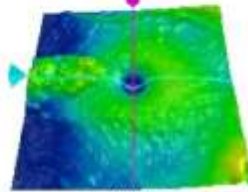
Macula Thickness : Macular Cube 512x128

OD OS

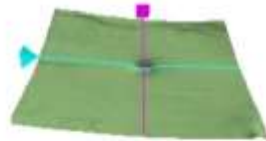


LM-RPE Thickness (µm) Fovea: 264, 64

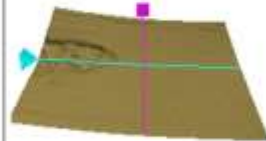
Overlay: ILM - RPE Transparency: 50 %



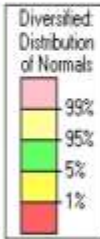
ILM - RPE



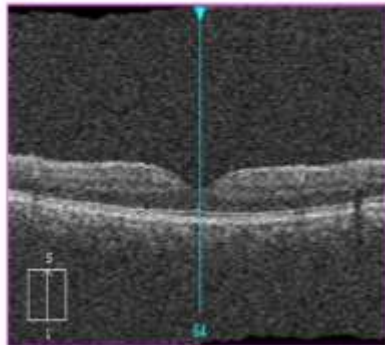
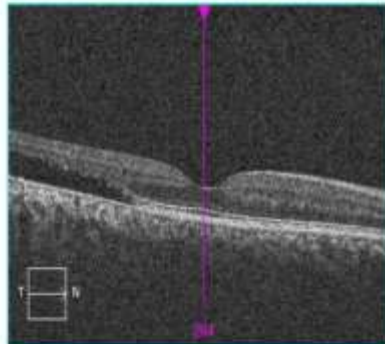
ILM



RPE



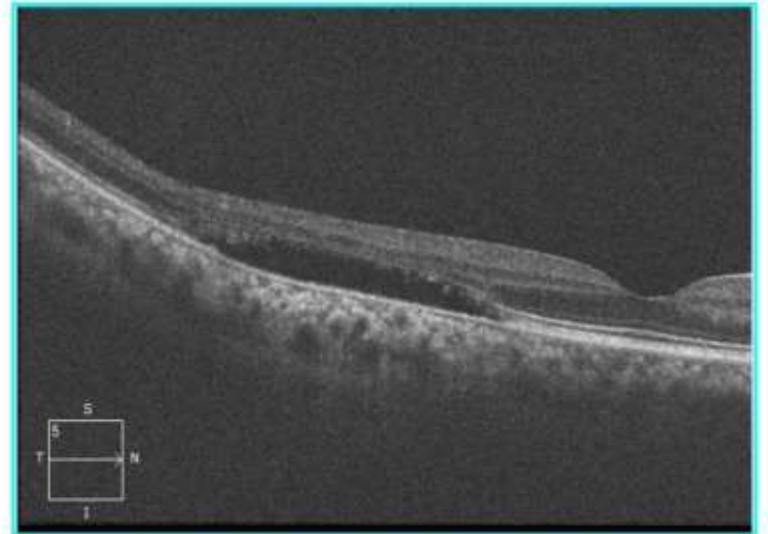
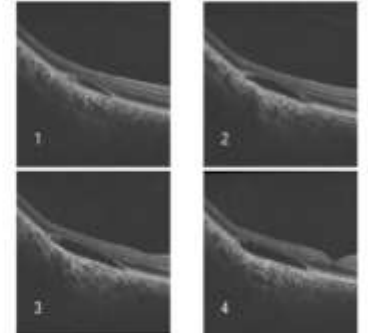
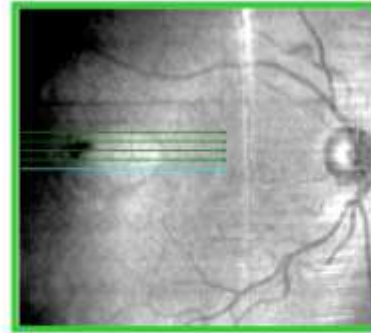
	Central Subfield Thickness (µm)	Cube Volume (mm ²)	Cube Average Thickness (µm)
ILM - RPE	252	10.1	281



High Definition Images: HD 5 Line Raster

OD OS

Scan Angle: 0° Spacing: 0.25 mm Length: 6 mm



Comments

Doctor's Signature

Torpedo Maculopathy

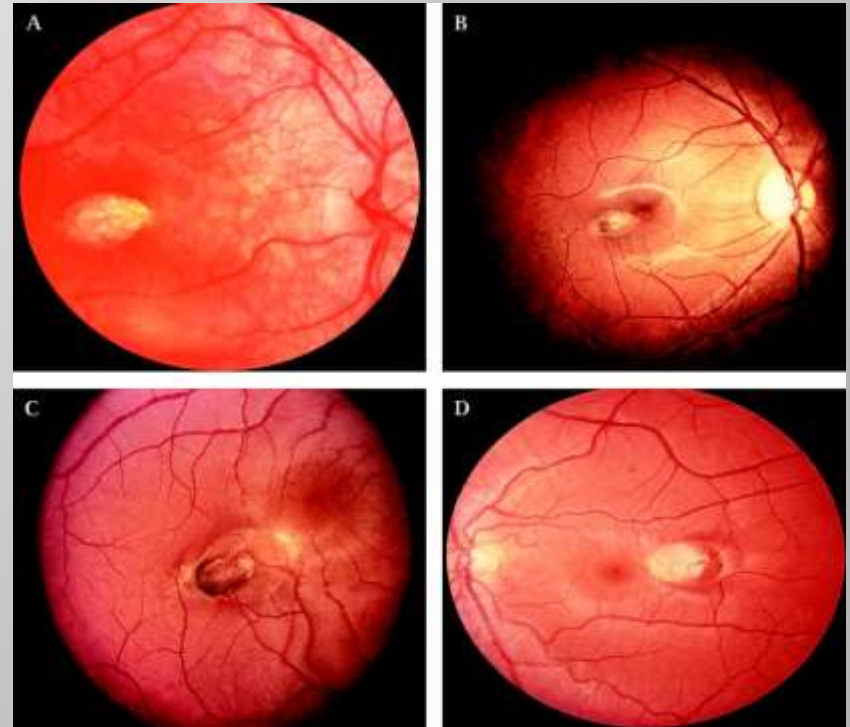
CONSTANT FEATURES

- Congenital
- Unilateral
- Torpedo shape (horizontally oval)
- Temporally to macula (along the horizontal raphe)
- Head pointing towards the fovea and tail pointing away



VARIABLE FEATURES

- Schisis cavity / intraretinal cleft
- Excavation
- Visual field defect
- Degree of pigmentation

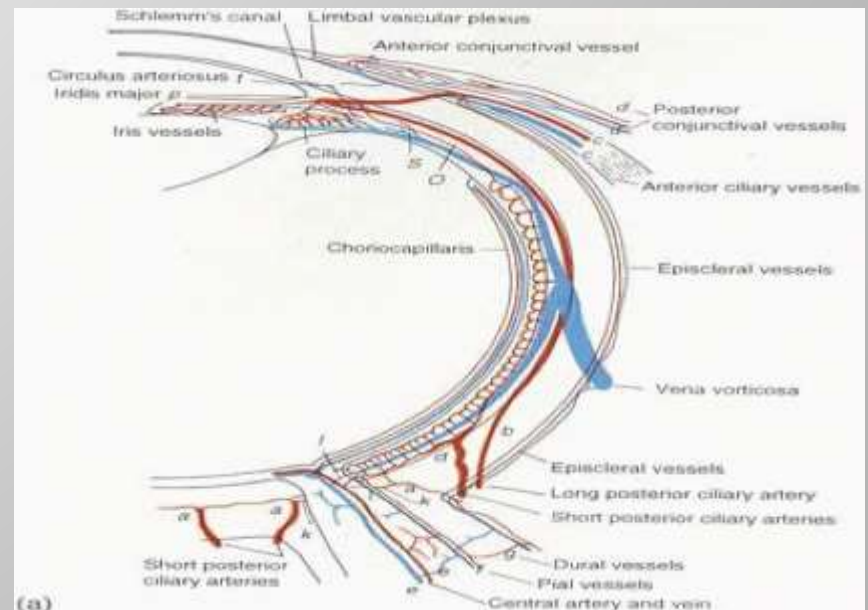
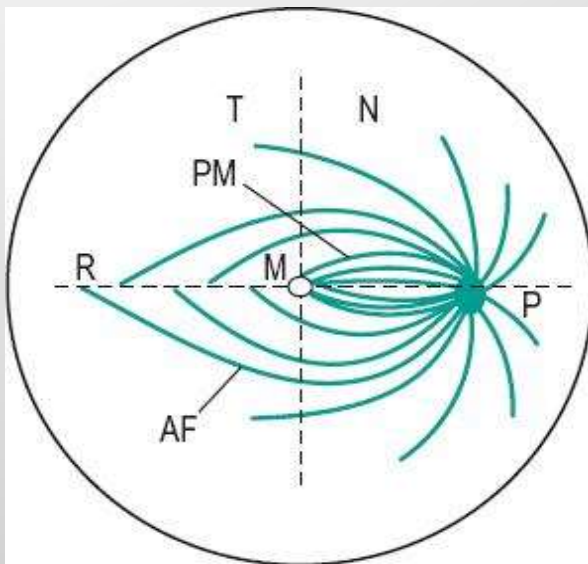


Aetiology?

- Developmental defect of unknown aetiology
- Tissue affected : RPE
- Gass and Roseman (1992) described it as **solitary hypopigmented nevus of the RPE**
- Daily (1993) described it as **paramacular albinotic spot syndrome**
- Daily introduced the term **torpedo maculopathy** in 1993

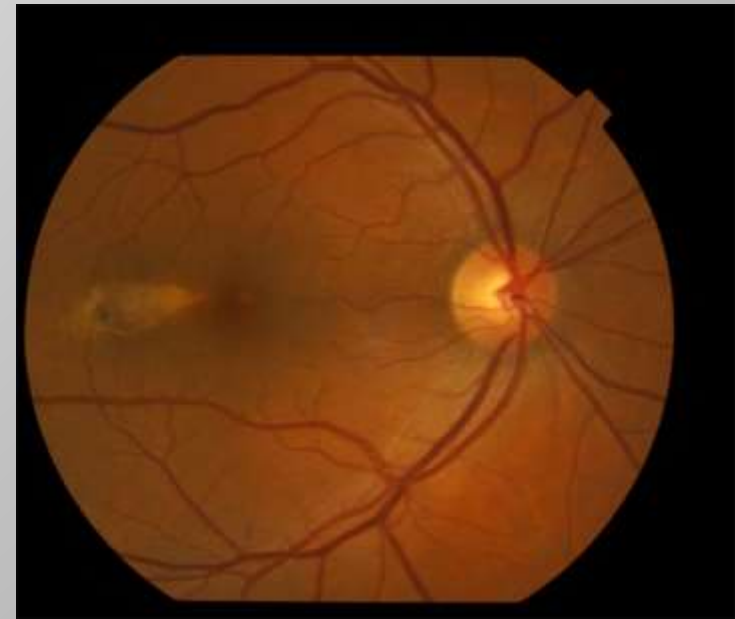
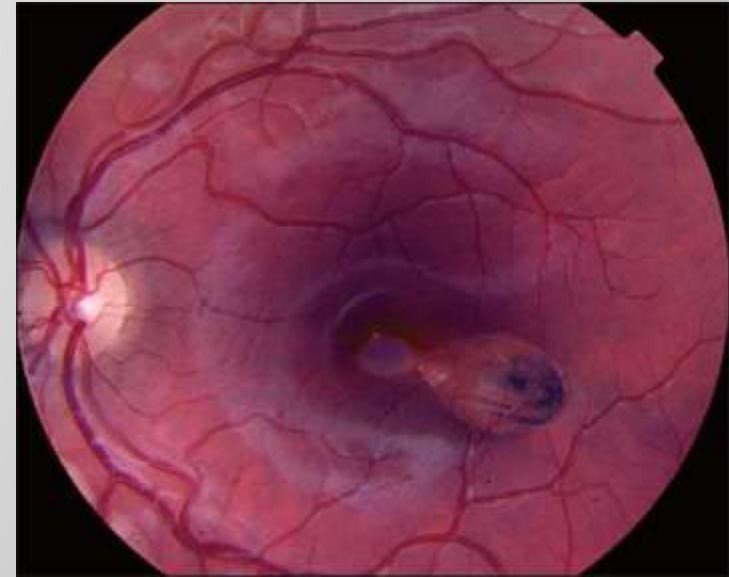
Theories

- Alteration in the development of RPE in the fetal temporal bulge
- Defect in the horizontal raphe during the development of the nerve fibre layer in the early postnatal period
- Vascular alteration of the macular area during embryonic development, which would result in an abnormal RPE in this region
- Malformation of the emissary canal of the long posterior ciliary artery and nerve



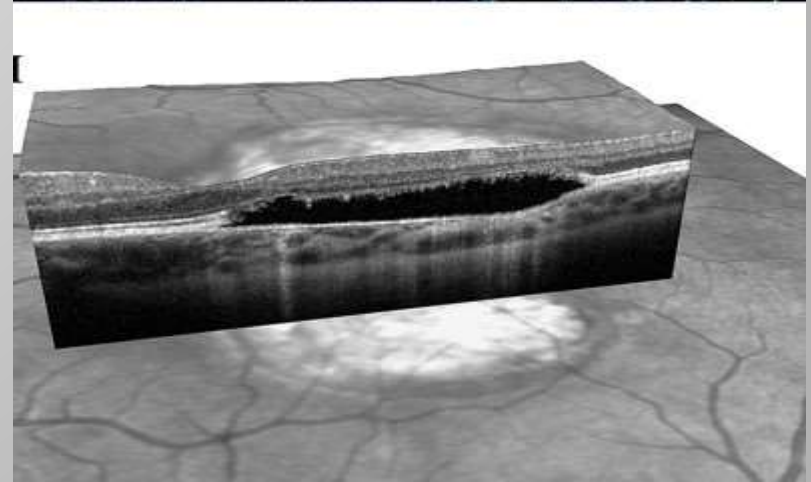
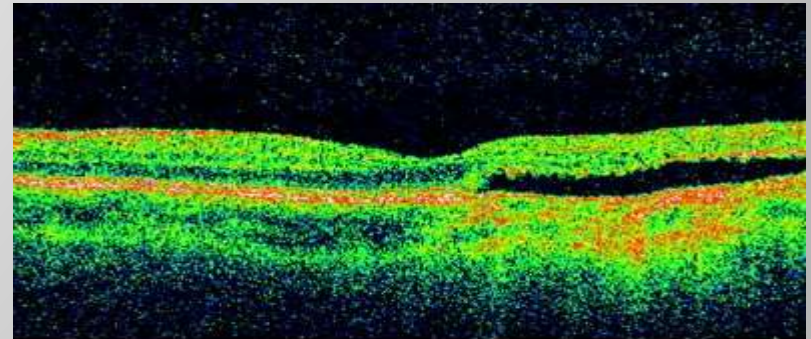
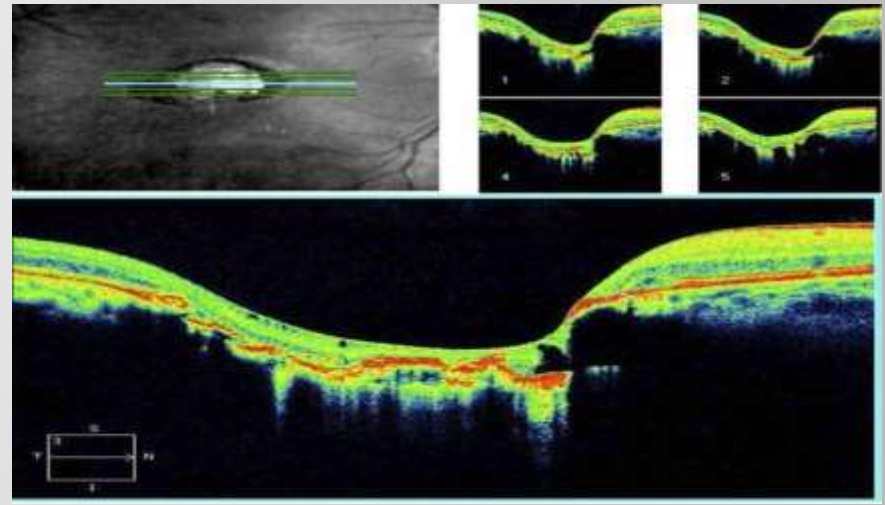
Torpedo maculopathy

- On a routine examination
- Non progressive
- No systemic and congenital associations or ocular abnormalities reported
- May encroach upon fovea, but rarely causes loss of vision
- Rounded or frayed tail
- No treatment



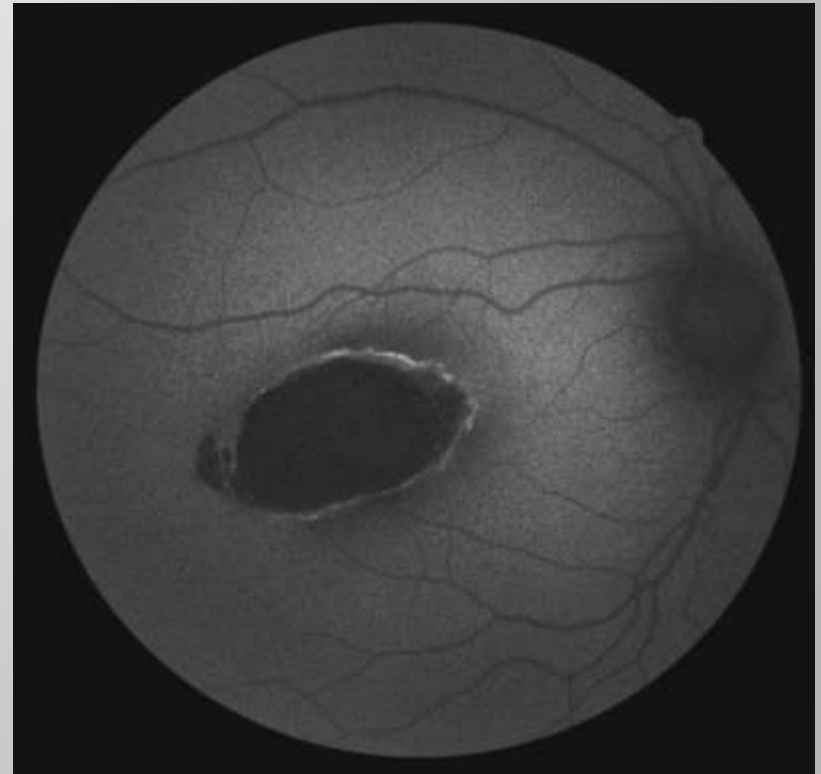
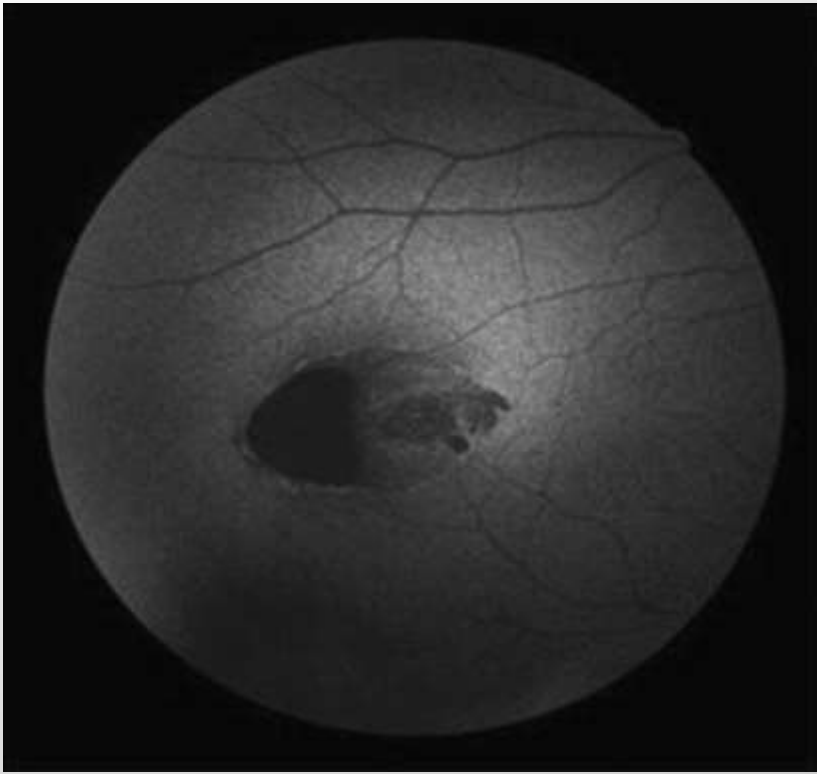
OCT

- Disorganization of RPE and outer retina
Hyper-reflectivity of RPE
- Cleft (possibly created by the loss of photoreceptors or RPE)
Thinner RPE - almost no signal
Increased reflectivity of choroid
- Excavation
- Abrupt transition between intact and disorganized retinal tissue
- Unclear what occupies the space under the neurosensory retina



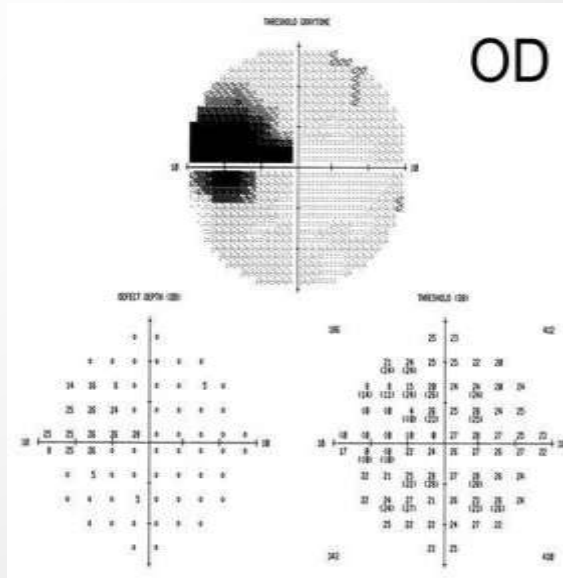
AutoFluorescence

- Hypo-fluorescence of the lesion (non functioning RPE)
- Thin ring of hyper-fluorescence at the lesion margins

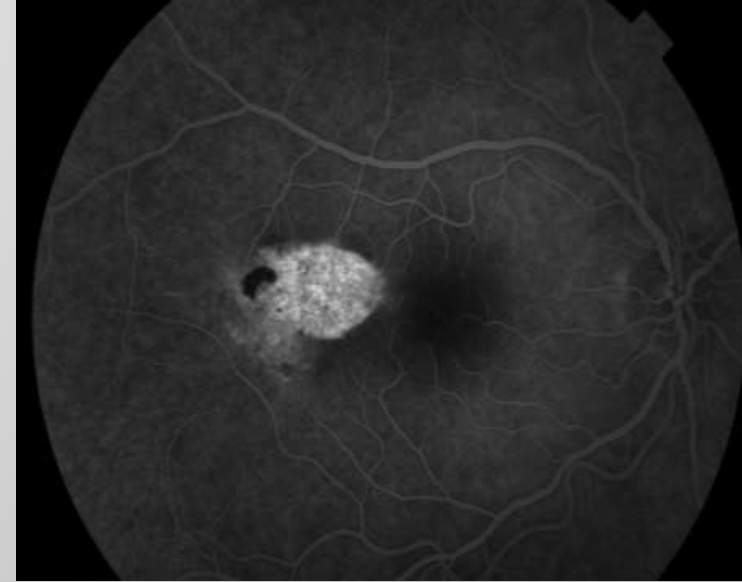


Other tests

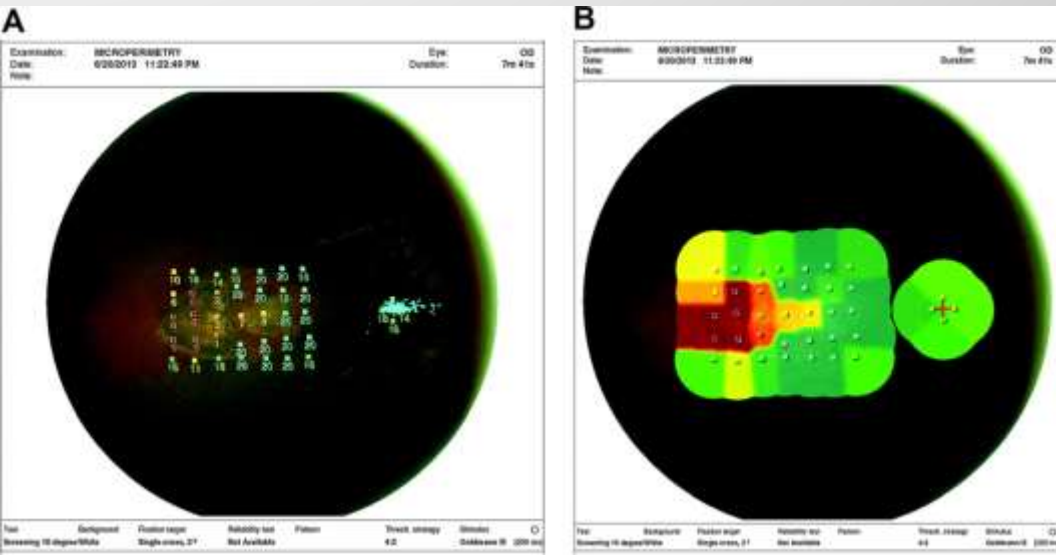
HVF



FFA



Microperimetry



Differential Diagnosis

Congenital / Acquired lesions of RPE

- Toxoplasmosis
- CHRPE
- Gardner syndrome

Focal pigmentation from external agents

- Trauma

Choroidal lesions (when hypopigmented)

- Melanoma
- Nevus
- Metastasis

Serous detachment of neurosensory retina (when cleft)

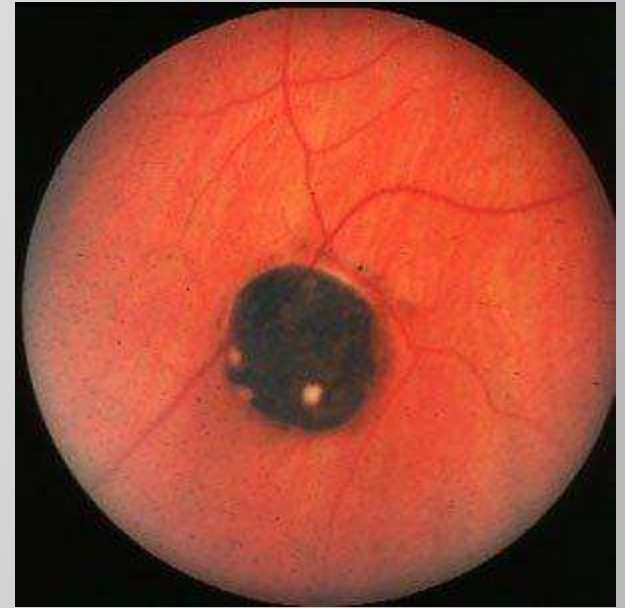
- CSR
- PCV

Macular / paramacular excavation

- Coloboma
- Macular dysplasia
- Posterior staphyloma

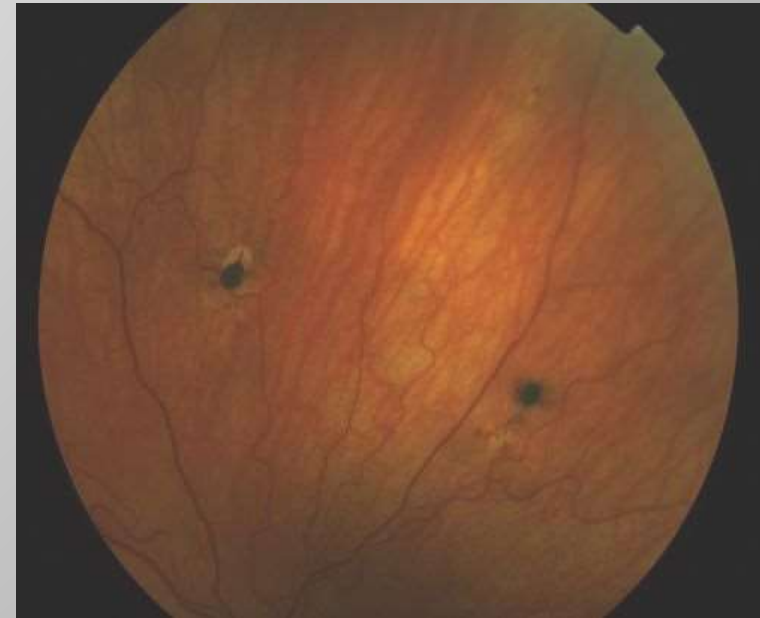
CHRPE

- Usually unilateral, flat, variably pigmented lesion at the level of RPE
- Rounded or scalloped margins
- Random distribution (most often in the equatorial or peripheral fundus - rarely in the macula)



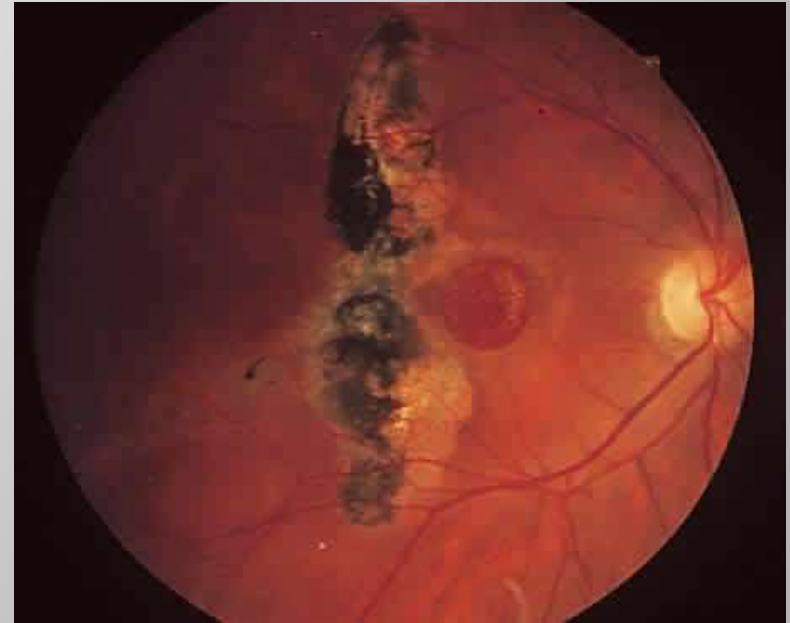
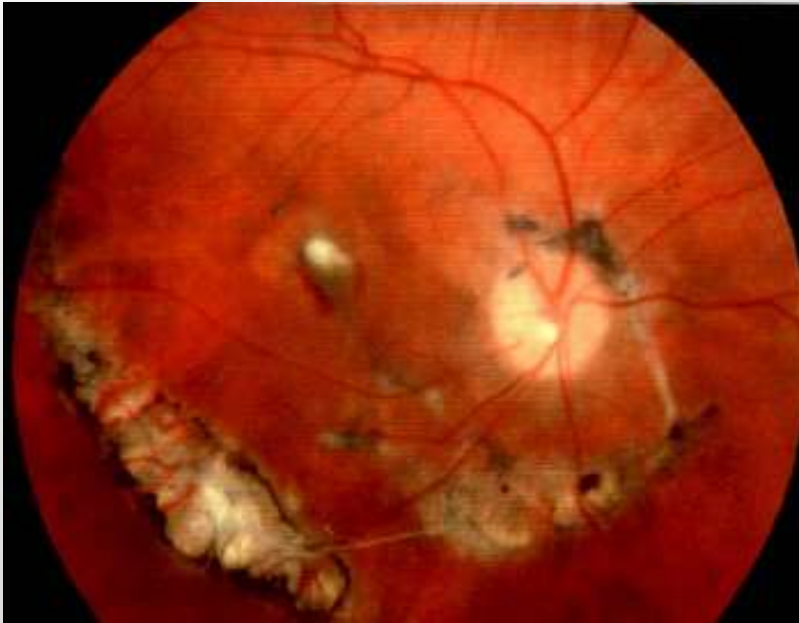
Gardner syndrome

- TRIAD = intestinal polyps + skeletal hamartomas + soft tissue tumours. Over 50% will have dental anomalies
- Usually bilateral
- Usually multiple RPE lesions
- Smaller (<1 mm)
- Random distribution, mainly equator and midperiphery, away from the macula
- More irregular in shape



Chorioretinal scarring secondary to choroidal rupture

- Crescent-shaped gaps in the RPE - Bruch - Choriocapillaris complex
- Often run parallel or concentric to the disc
- Pigmentation presents a highly irregular shape with erratic distribution



TAKE HOME MESSAGE

- ❑ Congenital, solitary, oval shape lesion of the temporal macula
- ❑ Diagnosis : Clinical
- ❑ Multimodal imaging : OCT and AF
- ❑ Differential diagnosis
- ❑ Investigation: not needed
- ❑ Treatment / observation : not needed





THANK YOU