

XV Congresso Società Oftalmologica Calabrese
2 Ottobre 2015

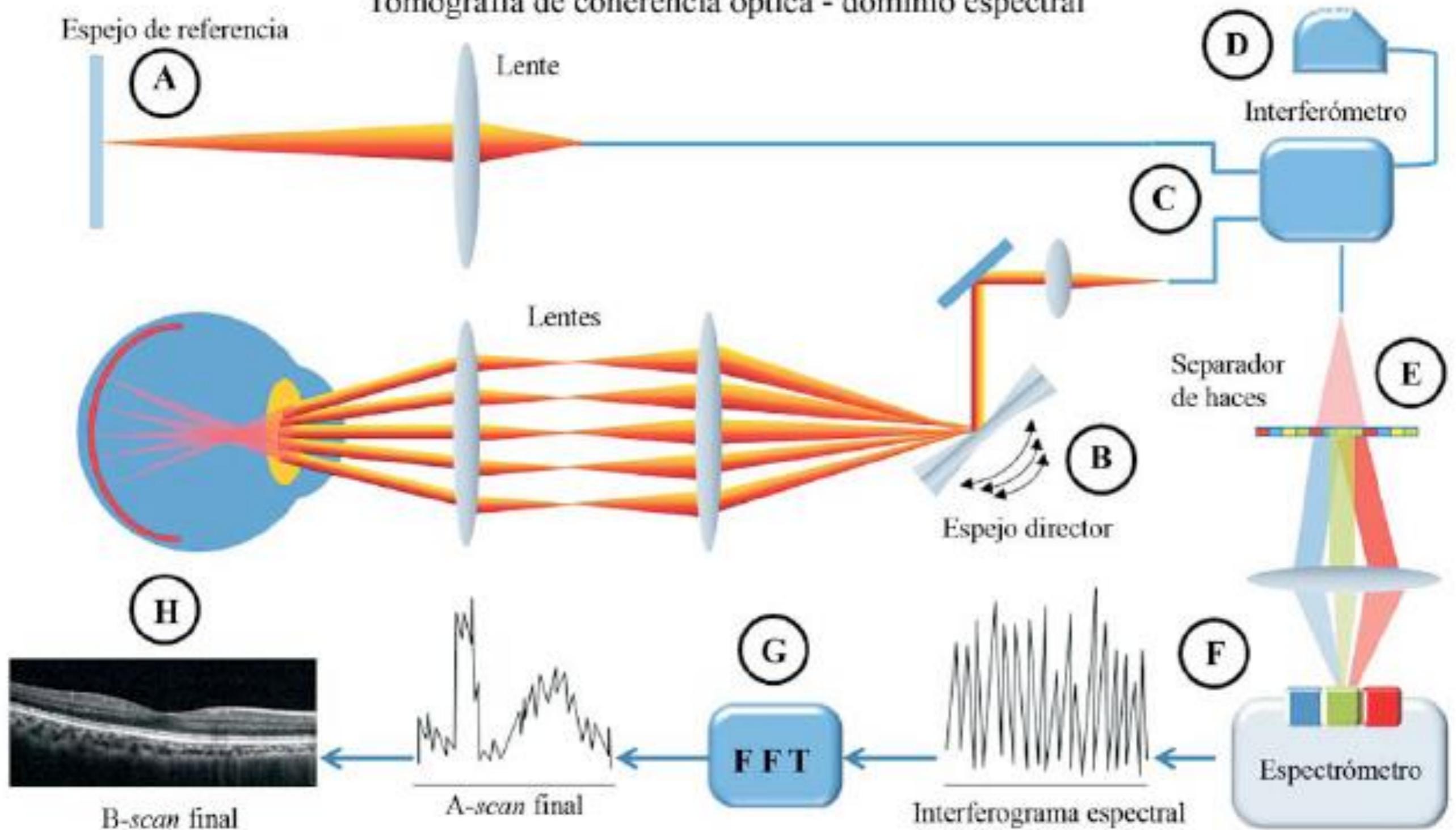
Anatomia della Retina con Spectral Domain OCT



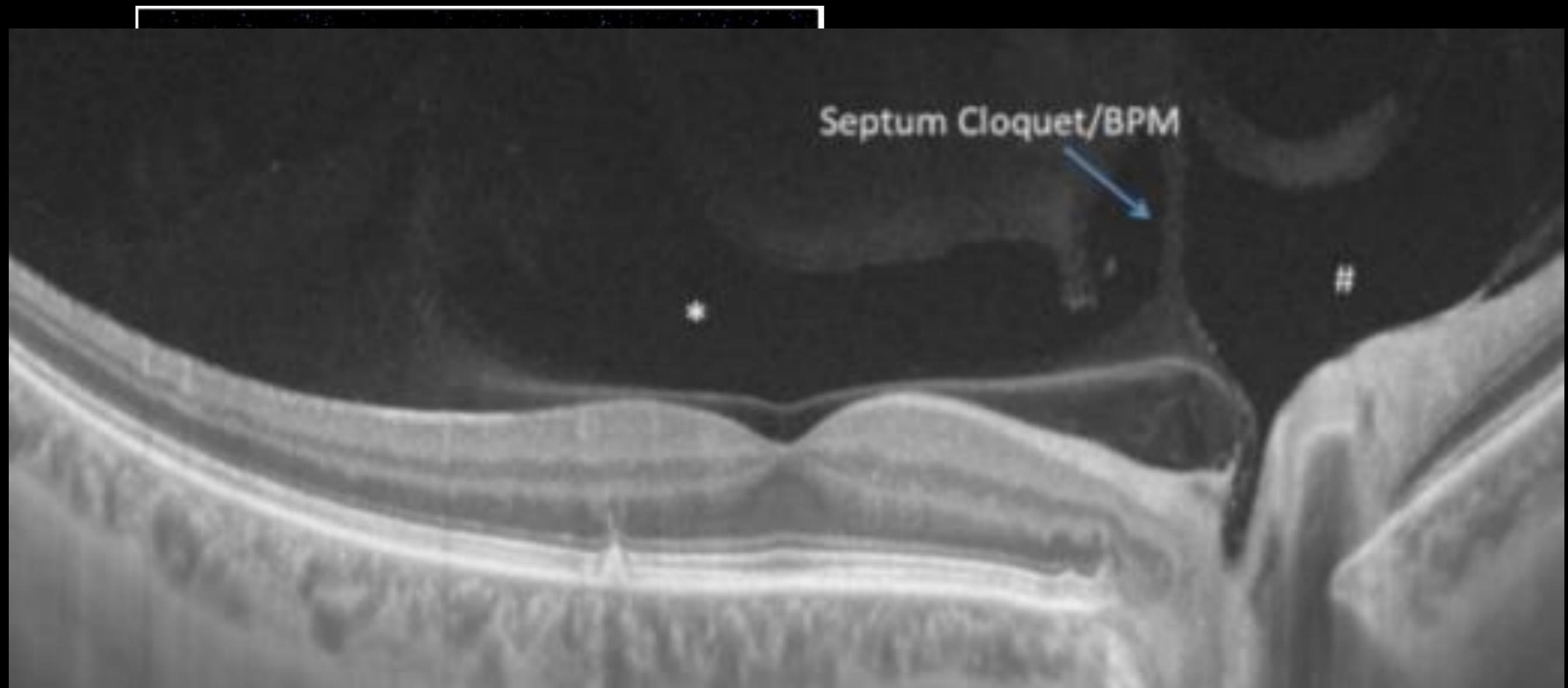
*Dott. Pierpaolo Patteri
Dirigente Medico U.O. Oculistica Alghero
Asl 1 Sassari*

OCT principios de funcionamiento

Tomografía de coherencia óptica - dominio espectral



Traduzione grafica



(b)

SWEPT-SOURCE OCT

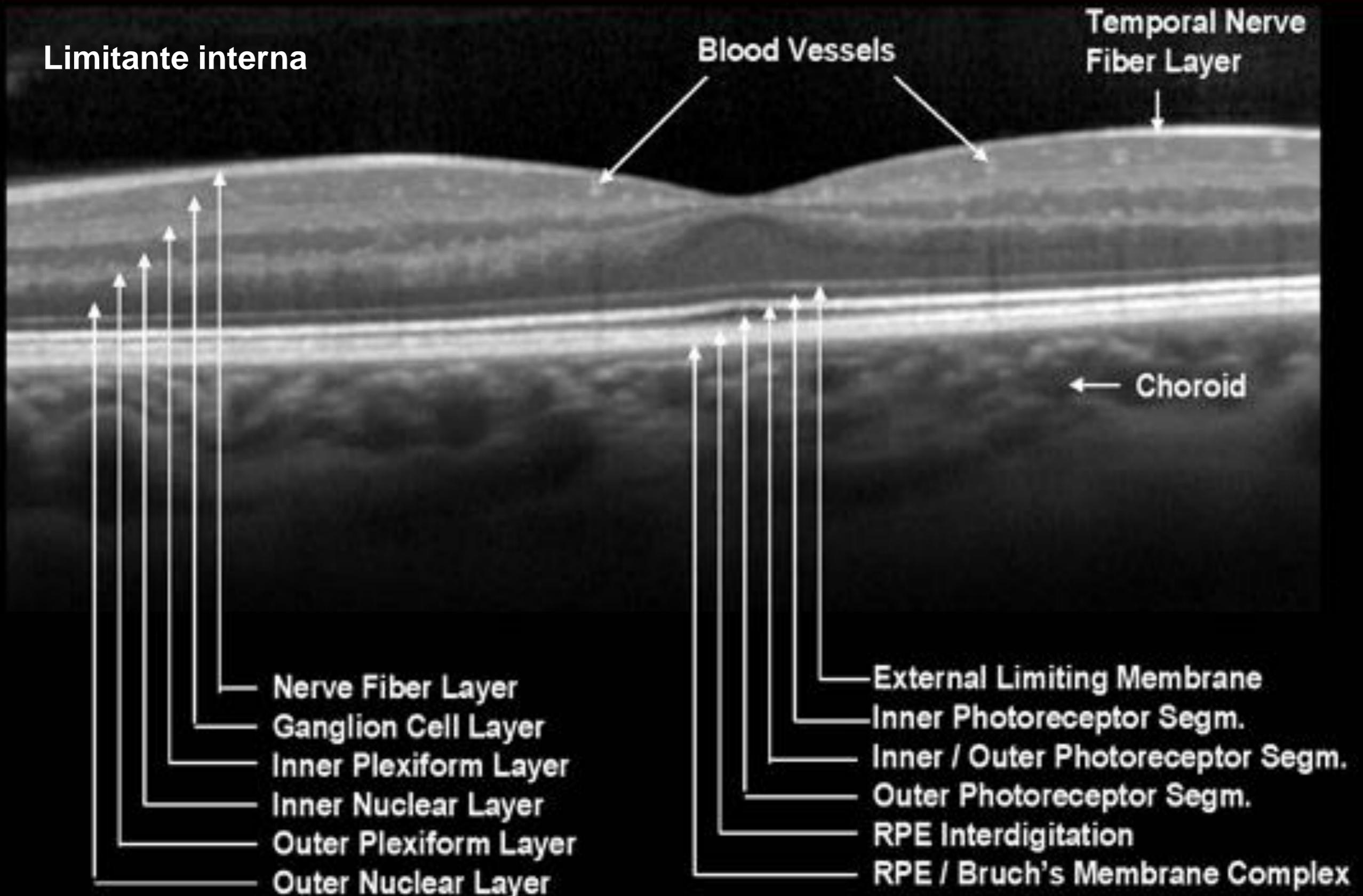
DRI OCT-1, Triton swept source OCT - TOPCON

	Spectral Domain OCT (3D OCT-2000)	Swept Source OCT (DRI OCT-1)
Light Source	Spectral Domain	Swept Source
Wavelength	840 nm	1.050 nm
Scan Speed	50,000 A-scans/sec	100,000 A-scans/sec
B-Scan Acquisition Time (Resolution: Line 1024)	Approx 0.02 sec	Approx. 0.01 sec
3D Scan Acquisition Time (Resolution: 3D 512x128)	Approx 1.6 sec	Approx 0.9 sec
Maximum overlapping Scan Count (Resolution: Line 1,024, 3D 512x64)	Max 50 Line (3D N/A)	Max 96 Line (3D Max. 4)

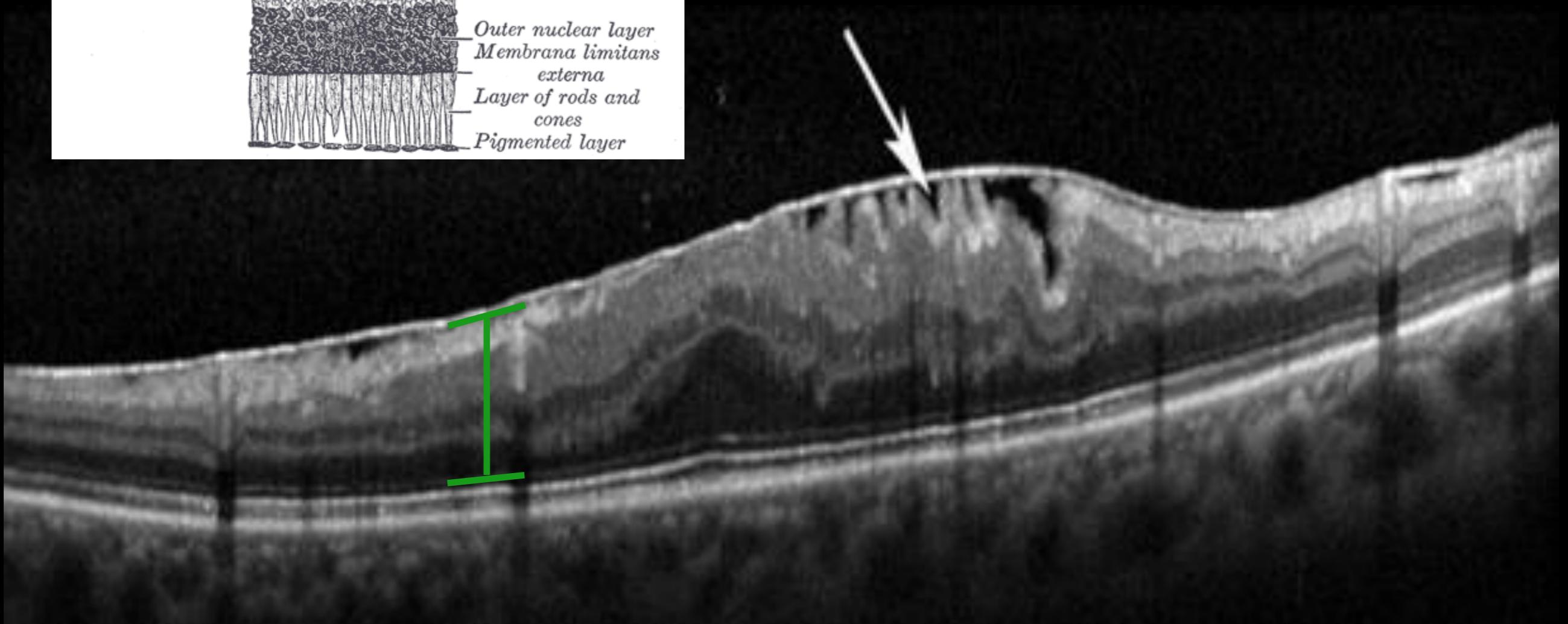
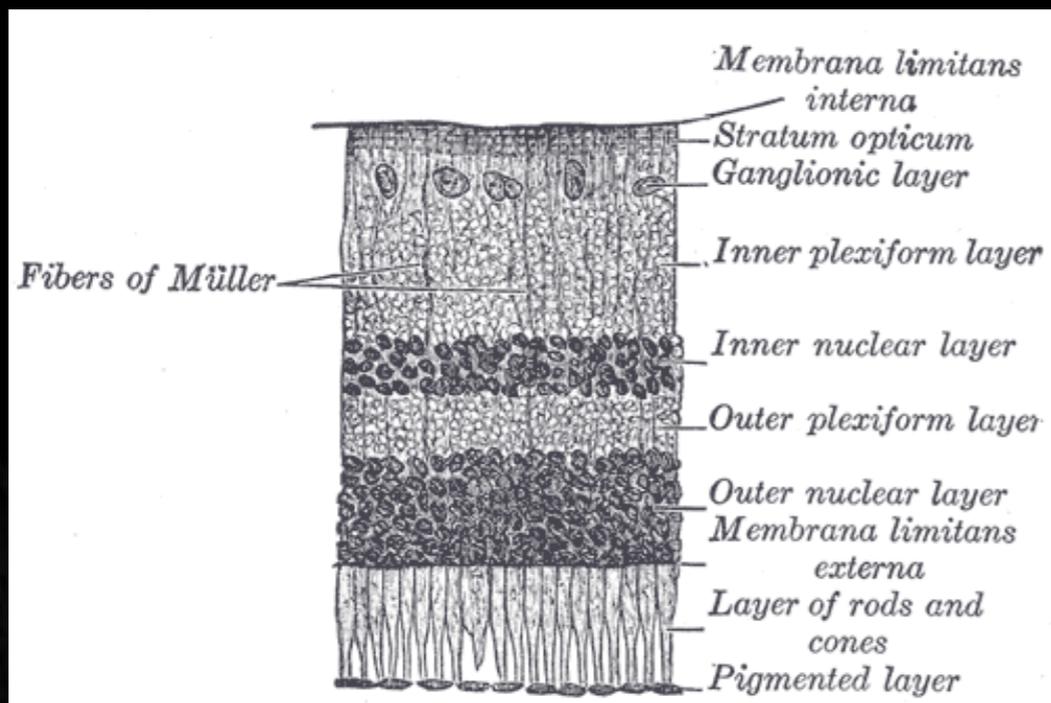
Tab. 1

Retinal Labeled Layers

(Image zoomed to ~15°)



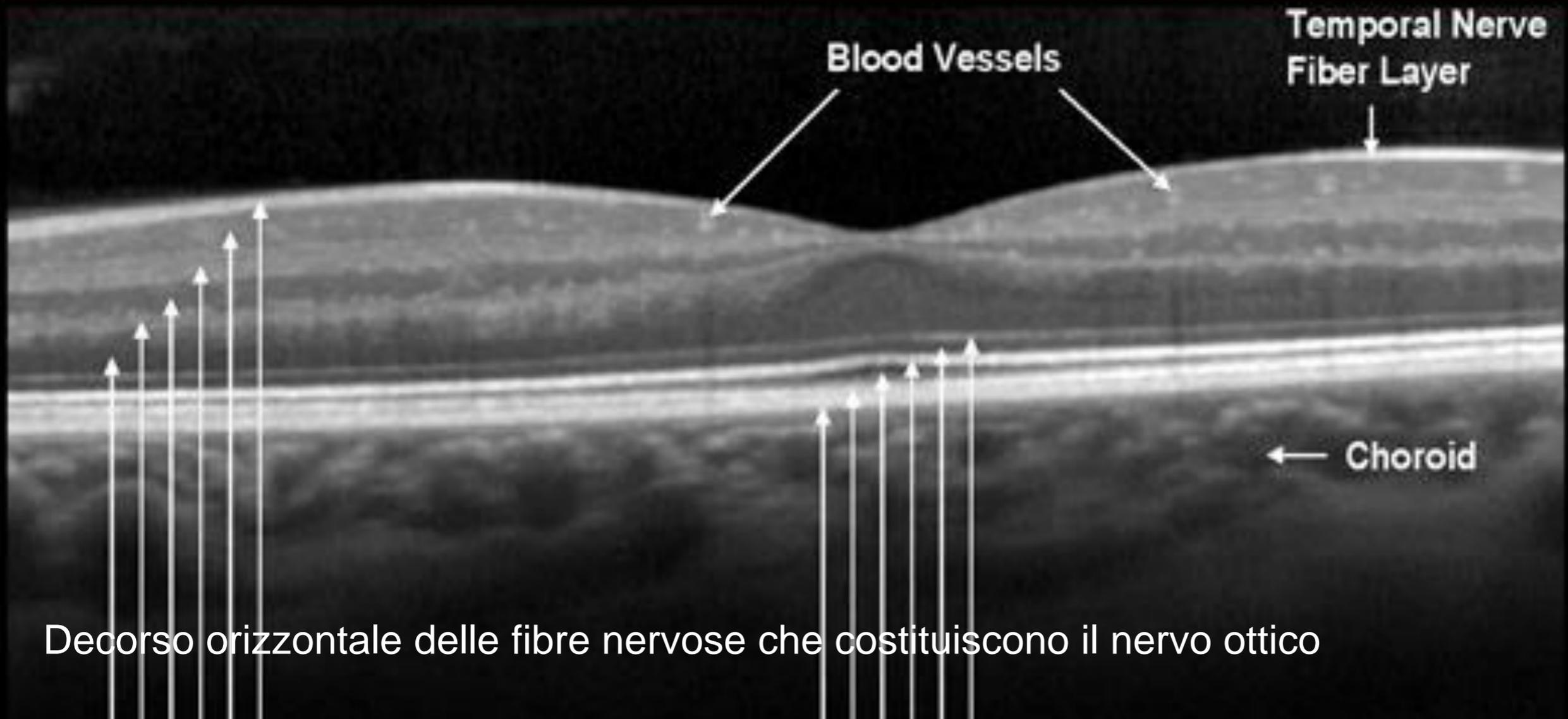
Limitante interna: cosa è che funzioni ha?



Retinal Labeled Layers

Fibre nervose

(Image zoomed to ~15°)



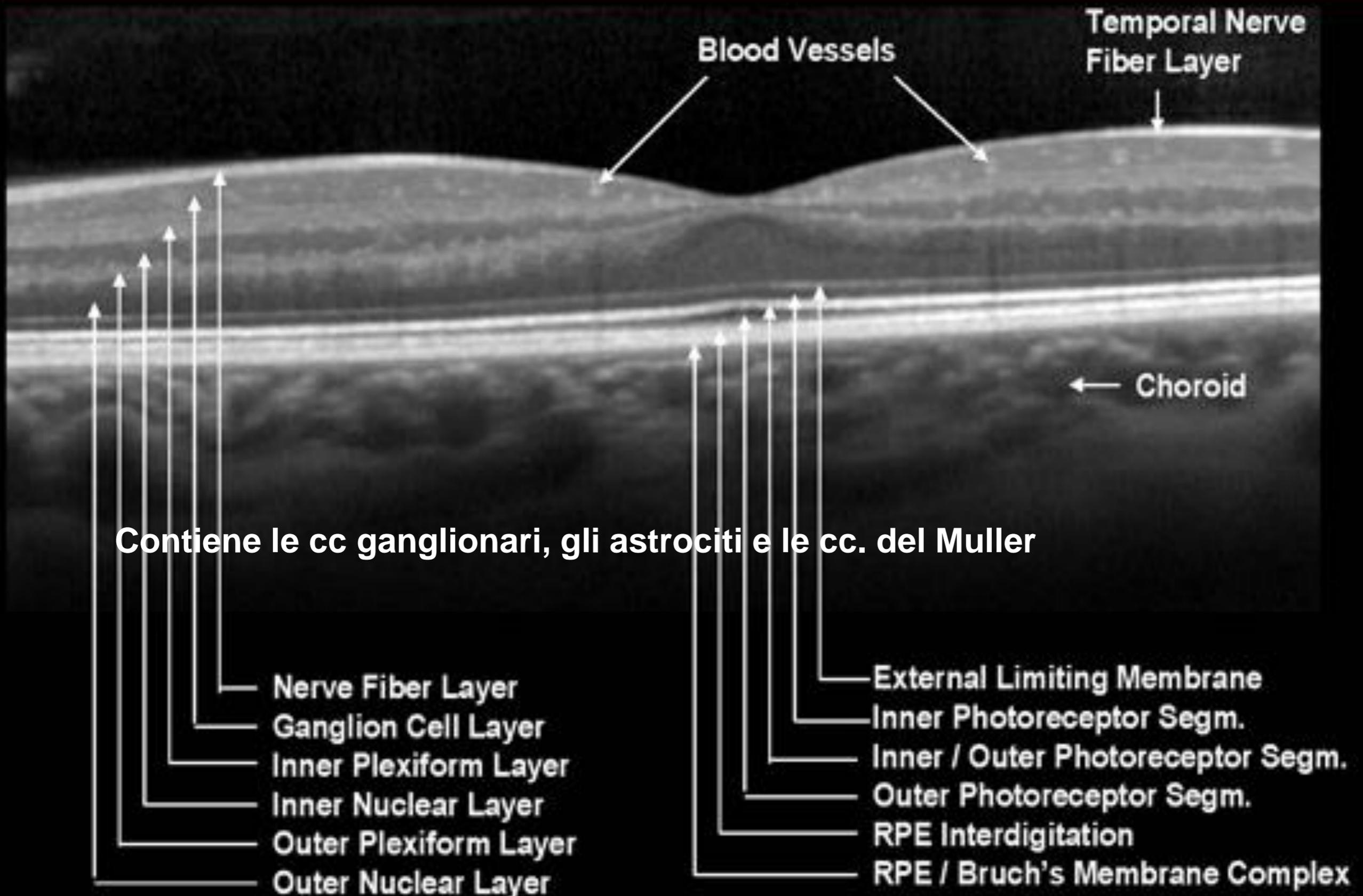
Decorso orizzontale delle fibre nervose che costituiscono il nervo ottico

- Nerve Fiber Layer
- Ganglion Cell Layer
- Inner Plexiform Layer
- Inner Nuclear Layer
- Outer Plexiform Layer
- Outer Nuclear Layer

- External Limiting Membrane
- Inner Photoreceptor Segm.
- Inner / Outer Photoreceptor Segm.
- Outer Photoreceptor Segm.
- RPE Interdigitation
- RPE / Bruch's Membrane Complex

Retinal Labeled Layers

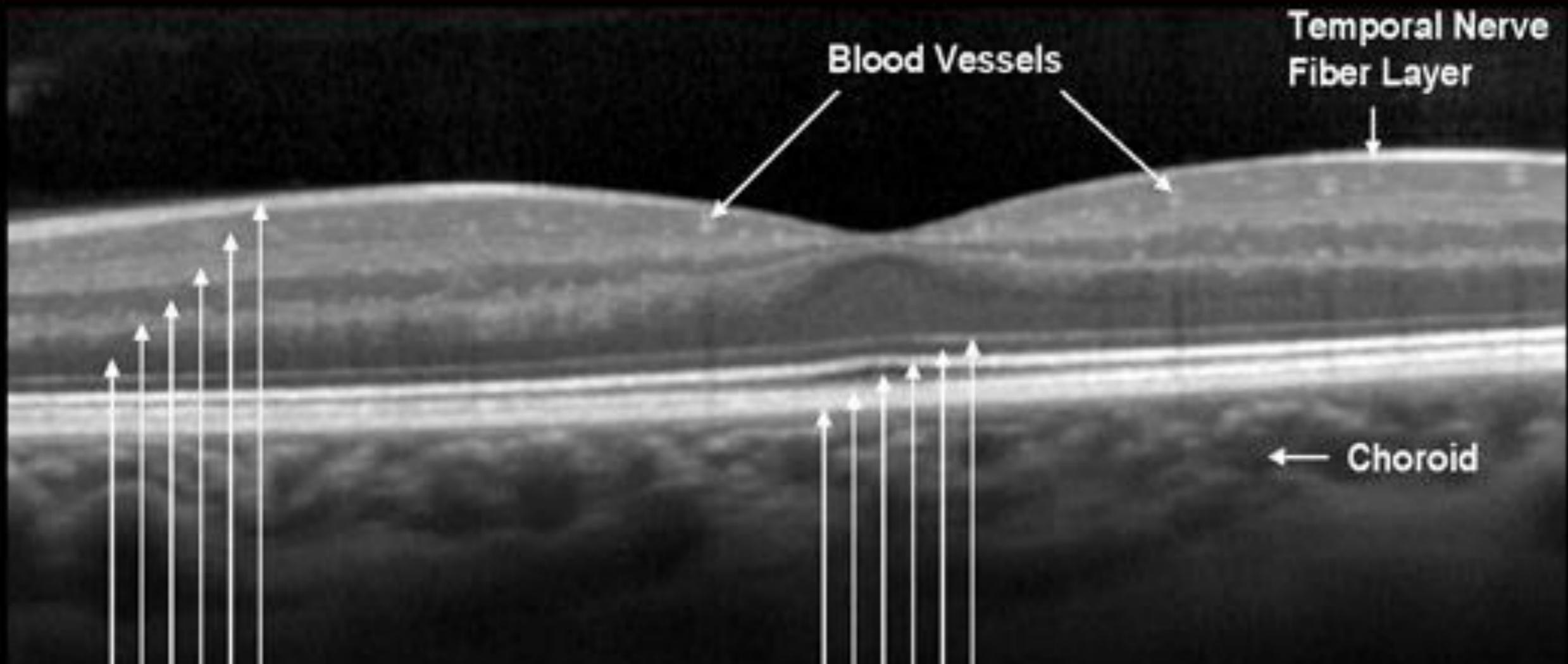
CC Ganglionari
(Image zoomed to ~15°)



Retinal Labeled Layers

Plessiforme Int.

(Image zoomed to ~15°)



Contiene le terminazioni delle cellule bipolari, delle cellule gangliari, delle cellule amacrine, delle cellule orizzontali.

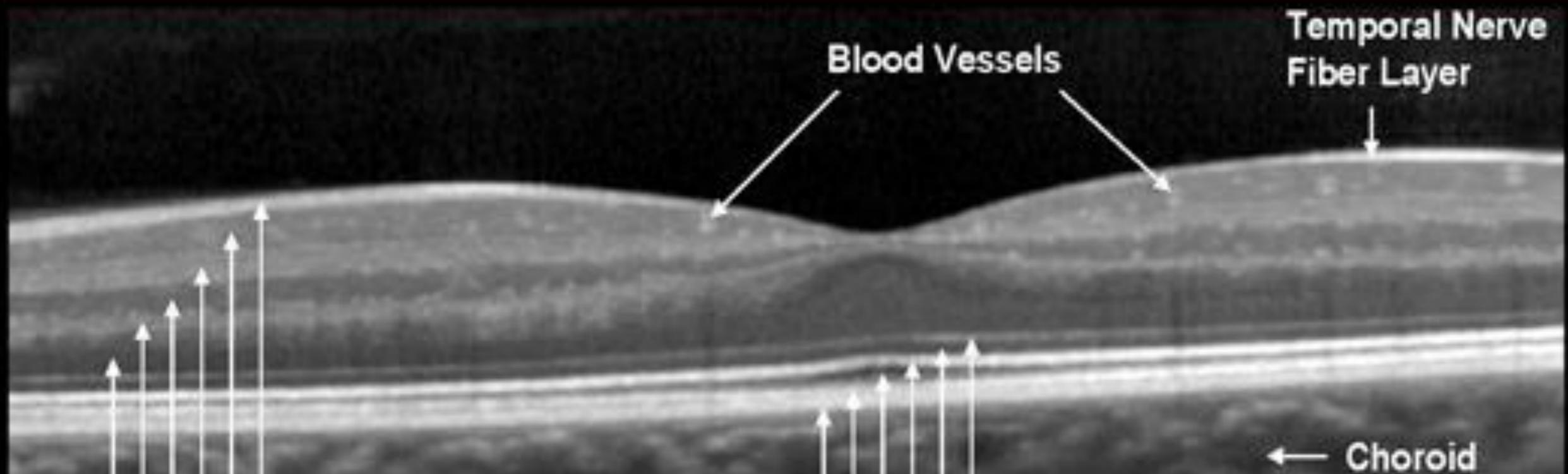
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Retinal Labeled Layers

Nucleare Int.

(Image zoomed to ~15°)



Strato dei granuli interni. E' spesso e caratterizzato dalla presenza di un gran numero di nuclei (granuli interni), che appartengono alle cellule orizzontali (disposte in doppia fila), alle cellule bipolari, più numerose, alle cellule di Muller ed a

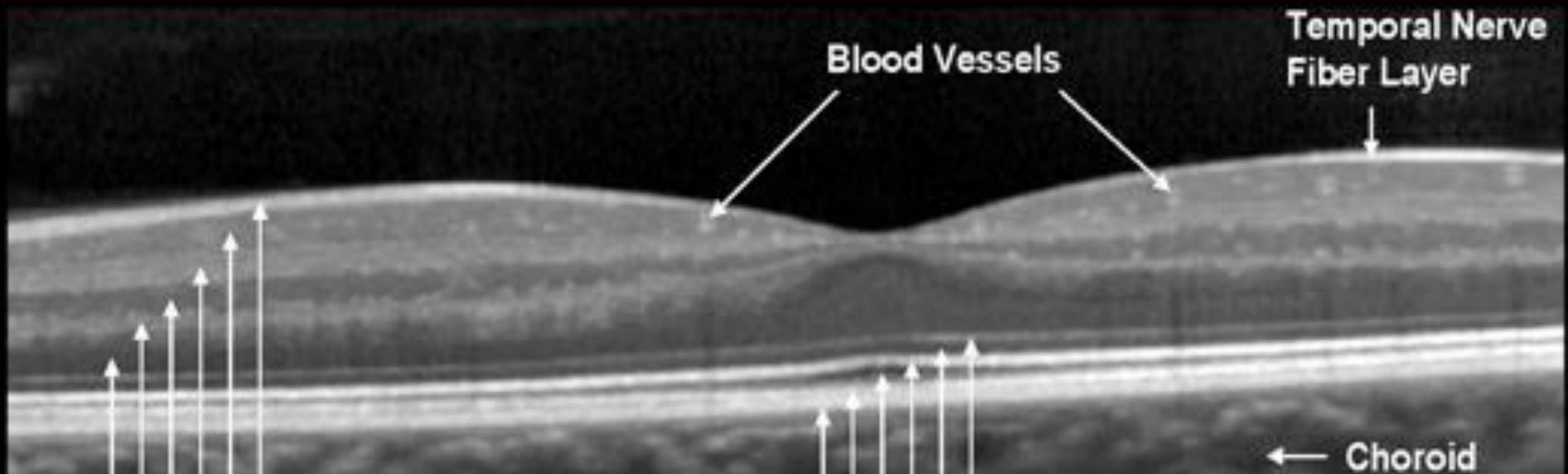
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Retinal Labeled Layers

Plessiforme Est.

(Image zoomed to ~15°)



4.- Strato plessiforme esterno. E' sottile e formato da un intreccio di sottili fibre decorrenti in vario senso. Vi si incontrano i rig

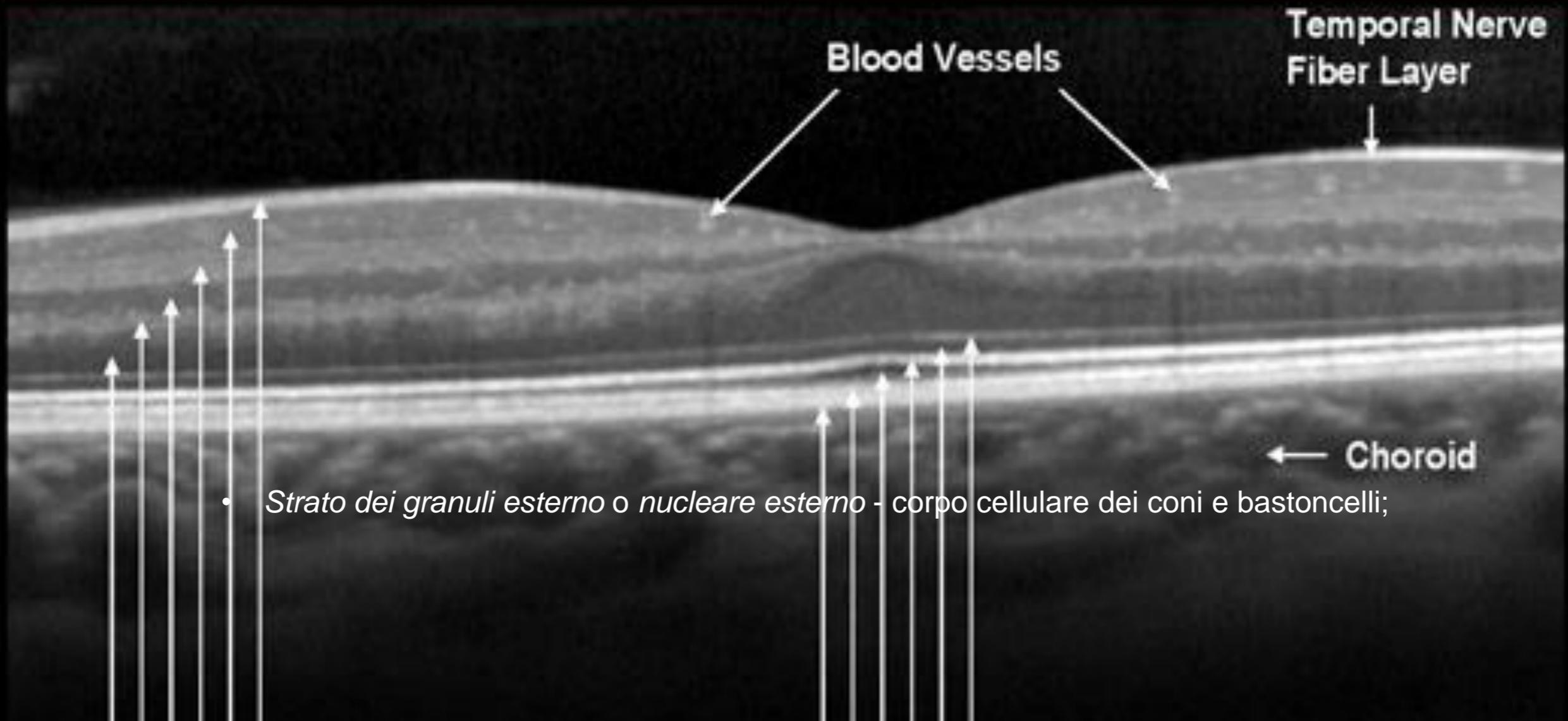
- Nerve Fiber Layer
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- Outer Nuclear Layer

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- Outer Photoreceptor Segm.
- RPE Interdigitation
- RPE / Bruch's Membrane Complex

Retinal Labeled Layers

Nucleare Est.

(Image zoomed to ~15°)



- *Strato dei granuli esterno o nucleare esterno* - corpo cellulare dei coni e bastoncelli;

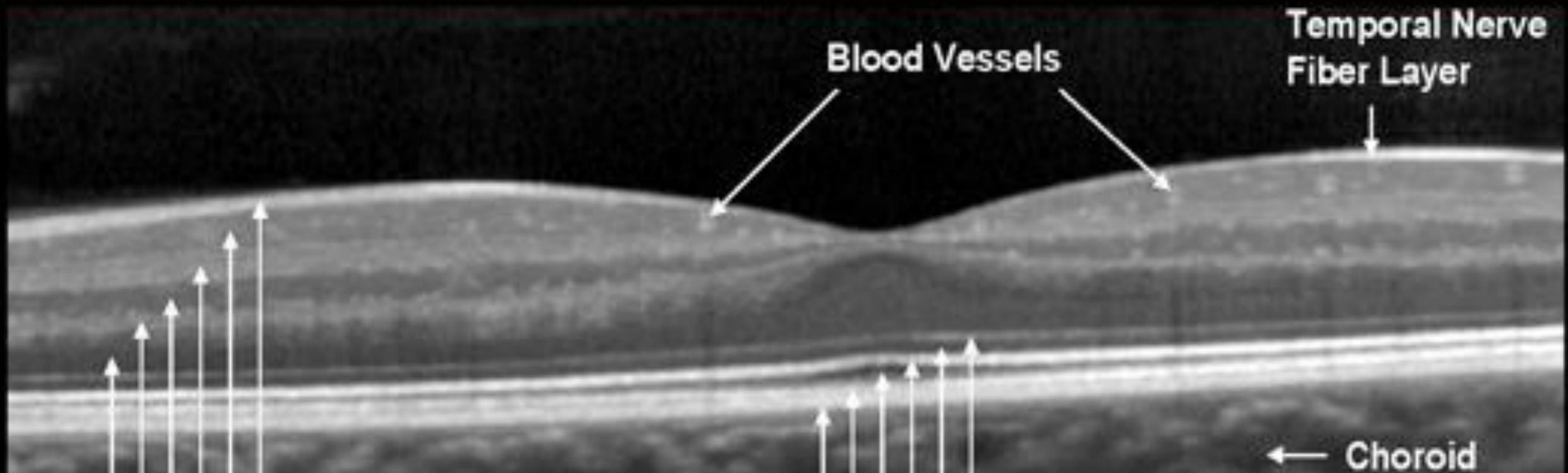
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Ganglion Cell Layer
Inner Plexiform Layer
Inner Nuclear Layer
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Outer Nuclear Layer

External Limiting Membrane
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Inner / Outer Photoreceptor Segm.
Outer Photoreceptor Segm.
RPE Interdigitation
RPE / Bruch's Membrane Complex

Retinal Labeled Layers

Limitante esterna

(Image zoomed to ~15°)



Membrana limitante esterna

Le giunzioni presenti tra le fibre esterne dei recettori e con le espansioni terminali delle cellule di Müller formano la membrana limitante esterna

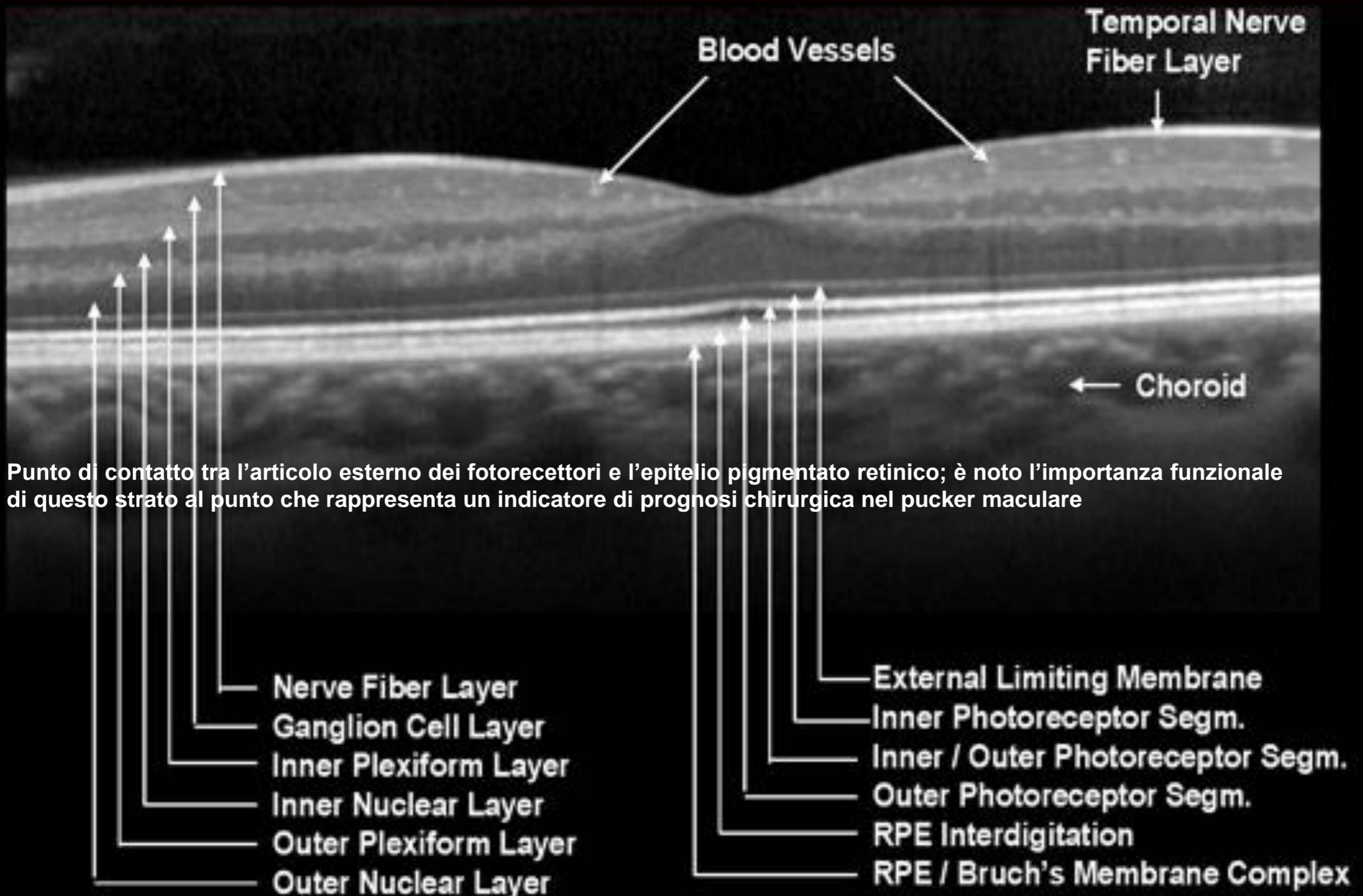
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Retinal Labeled Layers

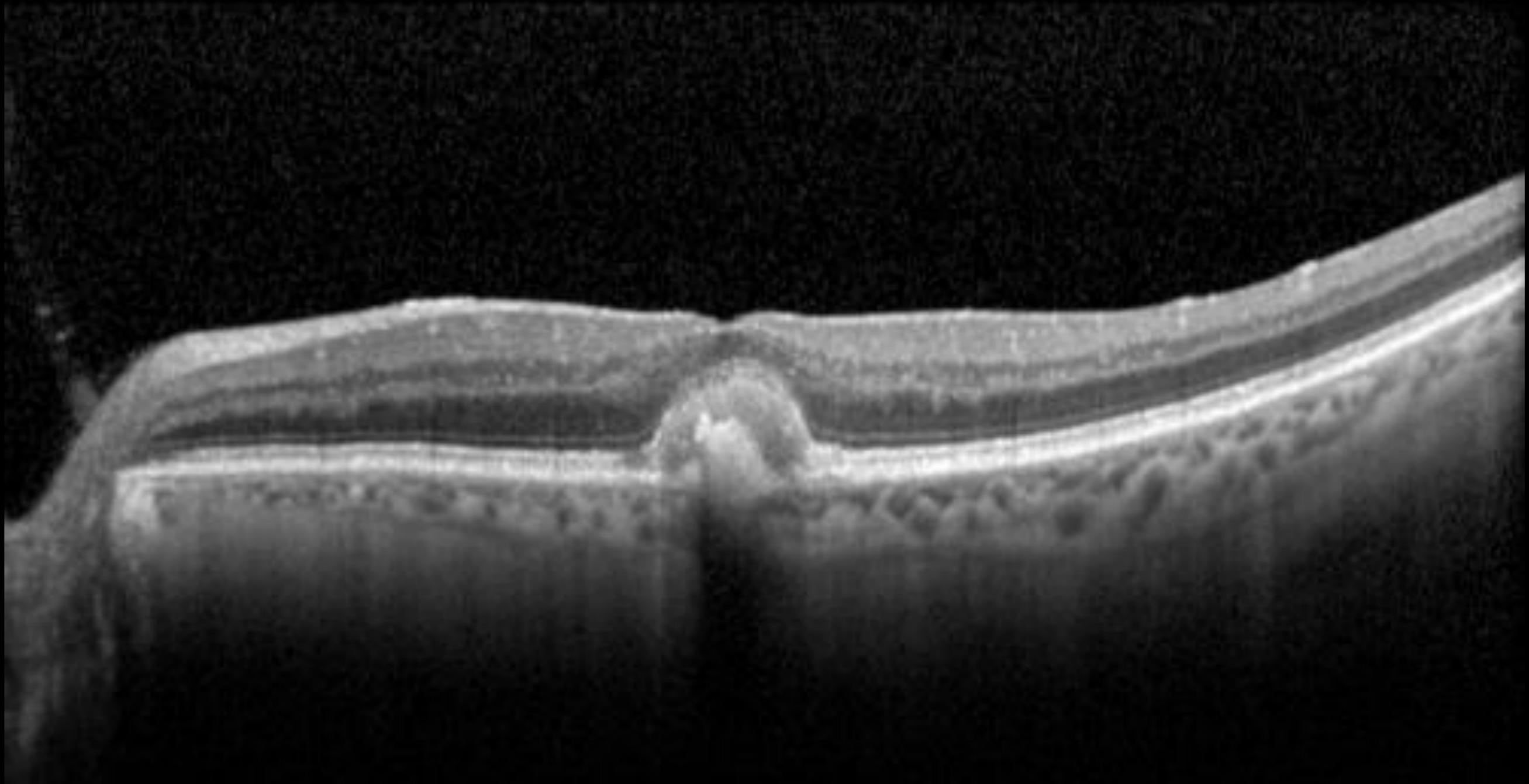
Ellissoide

(Image zoomed to ~15°)

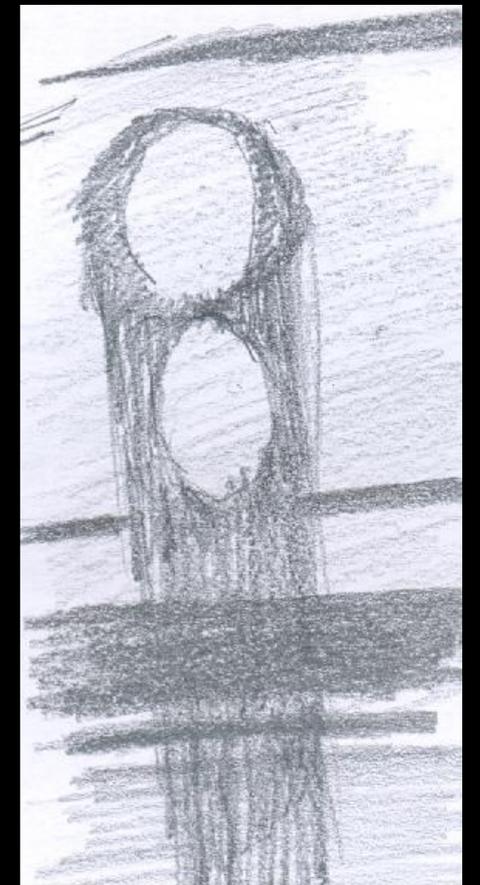
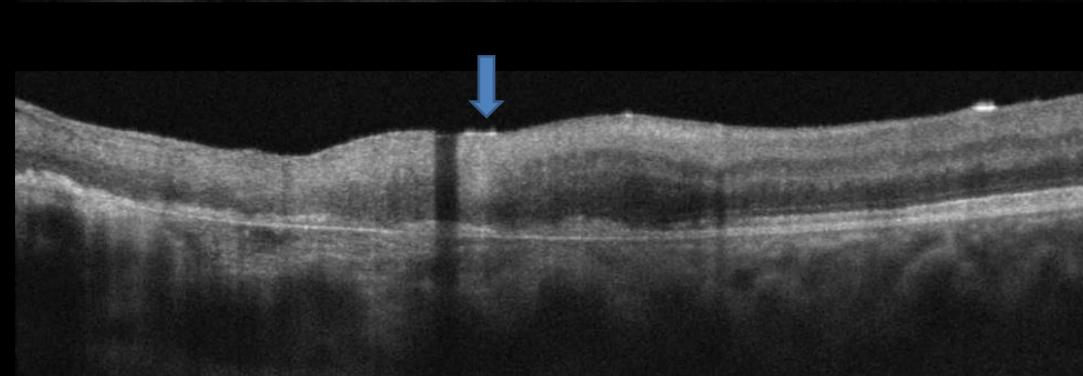
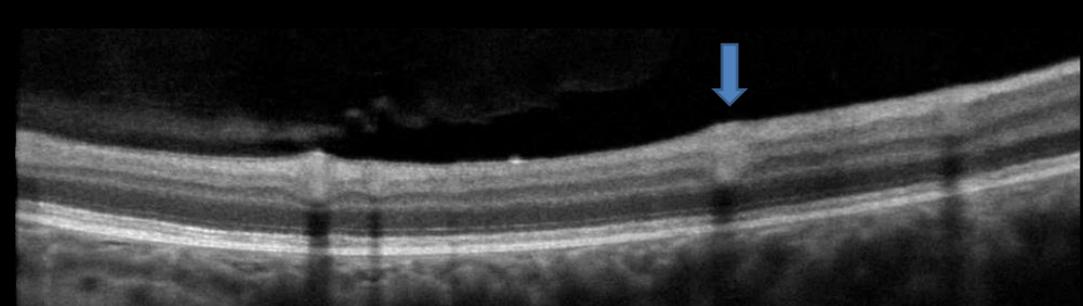
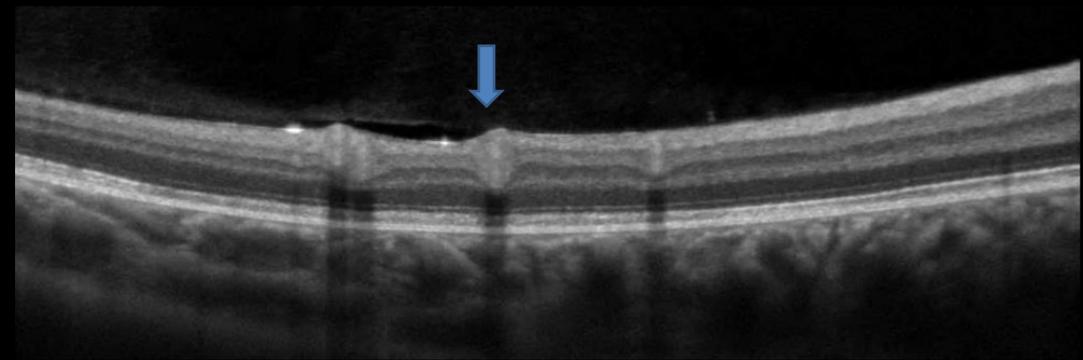


Punto di contatto tra l'articolo esterno dei fotorecettori e l'epitelio pigmentato retinico; è noto l'importanza funzionale di questo strato al punto che rappresenta un indicatore di prognosi chirurgica nel pucker maculare

Variazioni della riflettività



Vasi Retinici





Grazie per l'attenzione