

# COMPLICANZE IN CORSO DI MIOPIA

Miopia non significa soltanto  
portare un paio di occhiali



# MIOPIA

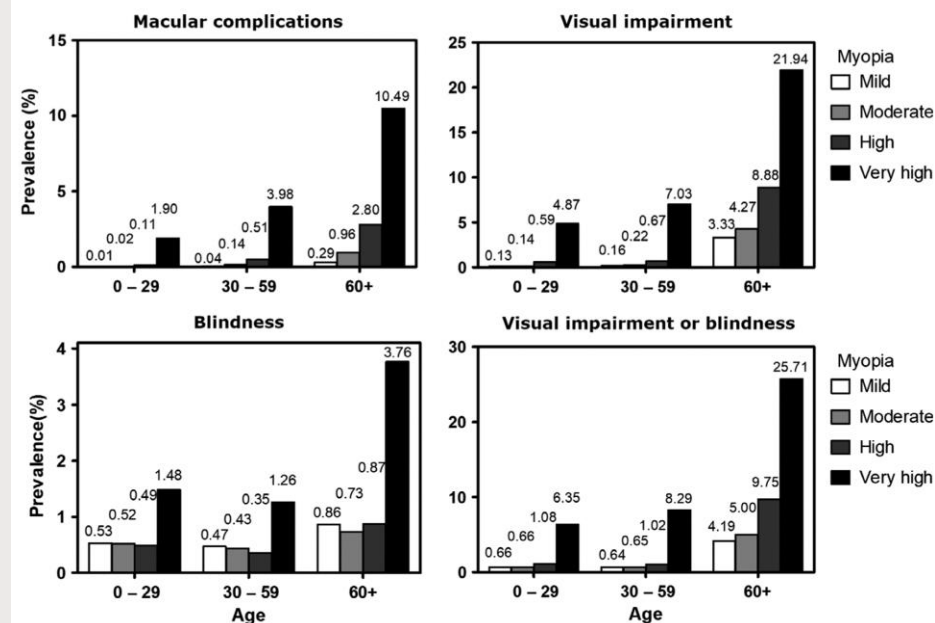
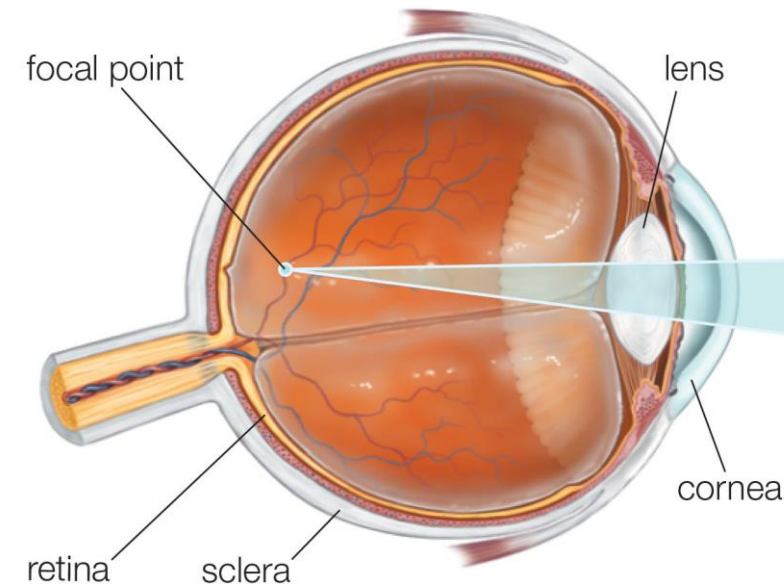
- MIOPIA: una delle principali cause di deficit visivo
- MIOPIA ELEVATA (O PATOLOGICA):  $SE \leq -6D$  o  $AL > 26.5$  mm

Assenza di un cut-off preciso: anche miopie lievi e moderate presentano un aumento del rischio di sviluppare patologie legate alla miopia

MIOPIA PATOLOGICA (PM) progressiva, precoce e con complicanze a carico di:

- *Segmento anteriore*: cornea, cristallino, cataratta, disturbi della motilità oculare
- *Segmento posteriore*: coroide, retina e nervo ottico

## Myopia (nearsightedness)



# INCIDENZA MIOPIA PATOLOGICA

- 0.3 - 4 % della popolazione generale
- 5 - 10 % dei miopi
- Aumentata prevalenza negli asiatici
- 1/3 dei miopi elevati è a rischio di ipovisione bilaterale in età avanzata

Review

## The Complications of Myopia: A Review and Meta-Analysis

Annechien E. G. Haarman,<sup>1,2</sup> Clair A. Enthoven,<sup>1,2</sup> J. Willem L. Tideman,<sup>1,2</sup> Milly S. Tedja,<sup>1,2</sup> Virginie J. M. Verhoeven,<sup>1-3</sup> and Caroline C. W. Klaver<sup>1,2,4,5</sup>

REVIEW ARTICLE

## Complications of Pathologic Myopia

*Bum-Joo Cho, M.D., Joo Young Shin, M.D., and Hyeong Gon Yu, M.D., Ph.D.*

**Acta Ophthalmologica**

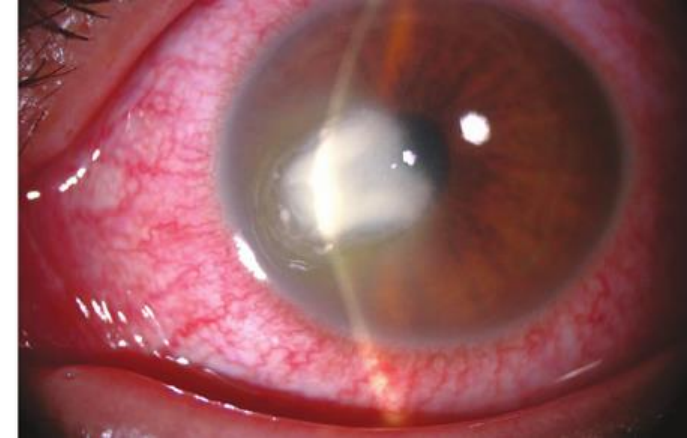
ACTA OPHTHALMOLOGICA 2020

## Prevalence of macular complications related to myopia – Results of a multicenter evaluation of myopic patients in eye clinics in France

Nicolas Leveziel,<sup>1,2,3,4,5</sup> Simon Marillet,<sup>2,6</sup> Quentin Dufour,<sup>1,2</sup> Olivier Lichtwitz,<sup>1,2</sup> Yacine Bentaleb,<sup>7</sup> François Pelen,<sup>7</sup> Pierre Ingrand<sup>4,6</sup> and Rupert Bourne<sup>5</sup>

# CORNEA E LENTI A CONTATTO

- Disepitelizzazione
- Ipoestesia
- CHERATITI INFETTIVE (Pseudomonas e Acanthamoeba)
- Educazione alla corretta gestione delle LAC è fondamentale

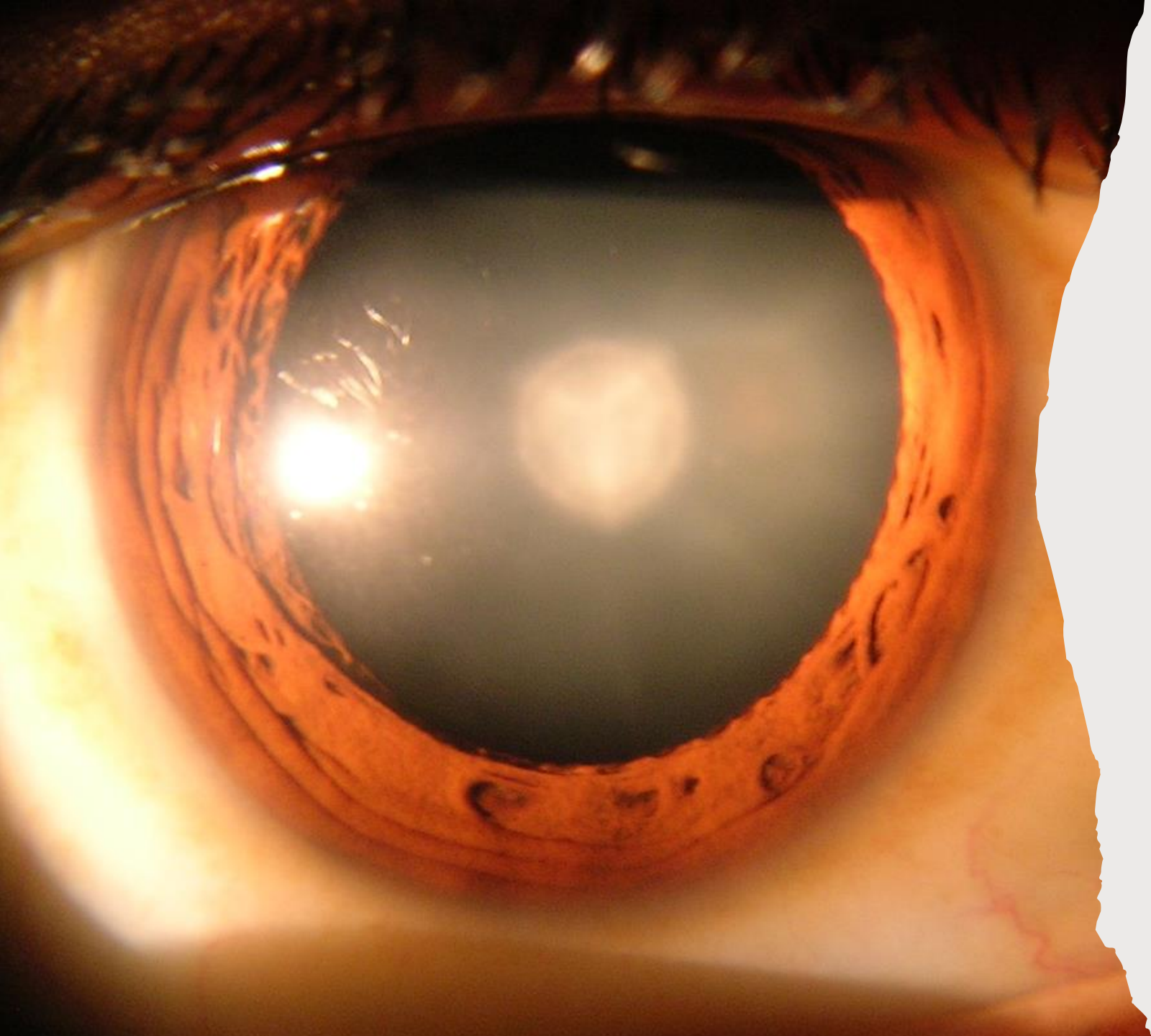




# PROPTOSI E MOTILITÀ OCULARE

- Heavy eye phenomenon
- Esotropia e ipotropia
- Ultimo stadio: strabismo fisso





# CATARATTA

## TIPOLOGIE

- Reale associazione con PSC
- Nucleare: dovuto a shift miopico da sclerosi del cristallino, non fattore di rischio indipendente

## RISCHI

- Chirurgia più complessa
- Lieve aumento del rischio di RD, ma associazione non confermata



The image consists of four circular fundus photographs arranged in a 2x2 grid, showing the progression of macular degeneration. The top-left image shows a normal fundus with a clear macula. The top-right image shows early-stage disease with small, dark drusen deposits. The bottom-left image shows intermediate-stage disease with larger, more numerous drusen and some pigmentary changes. The bottom-right image shows advanced-stage disease with large, confluent drusen and significant retinal pigment epithelium atrophy. The text 'MACULOPATIA MIOPICA' is centered in white, serif font across the middle of the images.

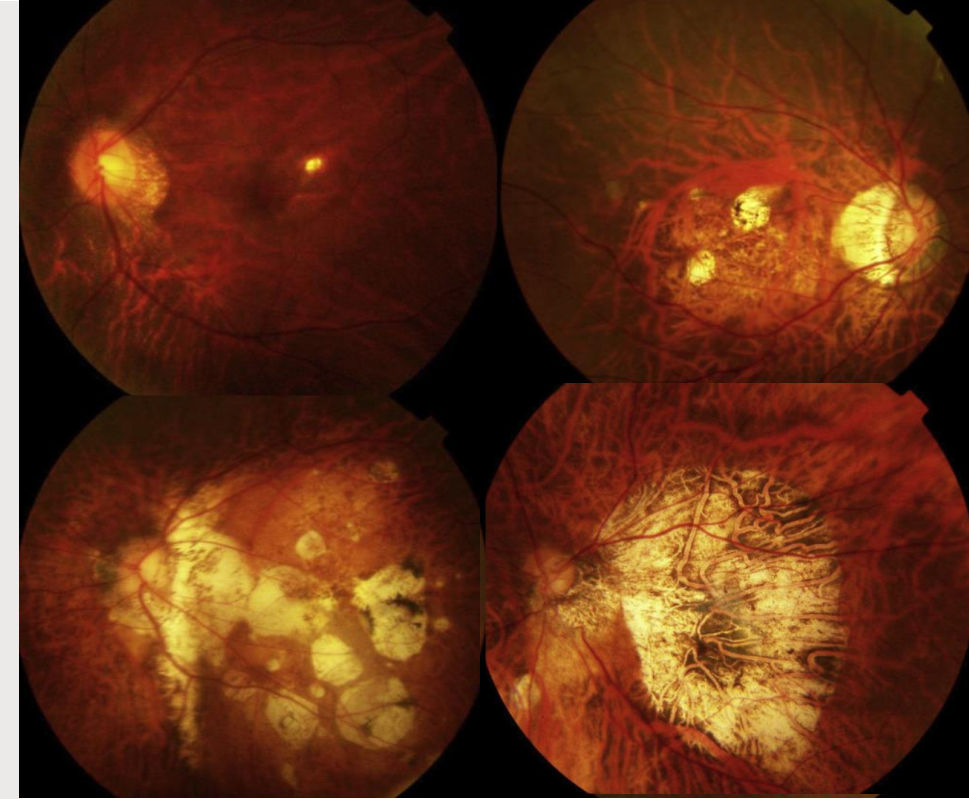
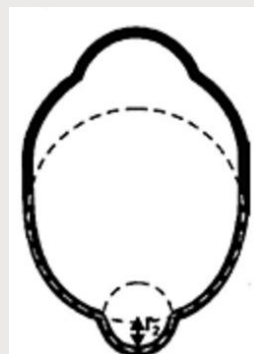
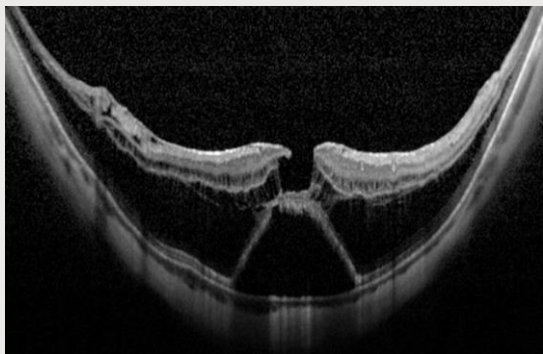
MACULOPATIA MIOPICA

# MACULOPATIA MIOPICA

La degenerazione maculare miopica (MMD) è una delle principali cause di deficit visivo e cecità legale nel mondo, specialmente nell'Asia dell'Est

L'allungamento del bulbo determina alterazioni delle strutture oculari posteriori:

- Stafiloma
- Lesioni retiniche e coroideali
- Maculopatia trazionale miopica



**TABLE 2.** Proposed Classification of Myopic Maculopathy<sup>a</sup>

	Myopic Maculopathy	"Plus" Lesions
Category 0	No macular lesions	
Category 1	Tessellated fundus	Lacquer cracks (Lc)
Category 2	Diffuse chorioretinal atrophy	+ Choroidal neovascularization (CNV)
Category 3	Patchy chorioretinal atrophy	Fuchs spot (Fs)
Category 4	Macular atrophy	

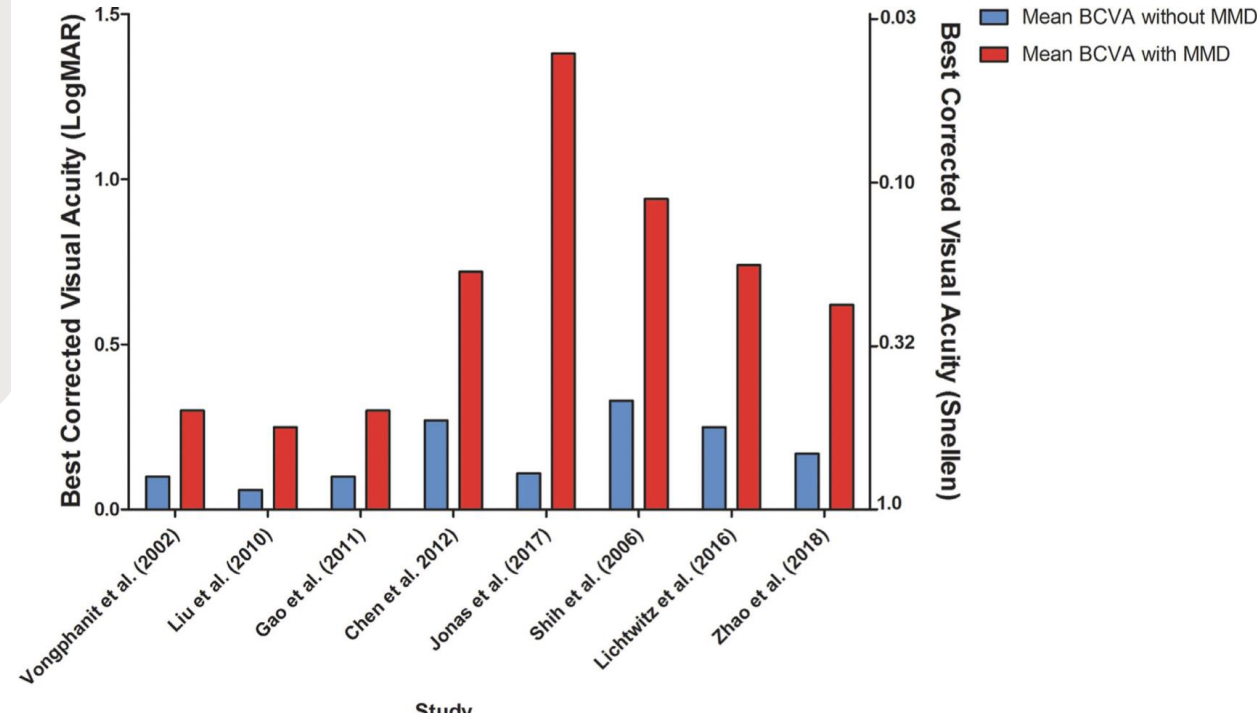
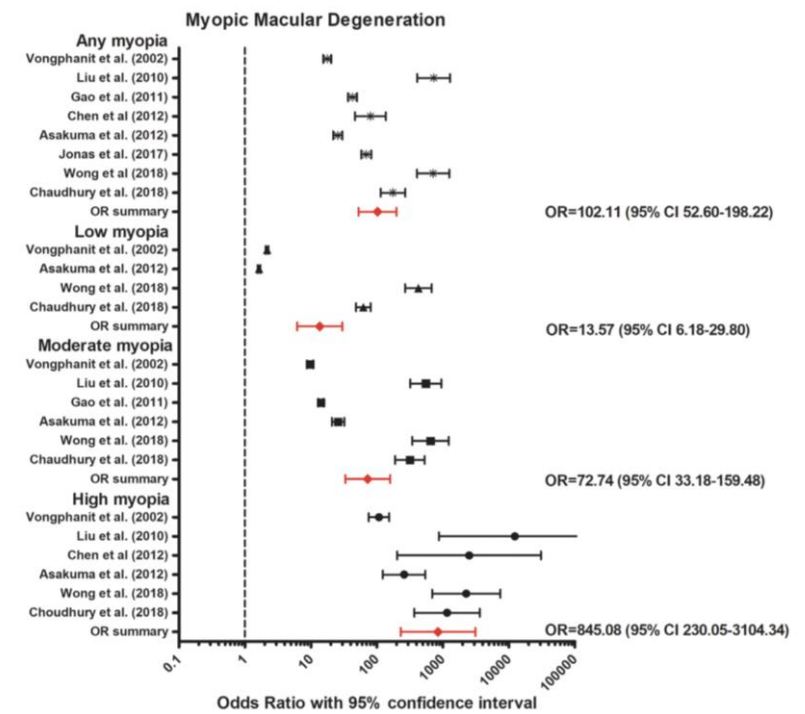
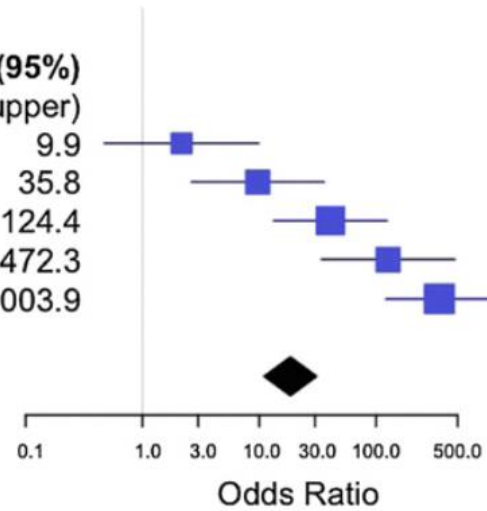


# MMD: PREVALENZA E VISUAL BURDEN

## Myopic Maculopathy Vongphanit et al.

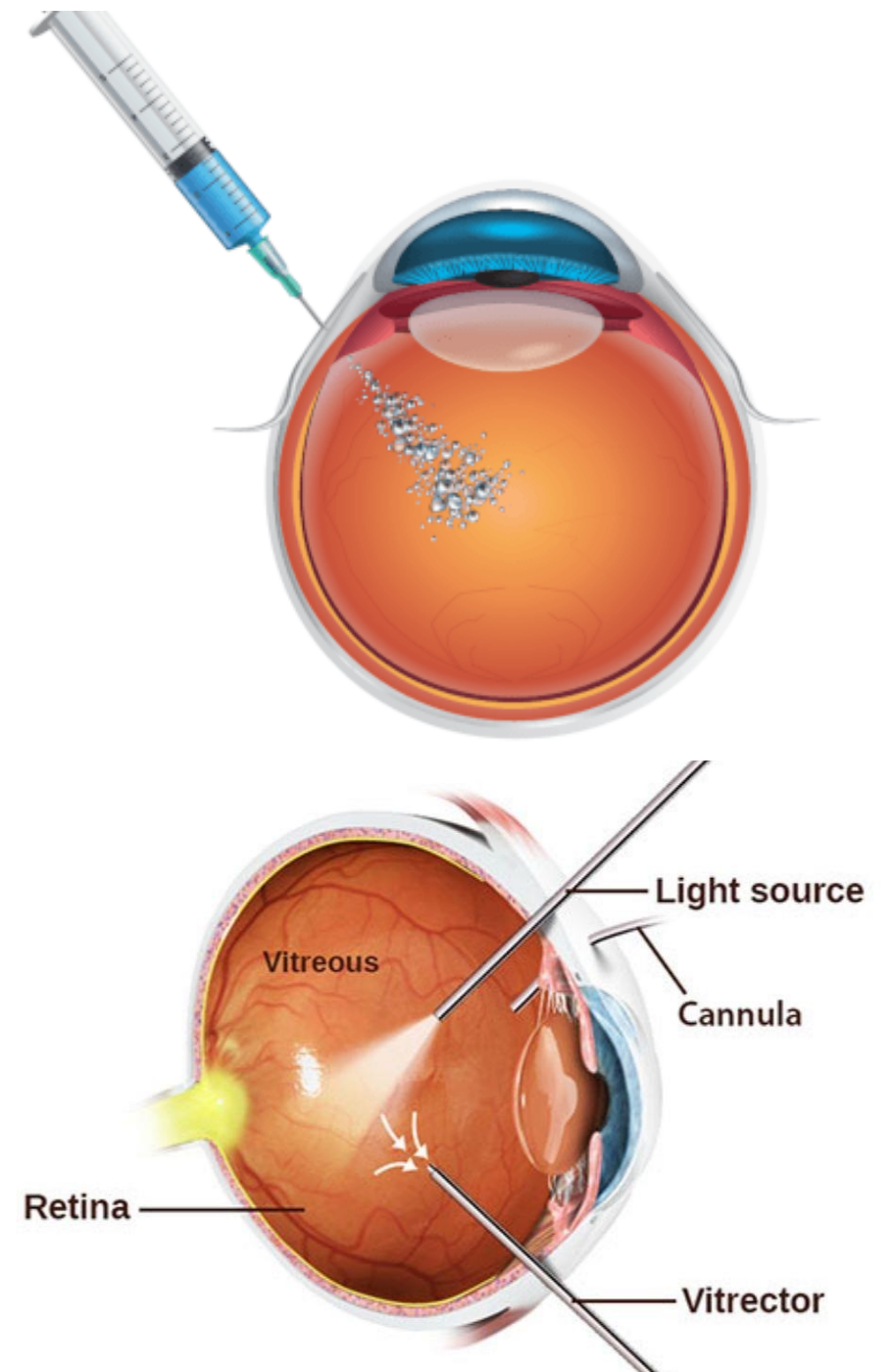
	OR	CI (95%) (lower) (upper)
-1.0 to -2.99D	2.2	0.47 9.9
-3.0 to -4.99D	9.7	2.63 35.8
-5.0 to -6.99D	40.6	13.27 124.4
-7.0 to -8.99D	126.8	34.02 472.3
<=-9.0D	348.6	121.05 1003.9

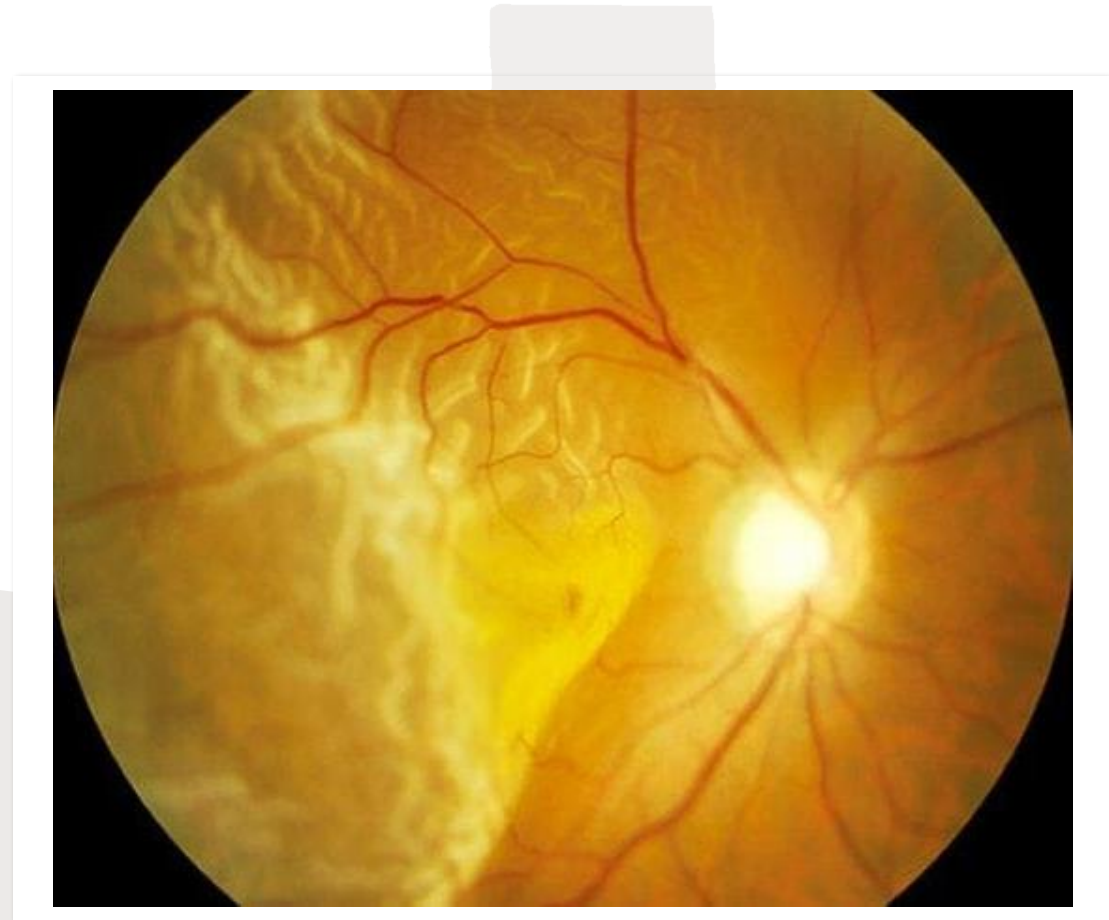
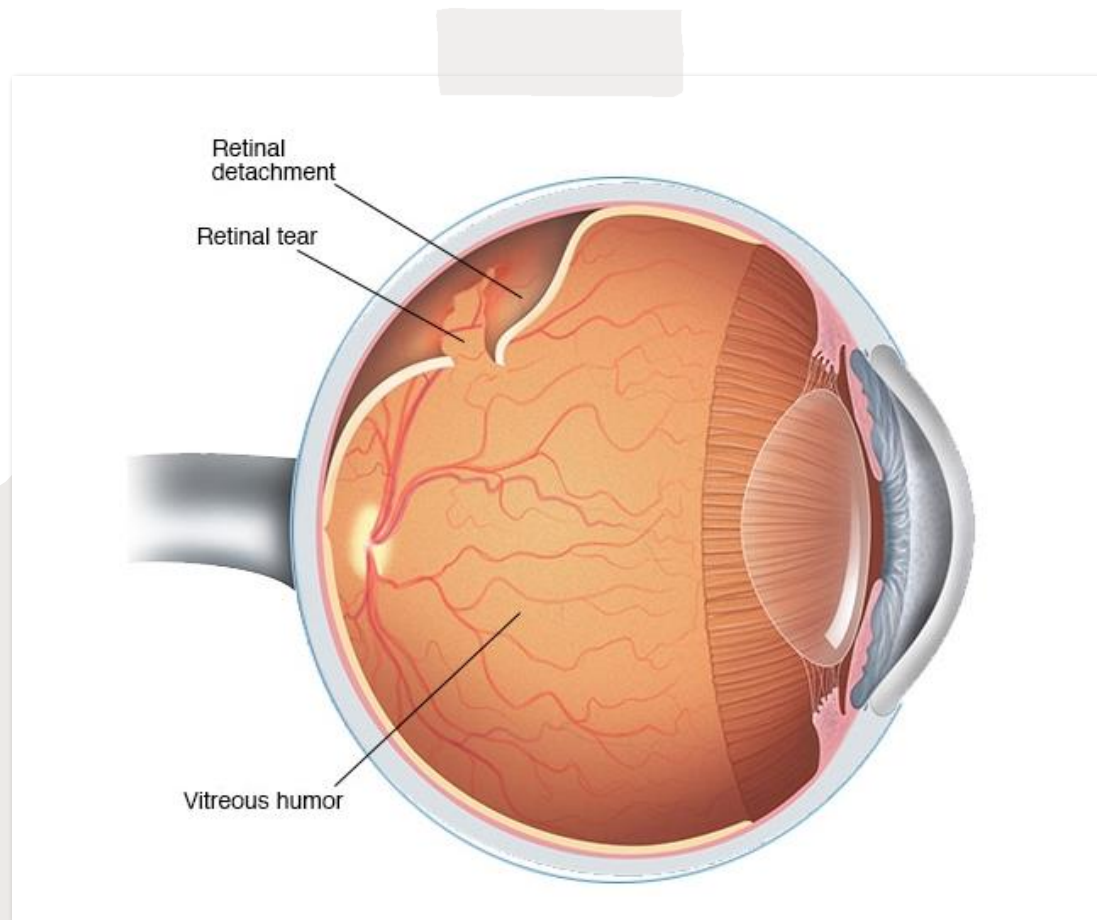
**Any Myopia** **18**



# MMD: TRATTAMENTO

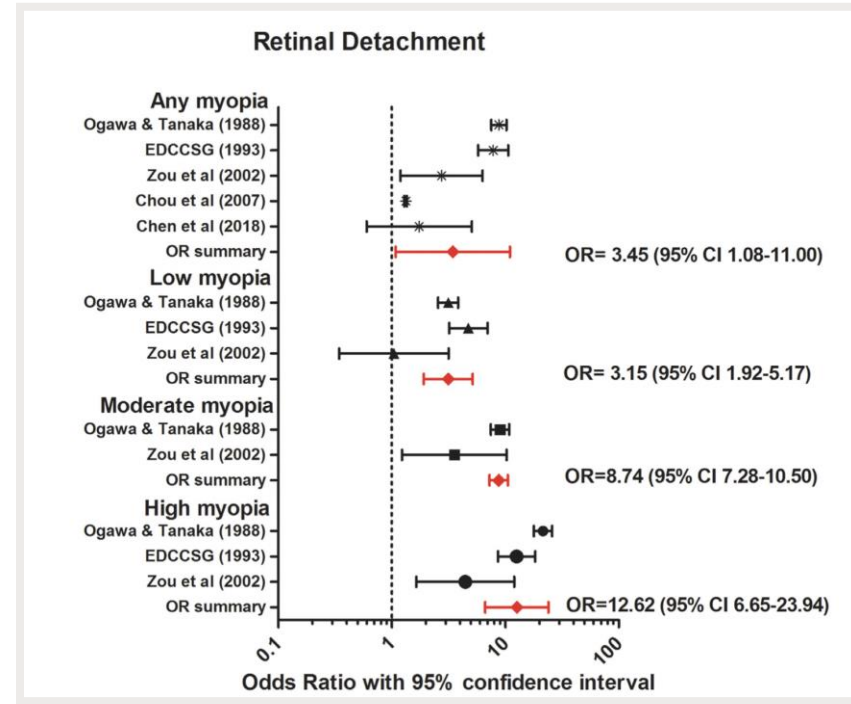
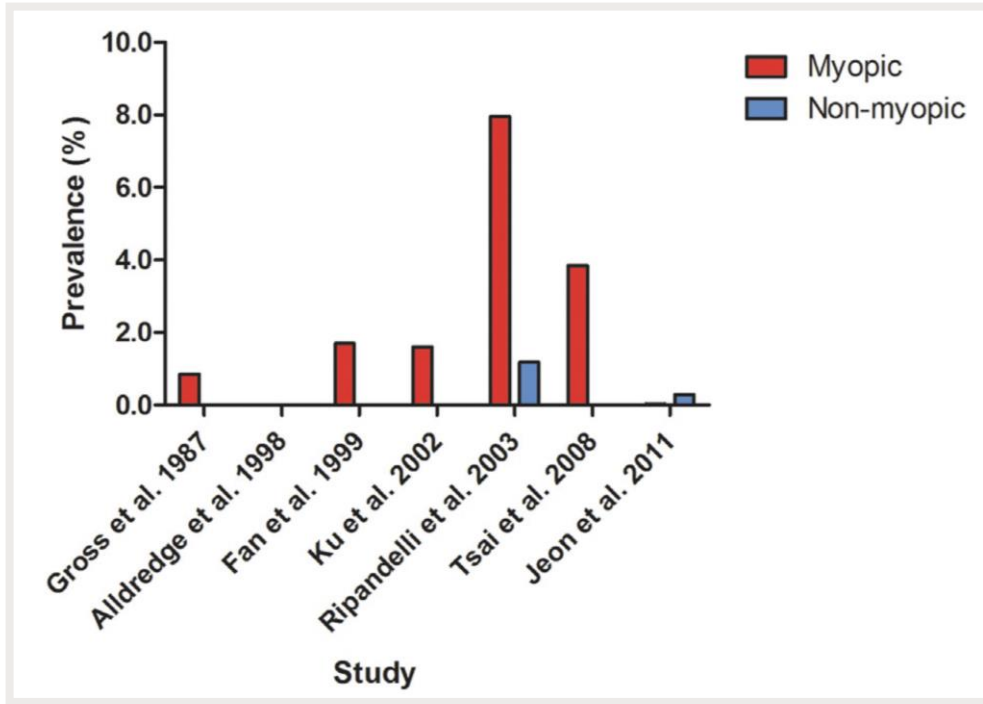
- Atrofia maculare: nessuna strategia terapeutica veramente efficace
- CNV attiva: IV antiVEGF (Vascular Endothelial Growth Factor)
- Maculopatia trazionale miopica (maculo/foveoschisi): vitrectomia via pars plana associata a peeling MER e ILM



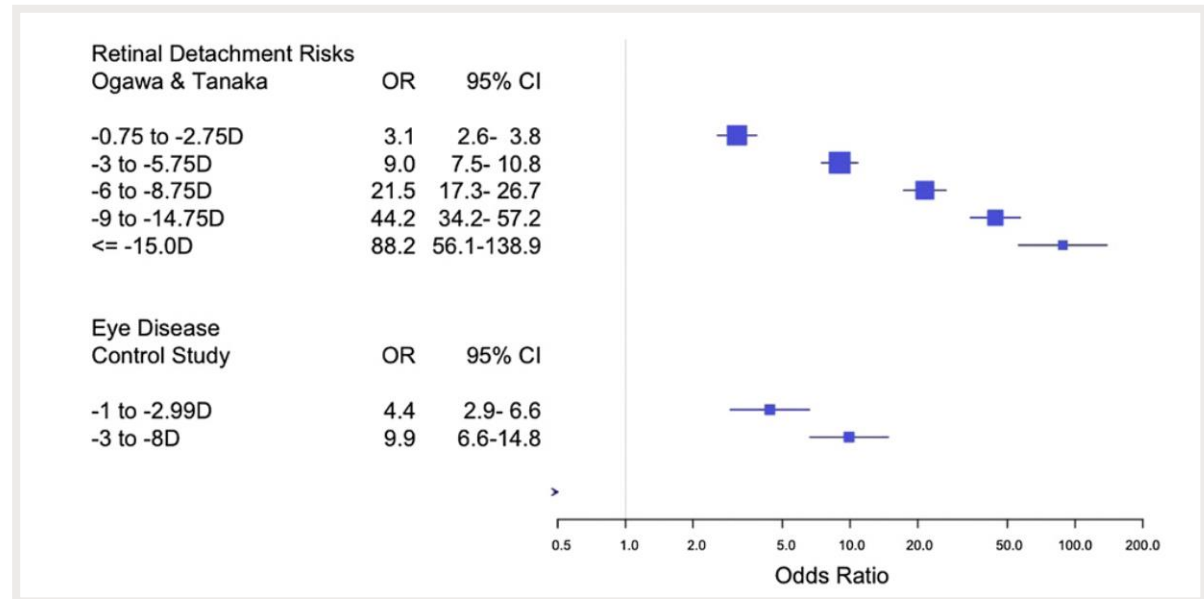


# DISTACCO DI RETINA

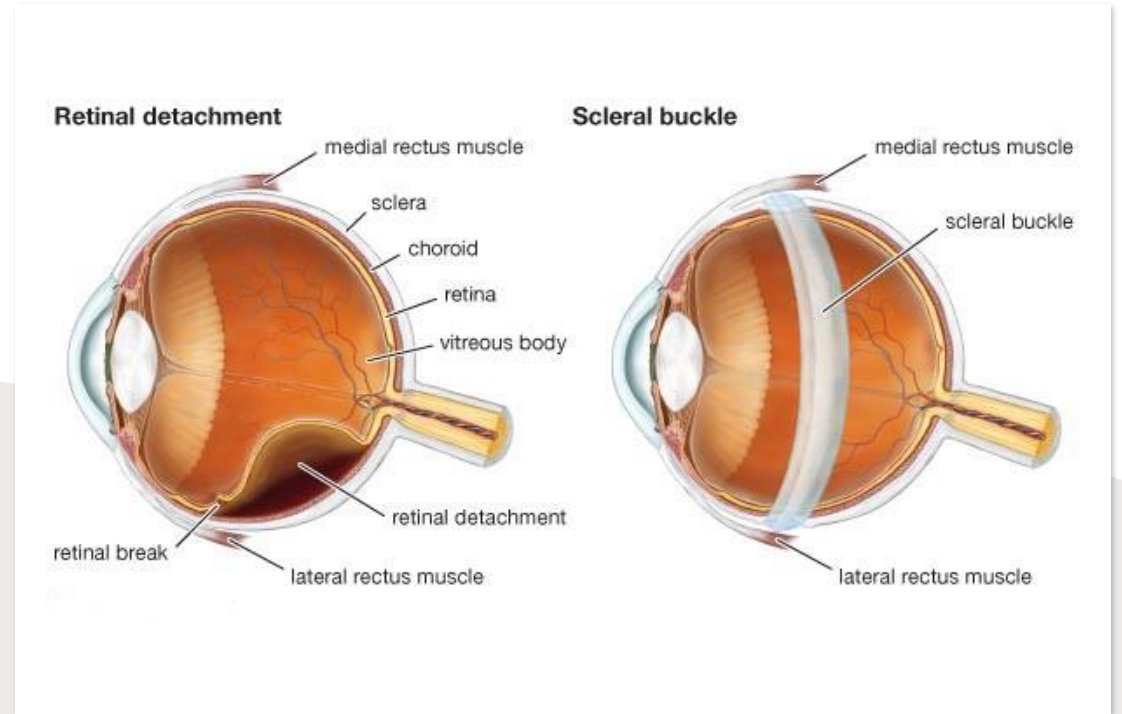
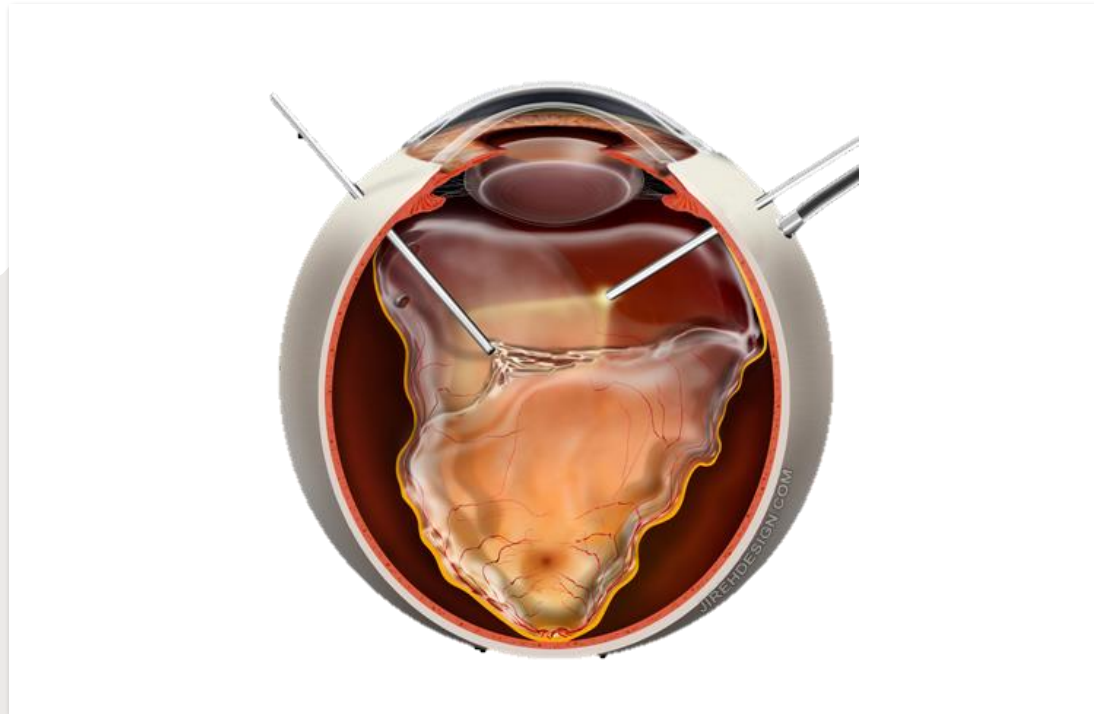




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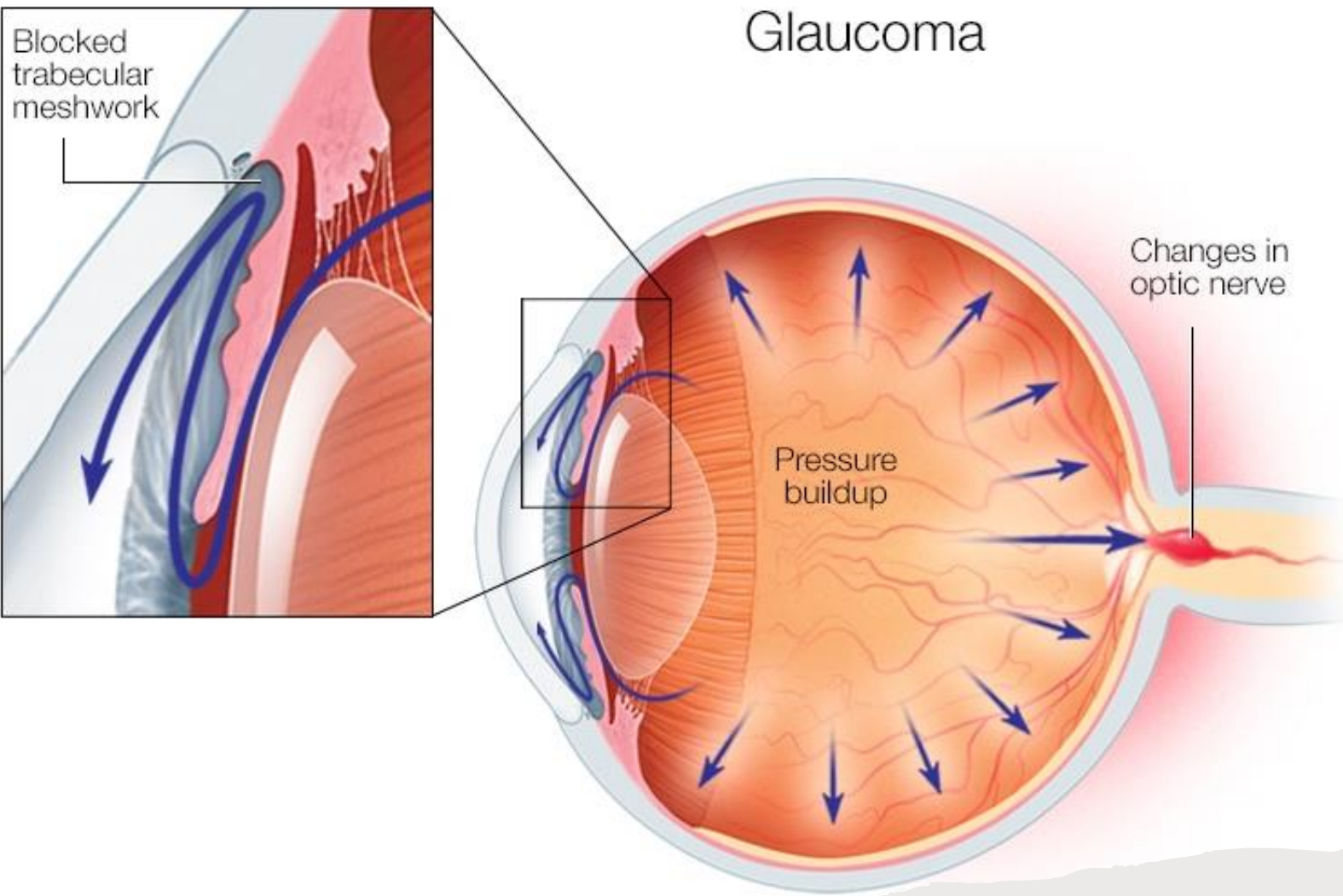


# DISTACCO DI RETINA: TRATTAMENTO



Due principali terapie:

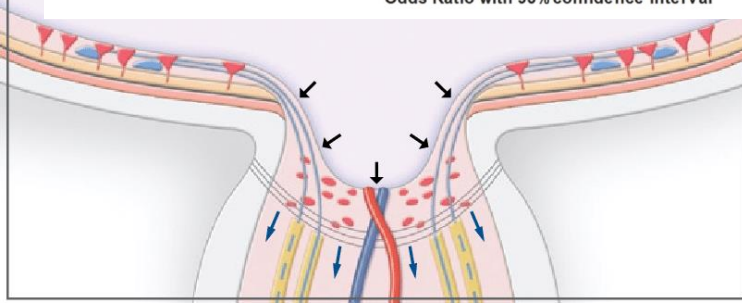
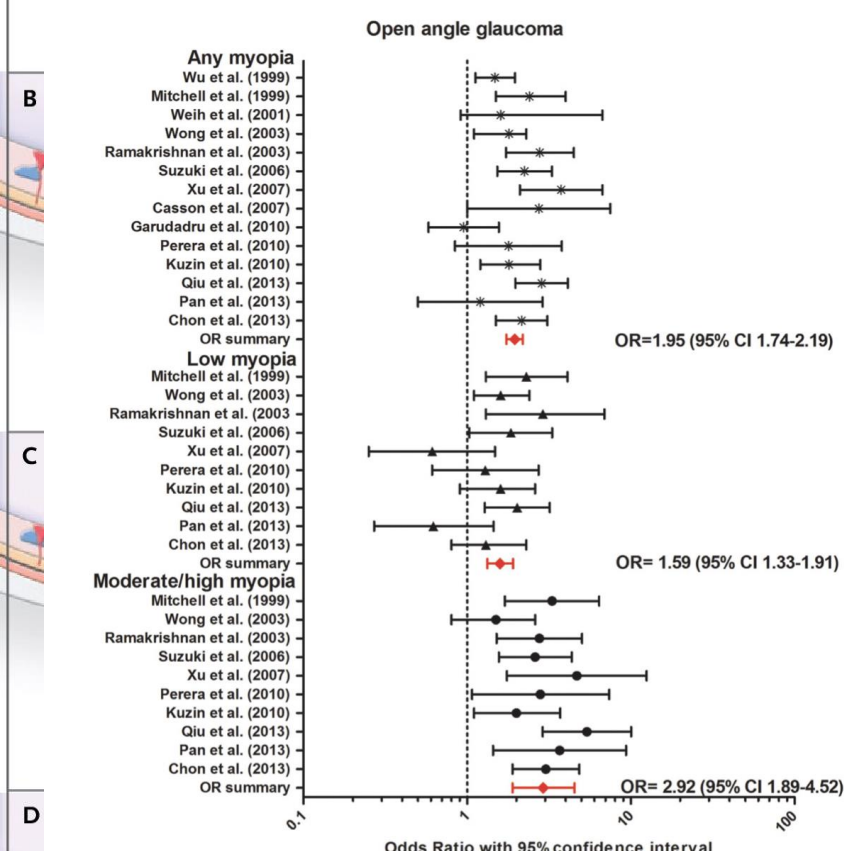
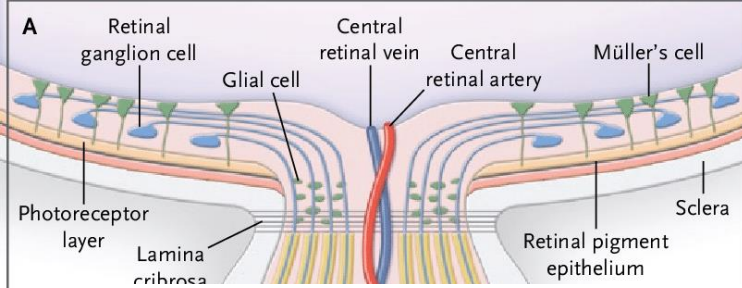
- Vitrectomia via pars plana associato a mezzo tamponante
- Cerchiaggio



GLAUCOMA AD ANGOLO APERTO



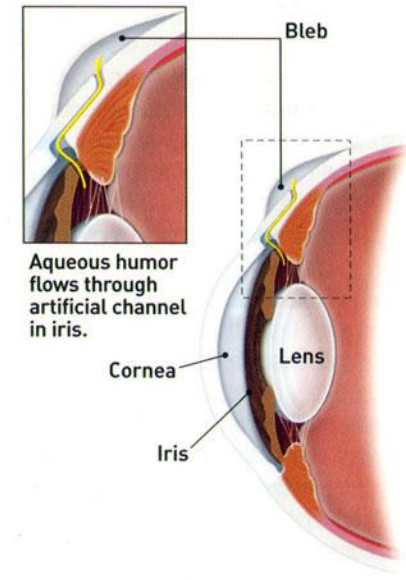
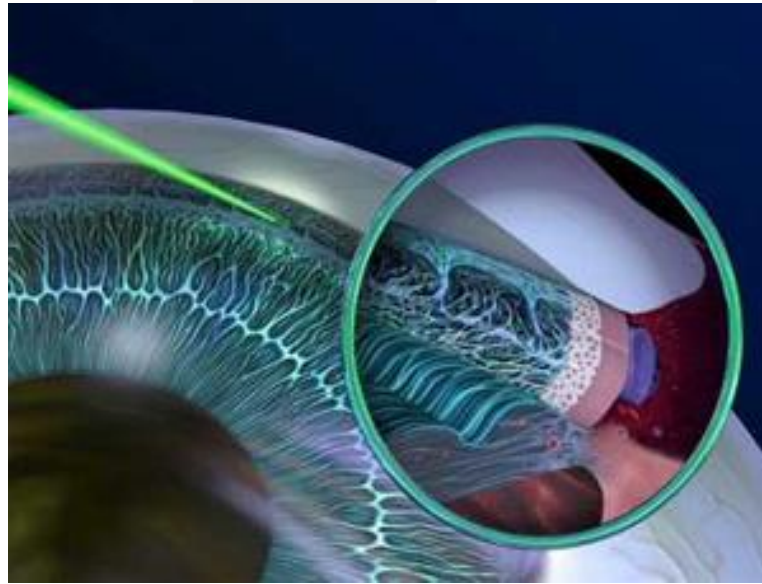
# GLAUCOMA AD ANGOLO APERTO



Fattori di rischio principali:

- Pressione intraoculare (unico fattore modificabile)
- Età avanzata
- Origini afro-americane
- Miopia elevate

Incidenza glaucoma proporzionale alla severità della miopia



# GLAUCOMA: TRATTAMENTO

# CONCLUSIONI



La miopia è un importante problematica di salute pubblica



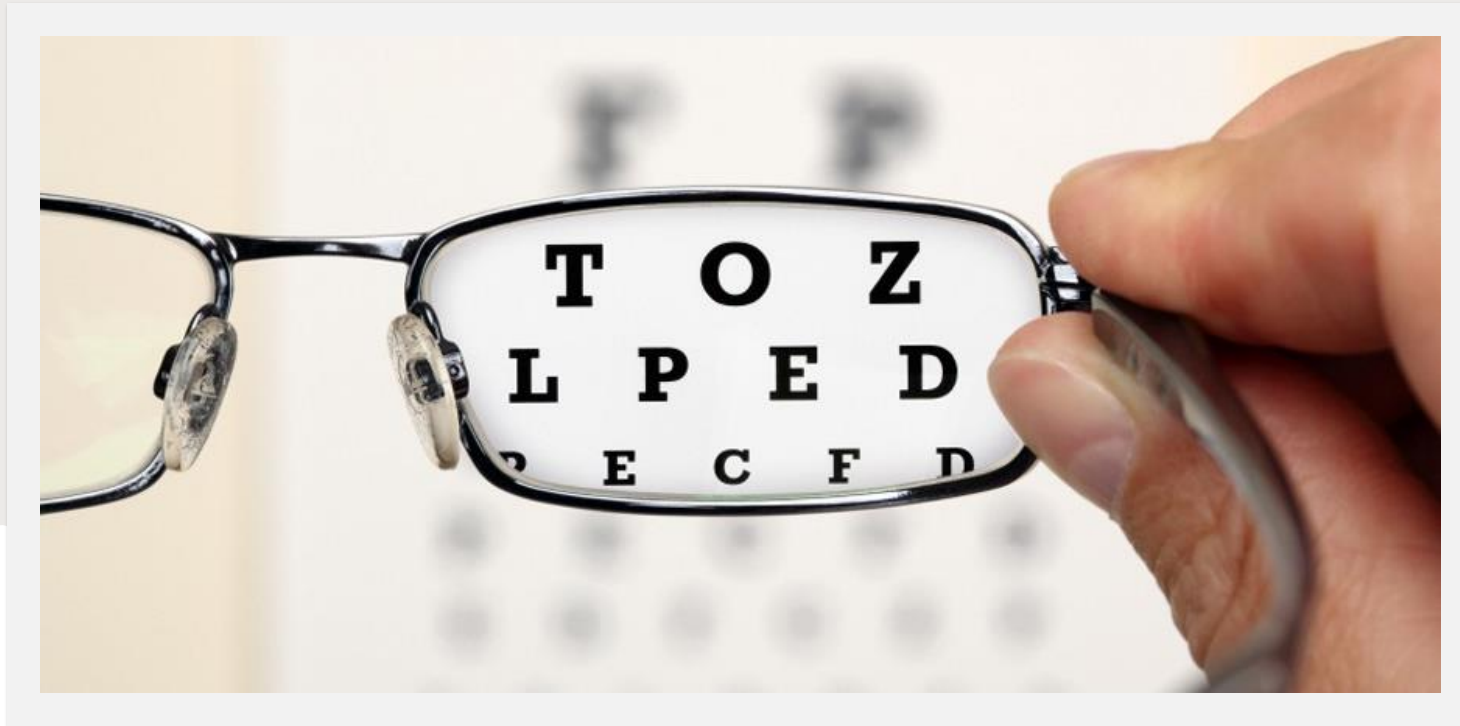
Le complicanze dovute alla miopia (di qualunque grado) possono causare danni irreversibili a numerose strutture oculari



La severità della miopia è proporzionale alla probabilità di sviluppare complicanze, ma non esiste una soglia specifica al di sotto della quale non si sviluppano più complicanze



GRAZIE PER L'ATTENZIONE



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