



Giza Memorial Institute  
For Ophthalmic Research (MIOR)



# A rare case of steroid-induced glaucoma

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19<sup>TH</sup> ANNUAL CONGRESS OF THE  
EGYPTIAN SOCIETY FOR THE  
*Glaucomas* ESG 2019

# No Financial Interests

- **8-year old child (Aswan)**
- **Recurrent respiratory tract infections**
- **Redness, tearing and eyelid forced closure**
- **Lesion (Membrane??)**

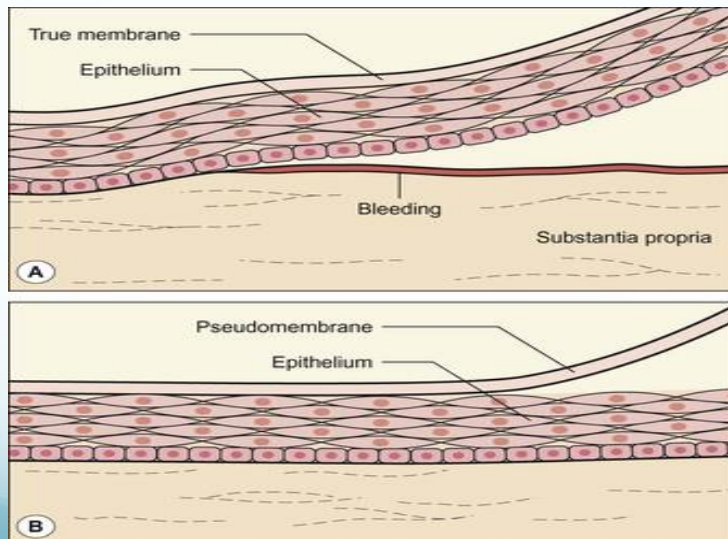


- **Thickening of upper and lower lids bilaterally**

- Prednisolone acetate ED (stopped)
- Gatifloxacin ED
- Nepafenac ED
- Carboxymethylcellulose-hypromellose EO
- Combined Brinzolamide-Timolol maleate ED
- Brimonidine ED
- Travoprost ED



- Bilateral Membranous conjunctivitis (Palpebral conjunctiva)
- True versus pseudo-membrane?



Entokey.com/conjunctiva/

- Corneal ulcers and erosions
- VA: 3/60 (doesn't correct) OU
- IOP: 32 mm Hg on max tolerated meds OU
- CD ratio: 0.9 OU



Steroid induced  
glaucoma  
to  
Ligneous conjunctivitis

## Clinical and histopathological aspects in two cases of ligneous conjunctivitis.

Mocanu CL, et al. Rom J Morphol Embryol. 2016.

[Show full citation](#)

### Abstract

Ligneous conjunctivitis represents a very rare form of chronic membranous conjunctivitis, with unknown etiology; **less than 200 cases** have been reported in the literature, most of them in infants and children. After 40 years, this condition appears in exceptional circumstances.

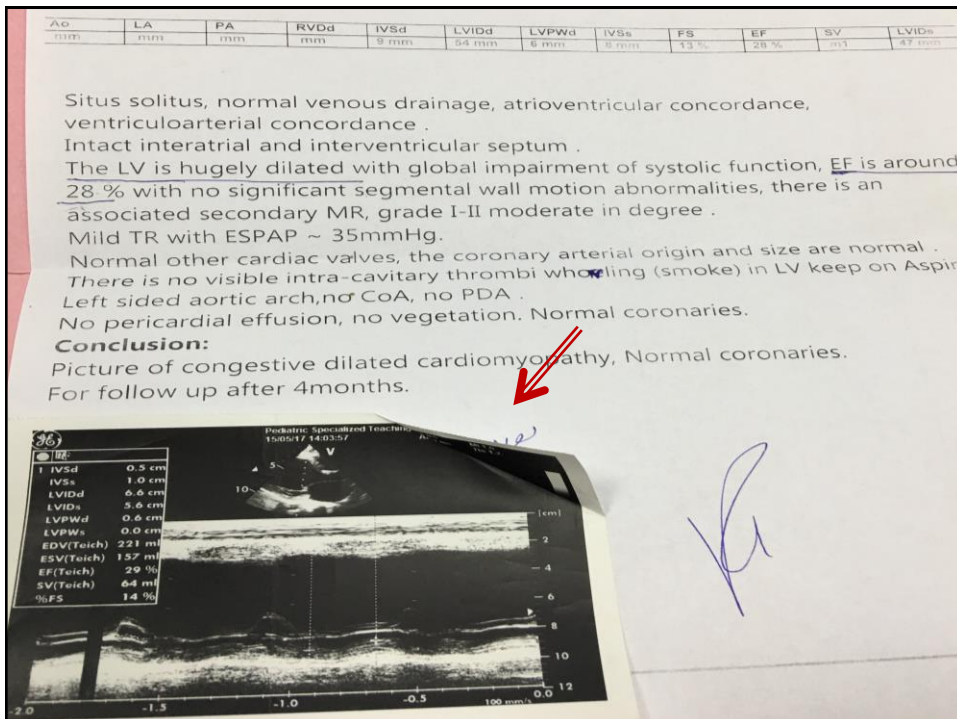
- Rare
- Chronic conjunctivitis
- Bilateral
- Wood-like fibrin-rich pseudomembrane
- **Sight-threatening?**

(Glaucoma, Corneal scarring, vascularization, infection or melting)

# Systemic manifestations

Development of ligneous membranes on mucosal surfaces

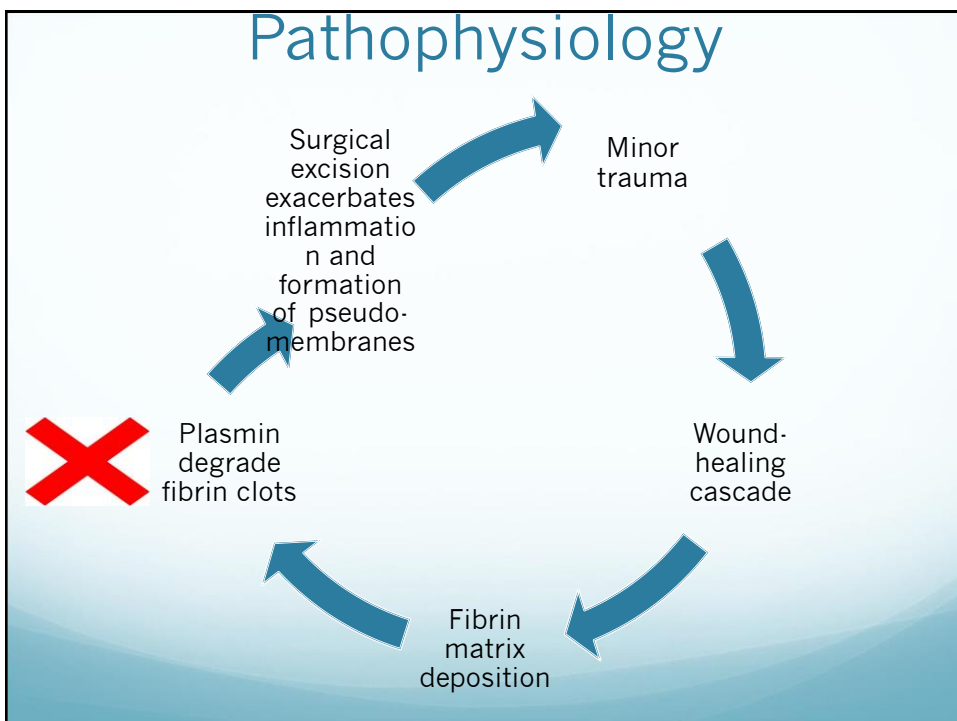
- Periodontal tissue
- Middle ear
- Tracheo-bronchial tract
- Kidneys
- Female genital tract
- Associated with hydrocephalus
- Life-threatening??



## Etiology

- Mutations in plasminogen (PLG) gene
- Deficiency in plasmin-mediated fibrinolysis (Type 1 plasminogen deficiency)

## Pathophysiology



# Decision??

## Options

- Laser Trabeculoplasty
- Trabeculectomy or deep sclerectomy
- GDDs
- Cyclodiode



- Surgical removal of the Ligneous membranes followed by amniotic membrane transplantation with hourly HEPARIN eye drops.
- Micropulse transscleral Diode laser cyclophotocoagulation

( MP-TSCPC)



## Follow-ups

Day	IOP (mm Hg)
1	18
8	13

## Take home message

- Ligneous conjunctivitis is a sight- and life-threatening disease.
- Variable treatment options are available but with high recurrence rates.
- A novel technique of Surgical excision with amniotic membrane transplantation followed by topical heparin may be the most effective.
- MP-TSCPC is an efficient noninvasive glaucoma ttt that achieves sustained IOP reduction.

Thank you

*Dr. Nader Montaz*