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A Challenging Case

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No Financial Interests

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

- Lesion (Membrane??)



- Thickening of upper and lower lids bilaterally

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Meds

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

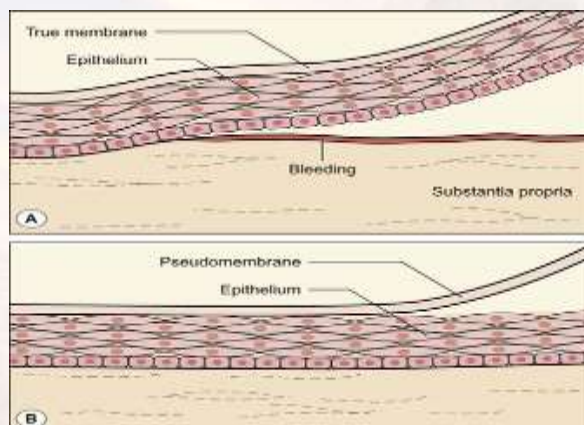
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- Bilateral Membranous conjunctivitis (Palpebral conjunctiva)
- True versus pseudo-membrane?



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Entokey.com/conjunctiva/

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- 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



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Steroid induced glaucoma to Ligneous conjunctivitis

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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.

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- Rare
- Chronic conjunctivitis
- Bilateral
- Wood-like fibrin-rich pseudomembrane
- **Sight-threatening?**
(Glaucoma, Corneal scarring, vascularization, infection or melting)

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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??

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LA	PA	RVDA	RVRA	LVDA	LVPWA	IVCA	FS	EF	SV	LVIDS
mm	mm	mm	mm	mm	mm	mm	%	%	ml	mm
40	30	30	20	40	10	10	12	28	100	57

Situs solitus, normal venous drainage, atrioventricular concordance, ventriculoarterial concordance .
Intact interatrial and interventricular septum .
The LV is hugely dilated with global impairment of systolic function. EF is around 28 % with no significant segmental wall motion abnormalities, there is an associated secondary MR, grade I-II moderate in degree .
Mild TR with ESPAP = 35mmHg.
Normal other cardiac valves, the coronary arterial origin and size are normal .
There is no visible intra-cavitary thrombi whorling (smoke) in LV keep on Aspirin .
Left sided aortic arch, no CoA, no PDA .
No pericardial effusion, no vegetation, Normal coronaries.

Conclusion:
Picture of congestive dilated cardiomyopathy. Normal coronaries.
For follow up after 4months.

Handwritten signature: *[Signature]*

LA	PA	RVDA	RVRA	LVDA	LVPWA	IVCA	FS	EF	SV	LVIDS
40	30	30	20	40	10	10	12	28	100	57

Etiology

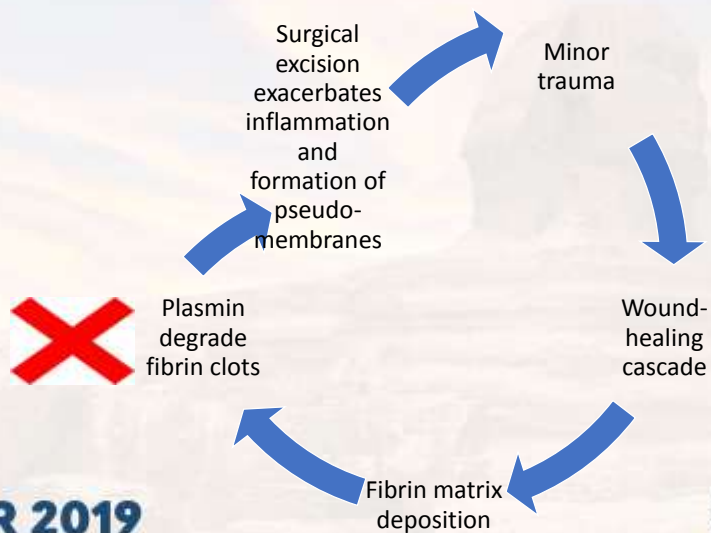
- Mutations in plasminogen (PLG) gene
- Deficiency in plasmin-mediated fibrinolysis
(Type 1 plasminogen deficiency)

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Pathophysiology



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Decision??

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Options

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

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

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Follow-ups

Day	IOP (mm HG)
1	15
8	13

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Take home message

- Ligneous conjunctivitis is a sight- and life-threatening disease.
- 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.

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Thank you

Dr. Nader Montaz