A CASE OF CHRONIC CONJUNCTIVITIS

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Lecture Objectives

- To share and review the different types of eye conditions that can cause chronic conjunctivitis with learning points from a case presentation and other various references.

- To discuss different diagnostic and therapeutic methods for patients with various forms of chronic conjunctivitis.
HPI: A 23 year old Hispanic male who presented to our clinic on 1/07/13 with complaints of a left red eye which started approximately 20 or so days prior and recently felt as though it was worsening for him. He also complained of some scant, purulent discharge, which when he would wake in the morning would have his eye matted shut. There were no other major ocular or systemic symptoms, other than some mild photo sensitivity and a headache which he felt was related to the red eye.

PMH: Healthy, no past history of any major illnesses.

PSH: No past surgeries that he can remember.

Social History: EtOh occasionally. He currently works as a painter with his cousin. He doesn’t recall any prolonged contact to any new chemicals/vapors etc.

Allergies: No medication or other history of allergic reactions to anything he has ever noticed.
Ocular History

- **POMH**: Myopia/astigmatism (-3.25 + 1.50 x120/-4.25 + 1.00 x055) although he has never worn glasses or contacts.

- **POSH**: He denies any history of ocular surgery.

- **Ocular Rx**: In the past week he has been using Visine p.r.n. (up to 6-7x/day) which hasn’t helped at all.

- **Ocular Fm/Contact Hx**: No one in his family has ever had any eye problems in the past and he denies any sick contacts with similar eye symptoms to his.
Ocular Examination

- \( V_{\text{asc}} \):
  - Pinhole 20/50 \( \rightarrow \) 20/30
  - 20/80 \( \rightarrow \) 20/60
  - Full

- \( T_T \):
  - 12 \( \rightarrow \) Full

- \( \text{MB} \): Full

- Pupils:
  - Ortho in primary gaze
  - 4mm \( \rightarrow \) 2mm
  - 4mm \( \rightarrow \) 2mm

- RAPD: None

- CVF: Full

- MRx: Not attempted
Ocular Examination (Cont.)

- **External:** No noted skin or orbital rim abnormalities, no tenderness to palpation.

- **Lids/Lashes/Lacrimals:** Some very minimal ptosis of the left upper eyelid noted. Trace edema of both upper and lower eyelids OS.

- **Conj/Sclera:** White/quiet OD, 3+ large sized follicular conjunctival reaction in left lower palpebral conjunctiva, much less of a response in the upper palpebral conjunctiva, 2+ injected bulbar conjunctiva OS.

- **Cornea:** Clear, no fluorescein uptake OD, 1+ sub-epithelial infiltrates seen scattered inferiorly OS.

- **Anterior chamber:** Deep and quiet OU

- **Irides:** Flat, round and brown

- **Lenses:** Clear, no opacities noted OU

- **Vitreous:** Clear OU

- **Posterior Pole:** Nerve pink and healthy, macula flat and normal FLR, vessels normal course and caliber OU

- **Peripheral Retina:** No holes/tears, flat and unremarkable OU
Differential Diagnosis? Tests you might order?
Differential Diagnosis

- **Conjunctivitis** (infectious, toxic, etc.)
- **Foreign body lower conjunctiva** (Looked and moved tissue around extensively and swept both upper and lower fornices, nothing seen anywhere)
- **Conjunctival lymphoma** (didn’t have the appearance of lymphoma, however lymphoma can mimic follicular conjunctivitis)
- **Parinaud Oculoglandular Syndrome** (No fever or systemic complaints, no obvious swollen lymph nodes)
- **Unilateral Contact Lens Wear**  Not a papillary conjunctival reaction with this patient though
Due to the *odd appearance and chronicity* of his conjunctivitis, I first ordered a urine test for chlamydia, which showed: **Positive for chlamydia trachomatis** by Amplified DNA Probe.

By the patient’s second visit, he had already begun improving some and actually had some mild pre-auricular lymph nodes and more of an EKC “viral conjunctivitis” appearance. Nevertheless, because of the positive urine test result, the patient and his wife were both given 100 mg Doxycycline (cheap) p.o. b.i.d. for seven days and improved quickly soon after.
What Defines Chronic Conjunctivitis?

*Any conjunctivitis that lasts >3 weeks is classified as being chronic.*

In order to successfully treat a case of chronic conjunctivitis, clinicians need to be able to correctly diagnose the conjunctivitis first. In order to do this, an algorithm, which contains four different categories, can be followed.

**The four categories are:**
1) Time course
2) Morphology
3) Localization of the disease process
4) Type of discharge/exudate
Chronic Conjunctivitis
Morphology

Divided into four categories:

1. Giant papillary
2. Follicular
3. Membranous
4. Cicatrizing
Papillary & Giant Papillary Conjunctival Reaction
Giant Papillary Conjunctivitis
Follicular Conjunctival Reaction

Dome shaped, conjunctival elevations composed of aggregations of mononuclear inflammatory cells within lymph nodes, surrounded by circumferential blood vessels.
Ligneous Conjunctivitis
Ocular Cicatricial Pemphigoid
Unilateral Causes of Conjunctivitis

1. Chronic lacrimal drainage infections (dacryocystitis, canaliculitis)
2. Giant fornix syndrome
3. Masquerade syndrome (e.g. sebaceous cell carcinoma)
Giant Fornix Syndrome

- Chronic/recurrent mucopurulent conjunctivitis which occurs in older persons (80 and up.)
- Happens due to deep superior sulcus (age related dehiscence of levator aponeurosis.)
- Cultures almost always contain S. Aureus.
- Best treatment is with forniceal sweeping followed by instillation of povidone iodine and supratararsal injections of antibiotics and steroids.
Masquerade Syndrome

Most common cause of masquerade syndrome causing unilateral conjunctivitis is sebaceous carcinoma
Types of Exudate

1. Purulent
2. Watery
3. Mucopurulent (catarrhal)
4. Mucoid exudate
What were some learning points from this case?

- If you don’t look for something, you won’t find it.
- There are a lot of different causes of conjunctivitis, don’t look at every case of conjunctivitis as being viral, especially if it is chronic/unilateral.
- Don’t be afraid to ask patients difficult questions, remember they are coming to you for help.
- While this conjunctivitis may not have been from chlamydia, the patient and his wife were very grateful to us for catching it and treating them.
- We are trained both as physicians and eye specialists, don’t forget to think systemically with every patient. The eye is a window into the body.
References

- Stern, GA “Chronic Conjunctivitis Parts 1 + 2” Focal Points Clinical Modules for Ophthalmologists; V. XXX, Number 11, Nov 2012.