

## CASE RECORD :Sterile, Viral, Bacterial Keratitis

You are presenting this case on behalf of a colleague. Chatham House rules apply but the patient and practitioners are not present. You must facilitate a discussion about the case.

Try and encourage the group to explore:

1. Sjogrens general considerations
2. Differential Diagnoses
3. The risk factors of sterile, bacterial and viral keratitis
4. Varying presentations of corneal ulcers and challenges of diagnosing based solely on clinical presentation
5. What considerations may influence management strategies
  - a. Size, location, duration, AC reaction, Immunocompetence, Hospital vs Community acquired
6. What are the 2 (or 3) primary reasons management options fail
  - a. Misdiagnosis, Under Treatment, (less than meticulous follow-up)
7. To consider multi-dose therapy both via acute treatment in optometrists and revised general treatment if HES (steroid, lid hygiene, systemic antibiotic)
8. The importance of increasing our armoury of confidence, skills and therapeutic agents
9. The need to take a comprehensive medical case history
10. The need to have immediate access to e resources to consider drug interactions and ADRs.
  - a. The importance of meticulous follow-up
  - b.
- 11. Vital educational value of Clinical Outcome Audits to hone skills and confidence**

The goal is to consider our evolving roles and responsibilities. The realisation a diagnosis is simply the best hypothesis and management may change in light of evolving evidence. The importance of Outcome Audit.

### GOC Competency Units and Learning Objectives

#### Competency 1: Communication

- 1.1.1 Obtains relevant history and information relating to general health, medication, family history, work, lifestyle and personal requirements.
- 1.1.2 Elicits the detail and relevance of any significant symptoms.
- 1.2.3 Discusses with the patient the importance of systemic disease and its ocular impact, its treatment and the possible ocular side effects of medication.
- 1.2.4 Explains to the patient the implications of their pathology or physiological eye condition.

## Competency 2: Professional Conduct

- 2.2.2 Is able to work within a multi-disciplinary team
- 2.2.5. Interprets and responds to existing records.
- 2.2.6. Makes an appropriate judgement regarding referral and understands referral pathways.

## Competency 3: Ocular Examination

- 3.1.2 Uses a slit lamp to examine the external eye and related structures
- 3.1.7 Assesses the tear film

## Competency 6: Ocular Disease

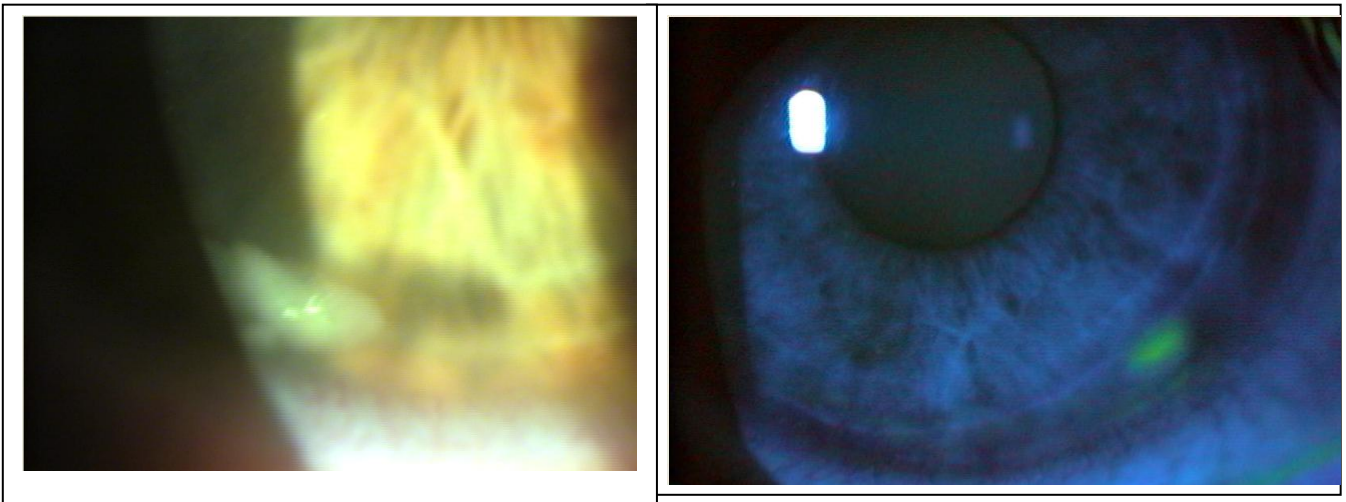
- 6.1.1. Understands the risk factors for common ocular conditions.
- 6.1.2. Interprets and investigates the presenting symptoms of the patient.
- 6.1.3. Develops a management plan for the investigation of the patient.
- 6.1.4. Identifies external pathology and offers appropriate advice to patients not requiring referral.
- 6.1.5. Recognises common ocular abnormalities and refers when appropriate.
- 6.1.7. Manages patients presenting with red eye/s.
- 6.1.11. Understands the treatment of a range of common ocular conditions.

## **Record Card**

### **Past Ocular History**

- 44 year old, established Secondary Sjogrens
- General Health and Medication as of **6/4/13**
  - Rheumatoid Arthritis –
    - ADRs to hydroxychloroquine & Methotrexate
    - Heart Palpitations - Methotrexate?
  - Secondary Sjogrens - Punctal Occlusion, Clinitas 6x, Lacrilube nocte
  - Lansoprazole
  - Asthma - Salbutamol

- non-Smoker
- Member of Eyeplan ensuring instant access to community based IP Optometrist
  - Referred to Corneal Specialist for chronic care and possible unlicensed medications. Now under regular review by corneal specialist in HES 6/12ly
- Regular corneal ulcers (previous episodes below)– marginal and not necessarily coinciding with HES check
  - Various previous acute episodes have been treated previously by the community optometrist with FML and Ofloxacin.



### Symptoms and history

6/4/13

General Health

Current Presentation

- Unscheduled appointment. Due for routine HES in 2/52 but very worried and seeking advice.
- Aware RE prickly again, very worried about ulcer recurrence
- Discomfort 1-10 (4)

### Clinical examination

VA 6/6 R&L

- Slit lamp – Inferior Geographic marginal Ulcer RE – 2 mm

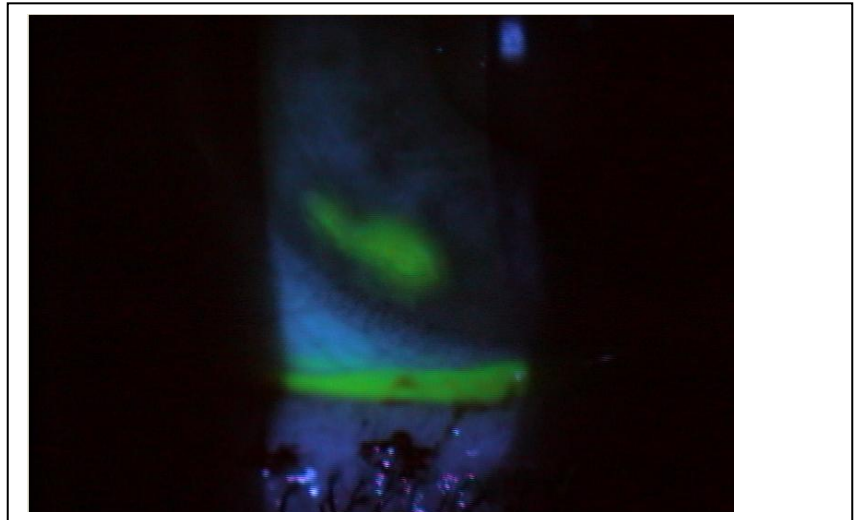
Diagnosis – Sterile marginal ulcer

FML qid review 2/7

8/4/13

Pain becoming worse.

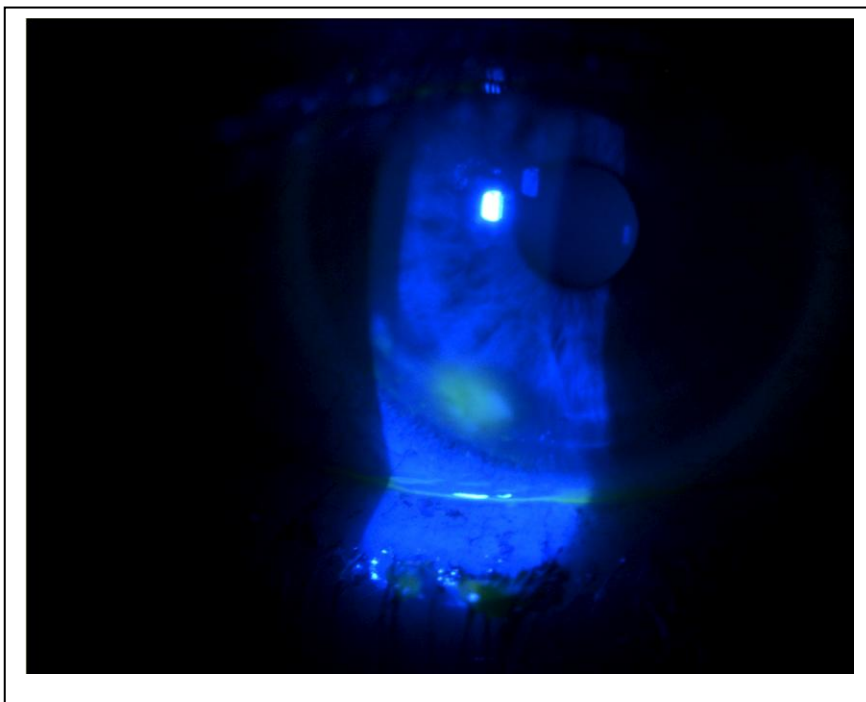
Lesion larger.



Re-Considered possible infective agent

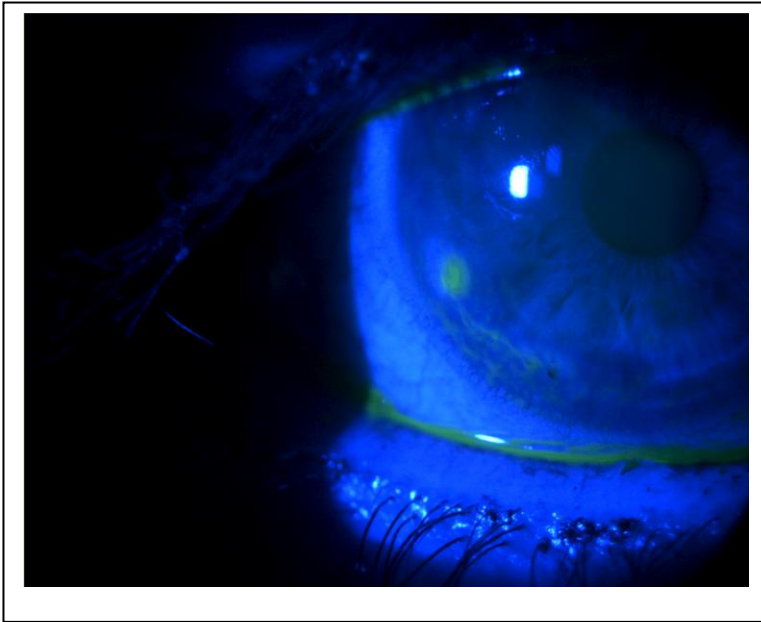
Stop FML. Start Ofloxacin q1h, but could be geographic Simplex (Immune system) – Ganciclovir 5X per day in conjunction with Ofloxacin

11/4/13 Looking much better – continue

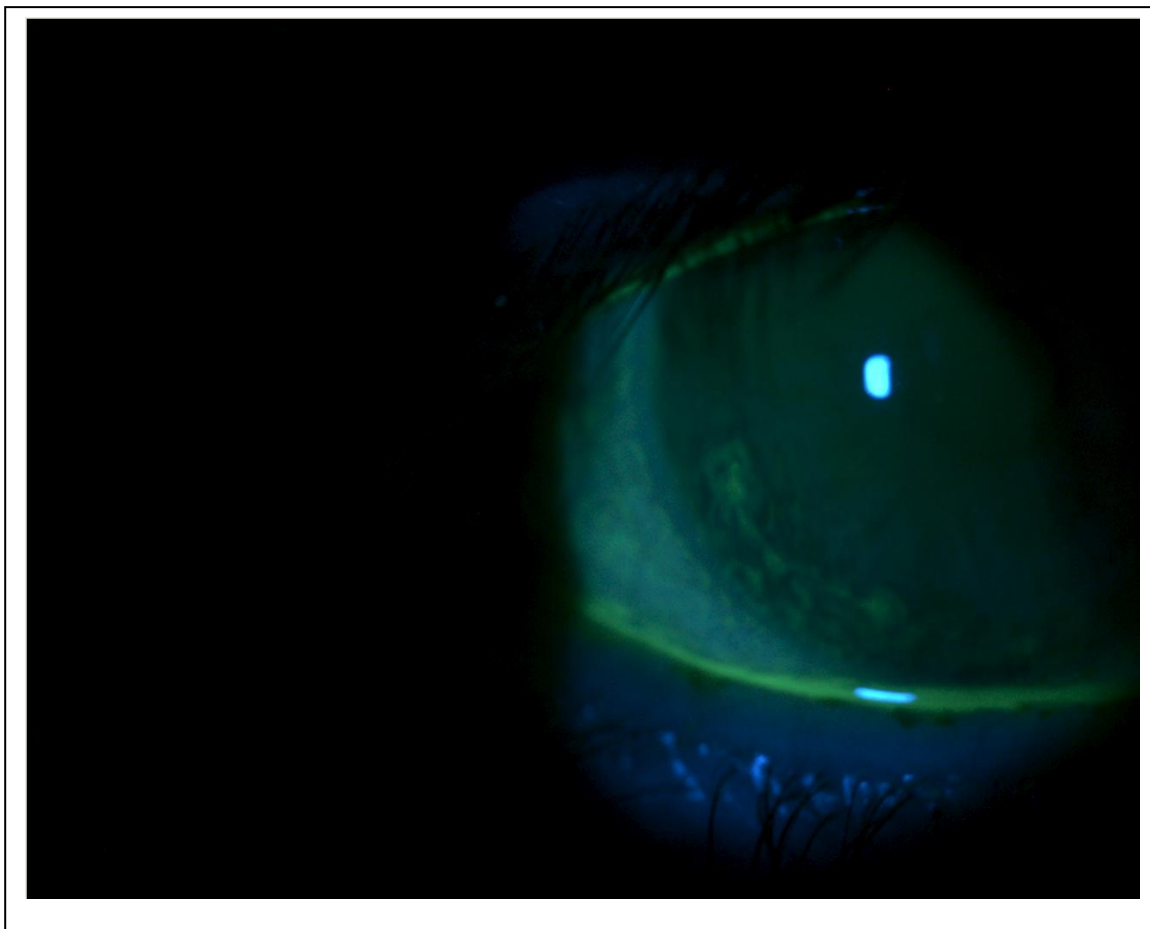


13/4/13 Improvement continuing.

Ofloxacin q2h and ganciclovir



15/4/13 Resolving. Due to see HES - report given and outcome audit arranged post HES



27/4/13

Post HES – New drug regime WITH Doxycycline (but advised to seek advice from rheumatologist prior to commencement) and permanent steroid.

Updated medications:

- Rheumatoid Arthritis - Intramuscular Methotrexate (regardless of previous ADRs)
  - ADRs to hydroxychloroquine & Methotrexate
  - Heart Palpitations - Methotrexate?
- Secondary Sjogrens - Punctal Occlusion, Clinitas 6x, Duolube nocte (White petrolatum & miberal Oil)(non-preserved, Lanolin free, Paraben free), Lotemax, Doxycycline, Lid Hygiene, Omega 3 Eye
- Lansoprazole
- Asthma - Salbutamol
- non-Smoker

Summary Of Product Characteristics (SPC) - Doxycycline

- 4.5 Interaction with other medicinal products and other forms of interaction

#### *Methotrexate*

■ Doxycycline increases the risk of methotrexate toxicity; prescribe with caution to patients on methotrexate.