The 'difficult' question of atypical conjunctivitis – a case series of non-neonatal gonococcal conjunctivitis in Northern Ireland.

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Introduction

- Rates of Gonorrhoea infection have dramatically increased in UK & Ireland with 25% ↑ in cases in England from 2017 to 2018[1]
- Despite increasing infection rates, planned spending on sexual health services ↓ by £64 million from 2014 – 2018.[1]
- Increasing antibiotic resistant strains of gonorrhoea: HLAziR/ MDR/ XDR strain outbreaks in UK in from 2015-2019[2]
- Gonococcal conjunctivitis in adults is rare but can be rapidly progressive & sight threatening.

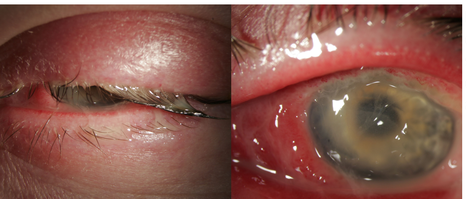
Methods

- Patients obtained retrospectively from review of electronic records within the Belfast Health and Social Care Trust from November 2018 – November 2019.
- Data collected: patient demographics, presenting features, diagnosis, treatment and patient outcomes.

Results

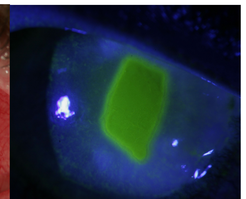
- Eight patients – 6 male, 2 female (full clinical data available in 7 patients).
- Mean age **25.6** years (range 13 – 48 years).
- Conjunctival **swabs** were taken on initial presentation in **7 out of 8** patients.
- **Sexual history** was taken in **5 out of 8** patients.
- In addition to systemic ceftriaxone , **saline washes** were recommended in **3** patients.
- There were **no drug resistant gonococcal strains**. Two showed **intermediate** sensitivity: 1 to penicillin and 1 to azithromycin.

VA @ start of treatment	VA on follow up
HM	6/12
CF	6/36
6/24	6/7.5
6/30	6/6
6/15	6/7.5
6/9.5	6/9.5
6/7.5	6/6

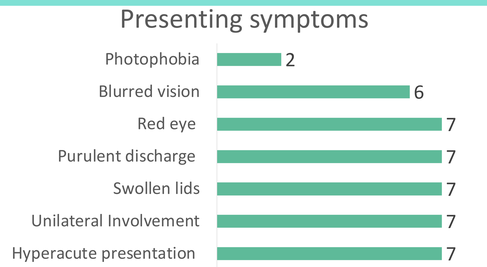


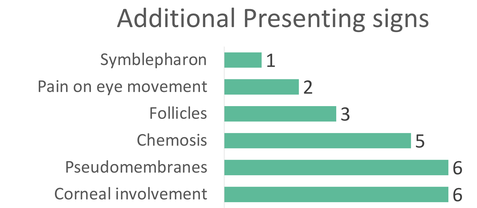
Patient 1 – demonstrating lid swelling, purulent discharge, chemosis and corneal damage

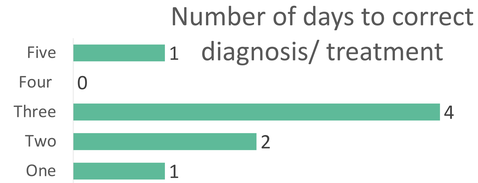


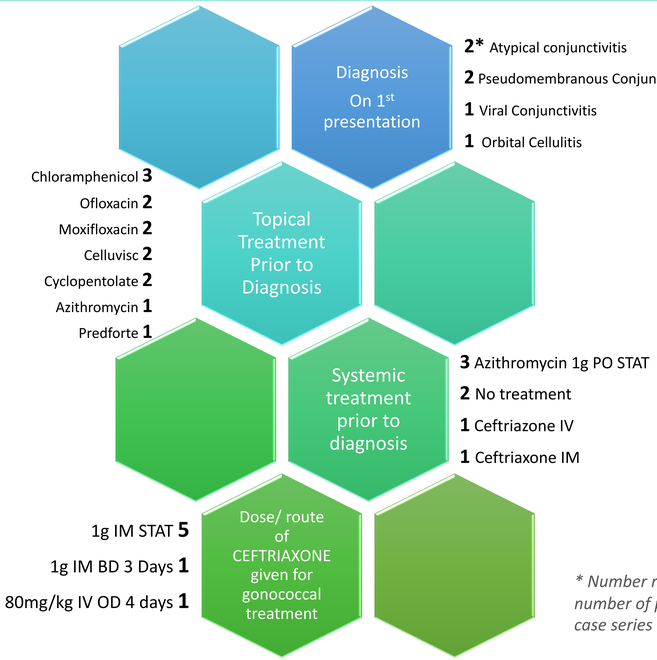


Patient 2 – demonstrating corneal epithelial defect









** Number represents number of patients in case series*

Discussion

- Prevalence of **0.43/ 1000 population** in our case series compared with 0.19/ 1000 population in 2015 Irish Study which may reflect the **increase in gonococcal infection** across the UK.[3]
- Unilaterality, hyperacute presentation, excessive purulence and lid swelling, reduced vision & corneal involvement are all **atypical features** which should raise suspicion of gonococcal conjunctivitis and warrant taking a **sexual history**.
- Studies have shown that **visual outcome** depends on disease severity at start of treatment therefore **timely swabs** including gram stain, PCR and culture are extremely important.
- Lack of consistency of treatment in this case series reflects **lack of consensus in literature.** Guidance of **1g IM Ceftriaxone** based on outdated research from 1989 with no agreed guidance in literature for empirical topical treatment.[4,5] **Further up-to-date research** is therefore needed in this field.

References

1. https://www.bashh.org/news/news/sexual-health-experts-highlight-grave-concerns-over-syphilis-and-gonorrhoea-rates-and-call-for-urgent-implementation-of-national-strategy-and-proper-service-funding/
2. Public Health England. UK case of *Neisseria gonorrhoeae* with high-level resistance to azithromycin and resistance to ceftriaxone acquired abroad . https://www.gov.uk/government/publications/health-protection-report-volume-12-2018/hpr-volume-12-issue-14-news-20-april
3. McAnena L, Knowles SJ, Curry A, Cassidy L. Prevalence of gonococcal conjunctivitis in adults and neonates. Eye (Lond). 2015 Jul;29(7):875-80.
4. Fifer H et al. British Association for Sexual Health and HIV national guideline for the management of infection with Neisser gonorrhoeae. 2019. https://www.bashhguidelines.org/media/1208/gc-2019.pdf
5. Haimovici R, Roussel TJ. Treatment of gonococcal conjunctivitis with single-dose intramuscular ceftriaxone. Am J Ophthalmol. 1989 May 15;107(5):511-4.