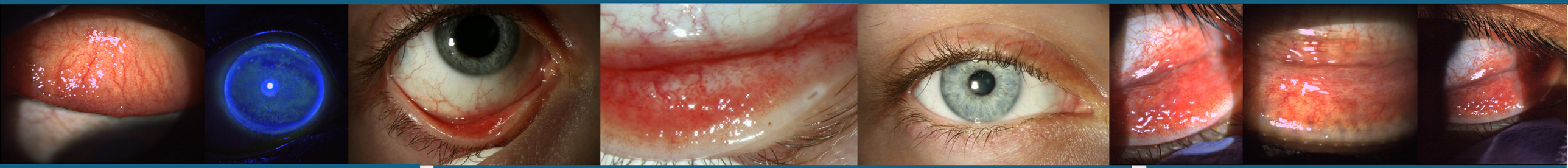
Chlamydia trachomatis conjunctivitis: a 10-year retrospective of the incidence, clinical presentation, diagnosis, management, outcomes and epidemiological trends at a tertiary referral centre in London

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Introduction

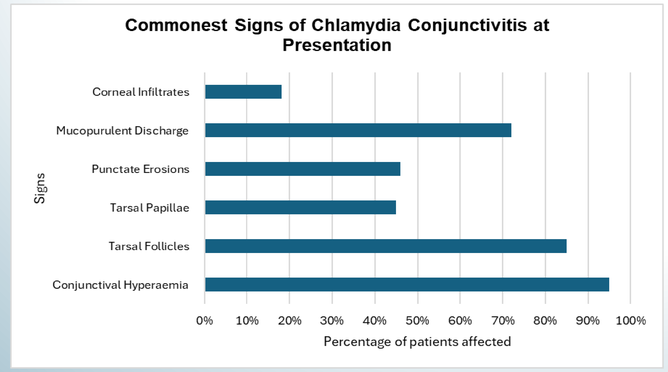
- *Chlamydia trachomatis* conjunctivitis (CTC), also known as inclusion conjunctivitis, is a sexually transmitted infection (STI).
- Chlamydia is the most common bacterial STI in the world [1]. In 2023, it accounted for half of all UK STIs, with 194,970 cases in England alone.[2]
- Presentation can be acute, chronic, bilateral or typically, unilateral.
- A concomitant rise in ocular infection is a concern due to the absence of distinctive clinical features, leading to the underdiagnosis or misdiagnosis of infection.
- There is limited recent local or national data concerning the incidence of *Chlamydia trachomatis* conjunctivitis.

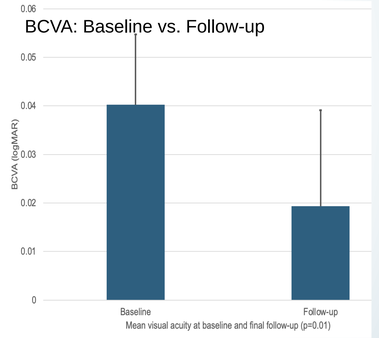
Methodology

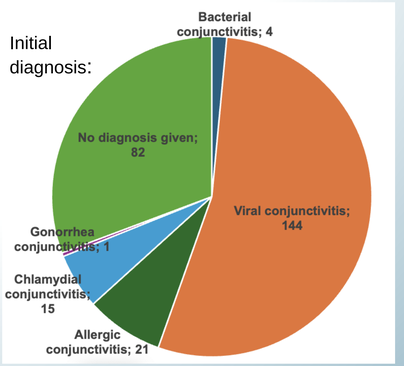
- 10-year retrospective review at a tertiary referral centre (1 January 2013 – 31 December 2023).
- Laboratory-confirmed CTC: positive conjunctival swab via nucleic acid amplification test (NAAT) Aptima kits (HOLOGIC, USA).
- Medical records analysed for clinical presentation, treatment, visual outcomes and complications. Those with incomplete medical records were excluded.
- Treatment (in non-pregnant adults) was oral doxycycline 100mg BD 7/7 +/- topical azithromycin 1.5% BD 3/7.

Results

- Over 10 years, 312 laboratory-positive cases were recorded, 267 were included in the study.
- Median age of patients = 26 years
- 181 (68%) were male and 86 (32%) female
- 235 cases (88%) unilateral vs 32 cases (12%) bilateral
- Median time from symptom onset to correct diagnosis = 14 days
- 101 (38%) required ≥2 visits before correct diagnosis
- Sexual history was absent in 76% of cases and only 4.5% had genital symptoms documented.
- 93% had no awareness of any genital chlamydia diagnosis
- Mean BCVA was 0.09 logMAR at baseline, with 77% recovered to baseline or better after treatment.







Conclusion

- Clinicians need greater awareness of the incidence and impact of CTC with improved documentation of sexual history and genital symptoms.
- Chlamydia conjunctivitis is frequently misdiagnosed, notably as viral conjunctivitis (53.9%).
- CTC is clinically indistinguishable from other forms of conjunctivitis; reliable differentiation is only achieved through NAAT testing.
- Conjunctivitis may be the only sign of chlamydial infection; prompt diagnosis is critical to prevent serious reproductive consequences and onward transmission.
- In 2026, new *Chlamydia trachomatis* guidelines from the British Association for Sexual Health and HIV (BASHH) will include detailed guidance on the clinical presentation, diagnosis and management of chlamydial eye infection.

References

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[2] UK Health Security Agency. Sexually transmitted infections and screening for chlamydia in England: 2023 report. UKHSA website. 2013. https://www.gov.uk/government/statistics/sexually-transmitted-infections-stis-annual-data-tables/sexually-transmitted-infections-and-screening-for-chlamydia-in-england-2023-report

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