OR-091

Neonatal and Early Infantile Conjunctivitis Caused by Chlamydia trachomatis: A 5-Year Cohort Analysis

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Purpose: To evaluate the burden of ocular infections caused by C. trachomatis in the neonatal period and to emphasize the importance of early recognition and treatment.
Methods: We conducted a retrospective analysis (December 2019–December 2024) of 201 infants aged 2 months who presented with signs of conjunctivitis at the University Medical Centre Ljubljana: Eye Clinic/Paediatric Clinic/Department of Perinatology. Laboratory methods included bacterial cultures and polymerase chain reaction (PCR) analysis.
Results: 22/201 infants (10.9%,16 girls : 6 boys) with clinically diagnosed conjunctivitis tested positive for C. trachomatis by conjunctival swab. Co-infection with another bacterial pathogen was present in 2/22(9.1%). Isolated ocular symptoms occurred in 20/22 (90.9%), while 2/22(9.1%) also showed systemic symptoms. Conjunctivitis began within the first 7 days of life in 13/22(59.1%) and between days 8-14 of age in 9/22(40.9%).
Bilateral conjunctivitis was observed in 12/22(54.6%); 5/12 initially showed unilateral symptoms. Conjunctival injection and purulent discharge were observed in 22/22(100%). Hemorrhagic discharge was noted in 13/22(59.1%), eyelid swelling occurred in 21/22(95.5%). Less common were chemosis in 3/22(13.6%) and papillary-follicular reaction in 3/22(13.6%), conjunctival membranes/pseudomembranes in 4/22(18.2%).
All 22 infants received systemic azithromycin (20 mg/kg/day for 3 days) and topical azithromycin (2x/day for 3 days). Empirical topical antibiotics had been administered in 15/22(68.2%) before final diagnosis, but none of the selected antibiotics were effective against C. trachomatis. Clinical suspicion of preseptal cellulitis led to 1/22 being treated with a systemic antibiotic before smear results were available.
Five mothers of the affected infants reported symptoms suggestive of chlamydial infection during pregnancy, and one had a history of pelvic inflammatory disease.
Conclusion: C. trachomatis is an important infectious cause of neonatal conjunctivitis in Slovenia, where routine screening for C. trachomatis in pregnancy is not performed, and effective topical prophylaxis for neonates is unavailable. Ocular manifestations of C. trachomatis infection are non-specific and overlap with signs of other pathogens undermining early clinical identification and appropriate antibiotic treatment. No recurrent infections were documented in our cohort, likely reflecting the efficacy of treatment protocols.

Konjunktivitis v neonatalnem in zgodnjem dojenčkovem obdobju povzročen z bakterijo Chlamydia trachomatis: 5-letna kohortna analiza

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NAMEN: Predstaviti breme očesnih okužb, povzročenih z bakterijo Chlamydia trachomatis v neonatalnem obdobju ter pomen zgodnje prepoznave in zdravljenja.
METODE: Retrospektivno (december 2019-december 2024) smo analizirali podatke 201 otrok 2 meseca starosti, ki so bili zaradi znakov konjunktivitisa obravnavani v UKC Ljubljana: na Očesni kliniki/Pediatrični kliniki/Kliničnem oddelku za perinatologijo. Laboratorijska analiza je bila izvedena z metodo kultivacije za dokaz patogenih bakterij, s testom PCR smo ugotavljali klamidijsko okužbo.
REZULTATI:
Pri 22/201(10.9%, 16 deklic : 6 dečkov) otrocih s klinično diagnozo konjunktivitisa je bil bris veznice pozitiven na C.trachomatis. 2/22(9.1%) sta imela ko-infekcijo z drugo patogeno bakterijo. 20/22(90.9%) otrok je imelo zgolj očesne, 2(9.1%) pa tudi sistemske znake okužbe. Starostni razpon ob pojavu konjunktivitisa je bil 7dni pri 13/22(59.1%), 8-14 dni pri 9/22(40.9%). Obojestranski konjunktivitis je bil opažen pri 12/22(54.6%); pri 5/12 sprva z enostranskimi znaki.
Konjunktivalna injekcija veznice in purulenten očesni izloček sta bila prisotna pri 22/22(100%), 13/22(59.1%) otrok je imelo hkrati tudi hemoragičen izloček, oteklina vek je bila prisotna pri 21/22 (95.5%). Redkejši znaki so bili: hemoza pri 3/22(13.6%), papilofolikularna reakcija pri 3/22(13.6%), veznične membrane/psevdomembrane pri 4(18.2%) otrocih.

Vseh 22 otrok je bilo zdravljenih z azitromicinom (20 mg/kg/24h) 3dni per os in z azitromicinom v obliki kapljic 3 dni 2x/dan. Empirični topikalni antibiotik je prejelo 15/22(68.2%) otrok, izbor ni bil v nobenem od primerov učinkovit proti okužbi s C.trachomatis. En otrok je bil na terciarni ravni do prejema izvida brisa veznice zdravljen s sistemskim antibiotikom zaradi kliničnega suma na preseptalni celulitis.
Pri 5 materah so bili anamnestično ugotovljeni simptomi suspektni za klamidijsko okužbo matere v nosečnosti, 1 je navajala prebolelo pelvično vnetno bolezen v preteklosti.
ZAKLJUČEK:
C.trachomatis je pomemben infektivni vzrok neonatalne oftalmije pri nas. Presejalno testiranje nosečnic se v Sloveniji ne izvaja, učinkovita topikalna profilaksa za novorojenčke ni na voljo. Očesni znaki okužbe so nespecifični in se prepletajo s klinično sliko okužbe z drugimi patogeni, kar lahko ob neustreznem zdravljenju in pozni identifikaciji vodi v zaplete. Pri dojenčkih, obravnavanih v UKC Ljubljana rekurente okužbe nismo beležili, kar pripisujemo učinkovitemu protokolu zdravljenja s sistemskim antibiotikom.