

Pediatr Infect Dis J. 2009 Nov 20. [Epub ahead of print]

Efficacy and Safety of Azithromycin 1.5% Eye Drops for Purulent Bacterial Conjunctivitis in Pediatric Patients.

Bremond-Gignac D, Mariani-Kurkdjian P, Beresniak A, El Fekih L, Bhagat Y, Pouliquen P, Delval L, Goldschmidt P, Bingen E, Cochereau I.

BACKGROUND: Purulent bacterial conjunctivitis affects all ages with high frequency in newborns and children. In a subset of 150 children included in a large study having enrolled 1043 patients, our aim was to analyze in children, the efficacy and safety of azithromycin 1.5% eye-drops in the treatment of this disease.

METHODS: This multicenter, randomized, investigator-masked, parallel-group study, included 150 children and adolescents to study safety and compare azithromycin 1.5% eye drops twice daily for 3 days and tobramycin 0.3% 1 drop every 2 hours for 2 days then 4 times daily for 5 days. Out of 150 patients included, 58 had positive cultures and were studied for efficacy. Signs and symptoms were evaluated and cultures obtained at baseline, Days 3 and 9. Primary efficacy variable was the clinical cure (score 0 for bulbar conjunctival injection and purulent discharge) at the test of cure visit (day 9).

RESULTS: Both treatments were effective with a clinical and microbiologic cure of more than 80% of children on day 9. Azithromycin therapy provided a greater bacteriologic cure on day 3 than did tobramycin ($P < 0.001$) and eradicated bacteria that were defined as resistant, using classical antibiogram. No adverse effects were noted on the ocular surface.

CONCLUSIONS: Azithromycin 1.5% eye drops leads to a rapid clinical and microbiological cure.

PMID: 19935122