

Suspected Conjunctivitis

Suspected conjunctivitis in an infant greater than or equal to 29 days of age or a child

Infants (> 28 days of age) and children with signs of conjunctivitis are more likely to have disease secondary to other infectious agents (*Streptococcus pneumoniae*, *Moraxella catarrhalis* and nontypable *Haemophilus influenzae*) compared to conjunctivitis caused by *Chlamydia trachomatis*, *Neisseria gonorrhoea*, or *Herpes Simplex Virus*. The incidence of true bacterial conjunctivitis in pediatric patients varies based on the identification method used. Reports of an incidence of 135.5 per 10,000 with more than 5 million outpatient or emergency department visits are based on diagnosed cases treated with antibiotics.

Patel et al (2007) evaluated 111 patients over one year and found that patients were more likely to have a positive bacterial culture with a history of gluey or sticky eyelids in the morning (OR, 5.0; 95% CI = 1.8 to 13.7), exam findings of mucoid or purulent eye discharge (OR, 4.8; 95% CI = 1.8 to 12.6) and eyelids or eyelashes crusting or gluing (OR, 3.0; 95% CI = 1.2 to 7.5). The combination of gluey or sticky eyelids in the morning and purulent or mucoid discharge on physical exam had a sensitivity of 85% (95% CI = 76% to 91%) with a specificity of 73% (95% CI = 40% to 93%) and a positive likelihood ratio of 3.1 (95% CI = 1.5 to 8.8). Interestingly, no association was identified between age, daycare attendance, exposure to other patients with a “pink eye” and a positive culture result.

Based on current literature the Care Process Model team recommends the provider consider bacterial conjunctivitis in the infant or child with a history of gluey or sticky eyelids in the morning, and exam findings of conjunctival injection/redness and mucoid or purulent eye discharge. Additionally, the Care Process Model team does not recommend **routine** bacterial eye cultures, but bacterial eye cultures may be helpful for recurrent, severe, or chronic purulent conjunctivitis in any age group and in cases where the conjunctivitis has not responded to medication.

References:

American Academy of Ophthalmology Cornea/External Disease Panel. (2013). *Preferred Practice Pattern Guidelines: Conjunctivitis*. San Francisco: CA

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Granet, D. B., Dorfman, M., Stroman, D., & Cockrum, P. (2008). A multicenter comparison of polymyxin B sulfate/trimethoprim ophthalmic solution and moxifloxacin in the speed of clinical efficacy for the treatment of bacterial conjunctivitis. *J Pediatr Ophthalmol Strabismus*, 45(6), 340-349.

Patel, P. B., Diaz, M. C., Bennett, J. E., & Attia, M. W. (2007). Clinical features of bacterial conjunctivitis in children. *Acad Emerg Med*, 14(1), 1-5. doi:10.1197/j.aem.2006.08.006

American Academy of Ophthalmology Cornea/External Disease Panel. Preferred Practice Pattern® Guidelines. Conjunctivitis. San Francisco, CA: American Academy of Ophthalmology; 2013.

These guidelines do not establish a standard of care to be followed in every case. It is recognized that each case is different and those individuals involved in providing health care are expected to use their judgment in determining what is in the best interests of the patient based on the circumstances existing at the time. It is impossible to anticipate all possible situations that may exist and to prepare guidelines for each. Accordingly these guidelines should guide care with the understanding that departures from them may be required at times.