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We are not ready to use breast milk eye drops for infants with eye discharges

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We were interested to read the paper by Sugimura et al¹, which evaluated the safety and efficacy of breast milk eye drops in infants up to six months of age with eye discharges. The authors reported that they found these as effective as sodium azulene sulphonate hydrate 0.02% and noted that eye discharge improved in 76.8% of patients without any adverse events. Although these results seem to be promising, we believe that there are some issues that warrant further clarification.

Firstly, acute bacterial conjunctivitis is frequently self-limiting and it generally resolves spontaneously in 10-14 days, even if the use of topical antibiotics can be useful in speeding up the resolution of symptoms and infections, with a number needed to treat of 13^{2,3}. Furthermore, the authors did not just include patients with bacterial conjunctivitis, but also conditions that

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should not routinely require antibiotic therapy. These included viral infections, nasolacrimal duct stenosis and allergic conjunctivitis. This means that we cannot know if the patients treated in the trial would have spontaneously recovered from the symptoms. Furthermore, we suggest that it would have been more appropriate to evaluate the efficacy of breast milk eye drops versus a placebo to verify a real improvement with the proposed treatment.

In addition, the findings of bacterial species found from eye discharge cultures, namely coagulase negative Staphylococci, *Corinebacterium* species and *Streptococcus* species, are reported as a normal component of the conjunctival flora. These bacteria can only cause acute inflammation of the eye in rare situations when there is an imbalance of the local flora⁴.

Moreover, in patients diagnosed with nasolacrimal duct stenosis, the mainstay therapy is digital massage of the lacrimal sac, while topical antibiotics can only be employed when there is a copious eye discharge⁵.

Finally, the authors reported allergies as a possible diagnosis in infants who did not respond to first-line treatment. This seems to be unlikely, because allergic conjunctivitis is extremely rare in infants and eye discharges are not the primary symptom in these patients.

In conclusion, we suggest that the limits of the article by Sugimura et al do not allow any firm conclusions about a hypothetical effectiveness of breast milk eye drops.

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