

Trachoma in the Torres Strait: a public health conundrum

Presenter: Kate Lynch, The University of Queensland, Queensland Health

Background: Trachoma is caused by ocular infection with specific serovars of *Chlamydia trachomatis* (Ct), and repeated infections can lead to blindness. Recent surveys have identified active trachoma (TF), diagnosed using the World Health Organization simplified five sign grading system, is present at endemic levels in the Torres Strait. These findings are in stark contrast with the experience of local clinicians who do not consider trachoma to be a public health problem.

Methods: We conducted a cross-sectional trachoma prevalence study, including clinical exam by an ophthalmologist and collection of ocular swabs, in a remote Torres Strait community where TF-like follicular conjunctivitis had recently been reported. Swabs underwent polymerase chain reaction (PCR) testing for Ct as well as a range of other pathogens known to induce follicular conjunctivitis.

Results: The prevalence of TF-like follicular conjunctivitis in children aged 5 to 9 years was 23%. No cicatricial trachoma was observed and no swab tested positive for Ct by PCR in this or any other age group. A small proportion of those with follicles grew a range of pathogens on bacterial culture.

Conclusions: Our results demonstrate that trachoma does not meet the criteria for a public health problem in this community and provides further evidence of the discord between follicles and infection. In this setting mass drug administration as recommended in the national guidelines is not appropriate. Queensland's approach to trachoma screening has changed with use of more detailed criteria for diagnosis.

In light of our findings, consideration should be given to reviewing national screening recommendations for low prevalence settings to include microbiological testing and examination by an experienced ophthalmic clinician.