



Should antibiotics be continued for a sore throat if GAS negative?

Dear Editor,

As a primary care clinician working with a population at higher risk for developing rheumatic fever, I have a comment and a question for the experts. In a situation of high prevalence of Group A Streptococcus (GAS) and where all "sore throats" are swabbed, some clinicians are mandating that it is preferable/more convenient/safer to treat all children with antibiotics, even when the swab is negative, and not to inform parents/patients of the negative swab result. Weighing up the issue of antibiotic overuse and resistance, my question is simply: Is there any justification to treat children with GAS negative throat swabs, and with no current household members who are GAS positive or have rheumatic fever, with ten day courses of antibiotics, or should we advise them to stop the antibiotics when the swab result is negative?

The risk is that many children would receive several courses of antibiotics per year for viral infections (as they already do with many primary care/ED practitioners still prescribing amoxicillin +/- steroids for every URTI/bronchiolitis). If that risk is outweighed by the benefit of treating, I am happy to change practice but as far as I know, the current published guidelines say "stop the antibiotic" if GAS negative.

I look forward to your response.

Anonymous

CORRESPONDENCE

We asked Professor Mark Thomas, Infectious Diseases Physician, Auckland DHB to respond to this question.

This letter about treatment of sore throats in people with a high risk of rheumatic fever draws attention to a probably well-intentioned, but ultimately harmful, approach to the prevention of rheumatic fever. If a patient has been given empiric antibiotics for a sore throat, but the subsequent throat swab result is negative for GAS, the antibiotics should not be continued. This is emphasised in the most recent New Zealand Heart Foundation guidelines* for management of sore throat, which very clearly state that antimicrobial treatment should promptly be stopped in people at high risk of rheumatic fever, who present with a sore throat and who do not have GAS (Streptococcus pyogenes) isolated from a throat swab. To advise such patients to continue with their antibiotic treatment is not consistent either with the widely accepted New Zealand guidelines or with guidelines from other international authorities.

The advice to continue "treatment" of people who do not have GAS infection, with an antibiotic intended to eradicate GAS infection, risks undermining confidence in the rational basis of the rheumatic fever prevention strategy. If clinicians are advised to "treat" patients for an infection, that they have documented not to be present by the gold standard test, then they may justifiably ask whether they are being encouraged to leave behind the practice of evidence-based medicine and return to practices based on good intentions. Patients and their caregivers are also likely to lose confidence in the wisdom of their health professionals and question why, if the results of the throat swab are to be ignored, the test was performed in the first place?

Adherence to treatment for proven GAS infection is widely acknowledged to be problematic. If clinicians are encouraged to "treat" non-existent infections, and patients and their families are encouraged to persist with "treatment" of non-existent infections then the programme risks losing credibility, which will then increase the risk of patients and their caregivers not persisting with treatment in those high risk patients who do have documented GAS infection.

The adverse effects of antibiotic treatment, whether immediate and minor, such as rash or gastrointestinal upset, or immediate

and severe, such as anaphylaxis, or more prolonged, such as selection of antibiotic resistant bacteria or increased risk of obesity, occur regardless of whether the antibiotic was prescribed correctly or incorrectly. However, those risks are very much less acceptable when the antibiotic prescription had no possibility of producing positive effects!

The writer of this letter, and those faced with similar situations, should ask those giving them incorrect advice about the management of sore throats, to carefully read the New Zealand Heart Foundation guidelines.

Associate Professor Mark Thomas

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* available from: www.heartfoundation.org.nz/uploads/sore_throat_guideline_14_10_06_FINAL-revised.pdf

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