

## Call for a national sore throat guideline

TO THE EDITOR: Pharyngitis, a common childhood illness, accounts for around 3% of presentations to general practice in Australia.<sup>1</sup> Although usually benign and self-limiting, group A streptococcus (GAS) pharyngitis, isolated in up to 20% of symptomatic children,<sup>2</sup> can lead to infectious and autoimmune sequelae. Despite Australia being a high income country, acute rheumatic fever (ARF) and rheumatic heart disease (RHD) still cause significant morbidity and mortality in Aboriginal and Torres Strait Islander people.<sup>3</sup>

Prompt treatment of GAS pharyngitis has been shown to reduce the incidence of ARF by two-thirds in high risk individuals.<sup>4</sup> Low risk individuals require supportive management only.<sup>5</sup> Clinical diagnosis of GAS pharyngitis is unreliable<sup>4</sup> and culture results take time. As such, clinicians must balance the competing priorities of appropriate treatment of patients at high risk of ARF or RHD with prudent antimicrobial stewardship. Clinical practice guidelines play an important role in decision making at both a population and individual level.

We undertook a search to identify Australian and New Zealand pharyngitis guidelines and compared these with previously published criteria.<sup>6</sup> Nine guidelines were identified. Inconsistencies in diagnosis, definition of high risk groups, analgesia, antibiotic rationale, agent, therapy duration, and tonsillectomy indications were observed (Box).

Australia's multitude of heterogeneous guidelines coupled with the transient workforce in remote Australia, where ARF burden is the highest,<sup>7</sup> predispose to management confusion and potential poor patient outcomes, including higher rates of ARF and RHD, and also fail to address the growing worldwide problem of antimicrobial resistance.

Australia needs a single national pharyngitis guideline to assist in providing rational, consistent and timely antibiotic treatment to patients at high risk of ARF, while minimising inappropriate antibiotic usage and resistance in individuals at low risk of sequelae. We call for an evidence-based guideline that includes the following:

- a clear, succinct approach to diagnosis and management;

- a definition of individuals at high risk of ARF, and rationale for antibiotic treatment;
- clear guidance regarding throat culture and point-of-care testing for GAS;
- rationale for first- and second-line empirical antibiotics, with alternatives for penicillin allergy;
- capacity to adapt management in different clinical settings; and
- supportive care recommendation including analgesia, tonsillectomy and school exclusion.

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References are available online.

### Summary of selected criteria:<sup>6</sup> are criteria addressed by each sore throat guideline?

Guidelines	NZ HF	BPAC NZ	CH QLD	NSW ICCPG	CARPA	RHD Aust	PCH	RCH	eTG
Number of criteria addressed	6/12	7/12	2/12	10/12	7/12	6/12	10/12	9/12	10/12
Diagnostic criteria	×	×	×	✓	✓	×	✓	×	✓
Routine throat culture/rapid antigen detection testing	✓	✓	×	✓	×	✓	✓	✓	×
Antibiotics to reduce symptoms	×	✓	×	✓	×	×	✓	×	✓
Antibiotics to prevent complications	✓	✓	×	✓	✓	✓	✓	✓	✓

NZHF = New Zealand Heart Foundation ([www.heartfoundation.org.nz/shop/heart-healthcare/non-stock-resources/sore-throat-algorithm.pdf](http://www.heartfoundation.org.nz/shop/heart-healthcare/non-stock-resources/sore-throat-algorithm.pdf)); BPAC = Best Practice Advocacy Centre (<https://bpac.org.nz/antibiotics/guide.aspx#sore-throat>); CH QLD = Children's Health Queensland Hospital and Health Service guidelines ([www.childrens.health.qld.gov.au/chq/health-professionals/antimicrobial-stewardship/guidelines/ent-infections](http://www.childrens.health.qld.gov.au/chq/health-professionals/antimicrobial-stewardship/guidelines/ent-infections)); NSW ICCPG = New South Wales infants and children clinical practice guidelines ([http://www1.health.nsw.gov.au/pds/ActivePDSDocuments/GL2014\\_021.pdf](http://www1.health.nsw.gov.au/pds/ActivePDSDocuments/GL2014_021.pdf)); CARPA = Central Australian Rural Practitioners Association's standard treatment manual (<https://docs.remotehcmmanuals.com.au/review/g/manuals2017-manuals/d/20321.html?page=115>); RHD Aust = rheumatic heart disease Australian guidelines (<https://www.rhdaustralia.org.au/arf-rhd-guideline>); PCH = Perth Children's Hospital emergency department guidelines (<https://pch.health.wa.gov.au/For-health-professionals/Emergency-Department-Guidelines/Tonsillitis>); RCH = Royal Children's Hospital Melbourne guidelines (with support of the Victorian Paediatric Clinical Network) ([www.rch.org.au/clinicalguide/guideline\\_index/Sore\\_throat](http://www.rch.org.au/clinicalguide/guideline_index/Sore_throat)); eTG = electronic therapeutic guidelines (<https://tgldc.dp.tg.org.au/searchAction?appendedInputButtons=sore%20throat>). ♦

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