

Best Practice Message

Date: November 2023

Focus on Managing antibiotic expectations and Topical antibiotics

The focus of this year's World Antimicrobial Awareness Campaign:

- Document the indication for the antimicrobial on prescription.
- Reserve use of topical antibiotics for Staphylococcus aureus nasal decolonisation.
- Consider a shared decision making approach to help your patient explore benefits and risks of antimicrobial treatment.

Introduction

Antimicrobial resistance (AMR) is one of the top 10 global public health threats, causing over 1.3 million deaths annually.¹ World AMR Awareness Week (WAAW) runs from the 18th to 24th of November, as with last year the primary theme is “Preventing Antimicrobial Resistance Together” with a national theme of “Indication in Antimicrobial Prescriptions” by including the indication (such as UTI for urinary tract infections) helps with facilitating communication between healthcare providers and patients, thoughtful prescribing, and decreased errors from misinterpretation of prescriptions. As part of WAAW, in Hawke’s Bay we are also advocating for a review on the use of topical antibiotics in the community as well as considering alternative ways of managing patient expectations when a patient presents acutely unwell requesting antibiotics.

Managing expectations

Often patients may present acutely unwell with an expectation that they will receive antibiotics. Patients can often overestimate the benefits of antibiotics while underestimating the risks associated with inappropriate use. However, this may not always be the case. Often patients instead are most interested in having a clear action plan with expected symptom resolution and guidance on when they should represent for further advice.² When patients present with infections which are often viral in nature such as bronchitis without underlying lung disease or sinusitis, consider discussions around the risks and expected benefits of antibiotic treatment vs a recovery plan with safety netting. He Ako Hiringa has developed Virus action plans for both adults and children in a variety of languages, these are available [here](#).

Topical Antibiotics

The prescribing rates of topical antibiotics are dropping, however there is still high prescribing rates of both fusidic acid and mupirocin ointments. Their primary use should be restricted to decolonisation of Methicillin resistant Staphylococcus decolonisation. Fusidic acid is considered to have a relatively narrow spectrum of activity almost exclusively to Staphylococci species.³ Similarly, mupirocin’s activity is limited to gram-positive bacteria.⁴ Because topical antibiotics are limited to mild superficial infections, consider if antibiotic treatment will be required at all or if the infection would clear with skin hygiene measures and topical antiseptic therapy (e.g. hydrogen peroxide cream or povidone-iodine ointment). Choosing Wisely Aotearoa have created an information sheet about antibiotics for skin infections which can be used to facilitate discussions around topical antibiotics.

Further Reading:

[bpacnz Primary Care Antibiotic Guide](#)

[He Ako Hiringa antimicrobial topics](#)

[World Health Organisation WAAW links](#)

References:

1. Murray CJL, Ikuta KS, Sharara F, Swetschinski L, Robles Aguilar G, Gray A, et al. Global burden of bacterial antimicrobial resistance in 2019: a systematic analysis. *The Lancet*. 2022 Feb;399(10325):629–55.
2. Ko L, Ha R, Leung V, Langford BJ. Shared decision making and antibiotic stewardship: Will pharmacists rise to the challenge? *Canadian Pharmacists Journal* : CPJ. 2020 Feb;153(1):12.
3. Fernandes P. Fusidic Acid: A Bacterial Elongation Factor Inhibitor for the Oral Treatment of Acute and Chronic Staphylococcal Infections. *Cold Spring Harb Perspect Med*. 2016 Jan;6(1):a025437.
4. Expanding the spectrum of activity of mupirocin to include gram-negative bacteria using cationic steroid antibiotics. *Journal of the American Academy of Dermatology*. 2005 Mar 1;52(3):P7.

Authored by: Ben Firestone

Acknowledgements: Thanks to Brendan Duck and Riani Albertyn for content contribution and guidance.

Disclaimer: The information and advice contained in this document is based upon evidence from available resources at our disposal at the time of publication, and reflects best practice. However, this information is not a substitute for clinical judgment and individualised medical advice. Health Hawke's Bay accepts no responsibility or liability for consequences arising from use of this information.