

Prescribing Matters Provided by NPS MedicineWise

Minimising antibiotic resistance risk

QUESTION DOES stopping antibiotics early lead to resistance?

ANSWER There is no strong evidence that stopping antibiotics before the end of the recommended treatment contributes to resistance.^{1,2}

The duration of antibiotic treatment must be adequate to avoid relapse requiring further treatment, unnecessarily increasing duration of antibiotic exposure and the consequent risk of resistance.³ However, several trials have demonstrated longer antibiotic therapy encourages the development of antibiotic-resistant organisms.^{1,4,5}

In some clinical situations shorter durations of antibiotic therapy have similar outcomes to longer courses.⁶⁻⁸

For example, cure without recurrence for uncomplicated cellulitis was the same for people treated for five or 10 days,⁸ and a three-day antibiotic course successfully treats uncomplicated UTI in women.^{3,9} Shorter antibiotic courses are associated with similar or fewer adverse events.^{10,11}

Minimising the duration of therapy is therefore good prescribing practice and is recommended in the Australian Therapeutic Guidelines Antimicrobial Creed.³ Clinical studies of routine infections are required to define minimum safe durations of antibiotic courses and the optimal therapeutic regimens.⁹

One way to effectively minimise therapy duration is to reduce patient misuse.

Prescribe only the amounts required and avoid providing unnecessary repeats.

Specify the duration of treatment on the prescription, ensure your patient understands how long they should take them, and explain the importance of not exceeding this length of time.

References at medobs.com.au

