

INFORMATION

general practitioners, nurses
and aged care providers

Topical antifungals:

Improving antimicrobial prescribing for residents of aged care homes

Key Messages

- Topical antifungals are antimicrobial medicines, usually in the form of a cream, that are used to treat fungal infections of the skin.
- Inappropriate prescribing of other antimicrobials, particularly antibiotics, can cause fungal infections and increase the use of antifungals.
- Topical antifungals are only indicated for a limited number of conditions such as oral/vulvovaginal thrush.
- Use of topical antifungals outside of these indications provides limited benefit. It increases the risk of antimicrobial resistance, potentially delays wound healing, and is an unnecessary expense for the resident.

How are topical antifungals currently used in aged care settings?

Topical antifungals are antimicrobials that are used in the treatment of oral thrush (e.g. nystatin oral drops) and vulvovaginal thrush (e.g. clotrimazole cream). The 2019 Aged Care National Antimicrobial Prescribing Survey (AC NAPS) identified high rates of topical antifungal use, particularly for when-required (prn) administration.

The most commonly prescribed antimicrobials reported in the AC NAPS include clotrimazole, chloramphenicol, nystatin, and Kenacomb® (triamcilonone, neomycin, nystatin and gramicidin).

Almost one-third (30.4%) of all prescriptions reported in the AC NAPS were for topical antimicrobials, which also accounted for more than 90% of prn prescriptions. The vast majority of prn prescriptions were for clotrimazole (74.1%).

Approximately 75% of the topical antimicrobials prescribed for prn use, were prescribed for durations of between one week and six months.

Why are these results important?

Since 2016, AC NAPS has identified persistent issues with inappropriate use of antimicrobials. Antibiotics (a kind of antimicrobial) can cause adverse effects such as oral and vulvovaginal thrush. These effects may require treatment with topical antifungals such as clotrimazole. Avoiding unnecessary antibiotic use can help prevent residents' risk of these adverse effects, and reduce their need for further antimicrobial treatment, such as topical antifungals.

How should topical antifungals be used?

Topical antifungals are only indicated for the treatment of oral thrush (e.g. nystatin oral drops) and vulvovaginal thrush (e.g. clotrimazole cream). Treatment with topical antifungals should be time-limited. For example, it is generally recommended that the use of clotrimazole is limited to two weeks for any indication.

What are some of the main issues associated with the use of topical antifungals in aged care settings?

The use of topical antifungals, such as clotrimazole (brand name Clonea® or Canesten®), is relatively common in aged care settings as demonstrated by the AC NAPS (in 2019, 17.5% of all prescriptions assessed were for clotrimazole).

Although clotrimazole is indicated for vulvovaginitis, it is often inappropriately prescribed for aged care residents with red skin patches, which are unlikely to be candidiasis.

Clotrimazole and other topical antifungals are often prescribed prn in aged care settings. This may contribute to use of these treatments well beyond the recommended duration of two weeks.

If used on chronic wounds and skin injuries, topical antifungals can delay wound healing and increase risk of complications.

The unnecessary use of antifungals, either topically or systemically, may also contribute to the development of treatment resistance in patients. Of particular concern is *Candida auris*, a multidrug-resistant fungus that, while currently rare in Australia, has become prominent in aged care settings in other countries. Antimicrobial resistance is a major concern, as it may mean that existing antifungals are ineffective for residents who require treatment.

What are the alternatives?

Red skin patches should be managed through alternative measures including ensuring adequate hydration, appropriate pressure care (e.g. repositioning) and good basic hygiene. Non-pharmacological management is a key consideration for these conditions.

Why is addressing the use of topical antifungals important?

The [Aged Care Quality Standards](#) (in particular requirement 3g and 8e) include specific actions to minimise antimicrobial resistance and promote antimicrobial stewardship.

Antimicrobial stewardship promotes the quality use of medicines and the seven 'rights':

- Right antimicrobial
- Right patient
- Right time
- Right dose
- Right route
- Right duration
- Right documentation.

Topical antifungals are being used in aged care for inappropriate indications and durations in turn also leading to unnecessary costs for residents.

Resources

<https://www.amr.gov.au/what-you-can-do/aged-care>

For more information, please visit:

<https://www.safetyandquality.gov.au/antimicrobial-stewardship-aged-care>

or contact: aura@safetyandquality.gov.au