



From the Clinical Director

This month's Ward MM newsletter has been distributed soon after worldwide Antibiotic Awareness Week, which ran 16 -22 November this year.

It is so important that we do accept the challenge put out by NPS MedicineWise and the Commission on Safety and Quality in Health Care, who have asked that we all handle antibiotics with care.

These important medications are often life-savers, but without careful and judicious use we risk compromising their effectiveness to the point where they may ultimately fail to deliver the benefits we currently gain from their use.

At a time when we are confronted by sad and awful world events that impact the lives of many people around the world, one truly terrifying piece of news may have escaped the notice of many people.

British and Chinese scientists have recently identified a strain of the E Coli bacteria that has developed a gene that means that it is resistant to all known antibiotics.

Moreover, it appears that this gene may be capable of transfer to other forms of bacteria that are commonly implicated in infections such as UTIs and pneumonia .

The reality of multi-drug resistant bacteria means that we face the frightening prospect of a return to the pre-antibiotic era, where simple infections such as a tooth abscess, a simple respiratory infection, a UTI or a skin infection could prove to be fatal.

With the focus in pharmaceutical development largely directed at medications used for the management of chronic, long-term conditions, it is clear that the world is not developing new antibiotic drugs at a rate that will allow the replacement of agents that are becoming redundant as a result of developing resistance patterns.

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At a time when antibiotic resistance is on the rise, it is important that all stakeholders adopt an approach to the use of these drugs that will help to preserve their efficacy and to ensure that they will continue to deliver benefits in the management of common infectious diseases.

Although attention has rightly been focused upon the hospital setting to achieve this, responsible use of antibiotics for the many thousands of people living in Australian Aged and Extended Care facilities is also essential.

Dr Chris Alderman, Director of Clinical Excellence, Ward MM.



Feature Article:

Preserving antibiotic effectiveness in aged care

Antimicrobial stewardship is a coordinated program that promotes the appropriate use of antimicrobials (including antibiotics), improves patient outcomes, reduces microbial resistance, and decreases the spread of infections caused by multidrug-resistant organisms.

There has been much attention to antibiotic stewardship in the hospital setting, but it is now clear that this approach also needs to be extended into the residential aged care setting as well.

Infections in nursing homes are common. One study involving 30 RACFs in rural Victoria has shown a total reported infection rate of 3.6 infections/1000 occupied bed days. Exposure to at least one course of antimicrobials occurs in 50–75% of Australian RACF residents annually, and more than 1 in 10 residents are receiving an antimicrobial at any given time. Current data suggests that the rate of antibiotic use in Australian aged care facilities is approximately 7 courses/1000 occupied bed days.

Some simple key points to remember:

- **Evidence does not support the use of antibiotics for asymptomatic bacteriuria.**

Don't do urinalysis/urine cultures for asymptomatic residents. Change indwelling catheters before antibiotics, collect any specimen from newly placed catheter.

- **Evidence does not support widespread use of antibiotic prophylaxis to prevent UTIs.**

In fact, this approach may result in potential unnecessary exposure to medications that can cause harm for older people. Long-term use of antibiotics can help to select for resistant organisms.



- **Using antibiotics while guided by the results of microbiology is associated with better outcomes and less resistance.**

Only use empirical treatment if clinical circumstances suggest unacceptable outcome if waiting 2-3 days. It can also be useful to check previous organism susceptibility documentation.

- **Many courses of antibiotics continue for longer than evidence suggests is needed.**

In general, continuing antibiotics for a duration of longer than a week increases the risk of resistance and the development of significant adverse effects.

It is important that all stakeholders – doctors, nurses and pharmacists – play their parts in promoting careful, selective use of antibiotics in Aged Care.

Why not speak to your Ward MM pharmacist for more information or a targeted educational session?

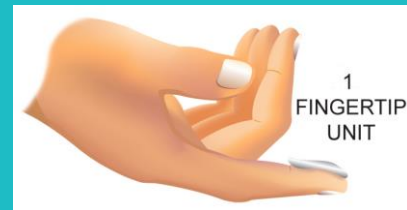
Call the Ward MM freecall number 1800 WARDMM (1800 927 366) at any time for advice or assistance in relation to this or other matters related to safe and judicious use of medications.

Quick Tip

How much cream?

Staff sometimes ask how much cream or ointment should be applied to a specific area. The Finger Tip Unit (FTU) can be helpful.

One FTU is the amount of cream that fits on the ventral aspect of the index finger from first crease to tip (see diagram). For adults, one FTU should cover the skin on one hand, 2.5 FTU for the face and neck, 2 FTU for one foot, 3 FTU for one arm, 6 FTU for one leg and 7 FTU for the front of the trunk and 7 FTU for the back.



Quick Tip

Watch the sun exposure...

Many medications can sensitize skin, causing nasty reactions in the event of exposure to sunlight.

There are many examples where sun exposure should be limited and sunscreen applied liberally.

These include:

- doxycycline,
- chlorpromazine,
- ciprofloxacin,
- amiodarone and;
- quinine.

Your Questions Answered

Notes from facilities serviced by Ward MM

It is quite common for us to receive similar enquiries from more than one facility in our network. In this section we summarise questions with a common basis – as a part of our “connect – network – share” ethos, we share the information with all of our facilities.

Q. Are there specific things to consider when using a medicine that is applied as a “patch?”

A. The administration of medications in the form of an adhesive patch is usually referred to as transdermal administration. This is different to the administration of a medicine in the form of an ointment or cream, where the intended purpose is for the medication in the product to exert its effect in the local area where the product is applied (e.g. for the treatment of a skin rash or infection).

In contrast, administration by the transdermal route is intended to achieve systemic absorption, whereby the medication is absorbed across the skin and into the bloodstream, and exerts systemic effects.

Examples of transdermally administered products include nitrates for ischaemic heart disease, opioid analgesics such as buprenorphine and fentanyl (which are used for pain relief), and other products used for diverse purposes such as hormone replacement, management of urinary incontinence, and reduction in dementia symptoms. As the effect is systemic, the patch does not need to be applied near the part of the body where the effect is needed – for example, a fentanyl patch applied on the upper arm will still be effective for the treatment of pain in the lower back!

In general, the site of application should be relatively hair free, and should be rotated. For example, a patch applied weekly could be affixed to the right shoulder blade in week one, the right upper arm week two, left shoulder blade week three and left upper arm week four. This means that no single site is used more often than once a month, lessening the likelihood of irritation or local skin reactions (note that some local reactions are related to the patch adhesive, not the drug, so switching patch brands may prove to be helpful). Medication patches should never be cut to modify the dose – this may critically alter the way the drug is released and cause either reduced efficacy or toxicity. Remove the previous patch when applying a new one. Dispose of safely – many patches still have active drug present even after use, meaning that the product could be harmful to children or pets.



Meet your Ward MM Team Member

Fiona Rhody-Nicoll was mentioned in last month's newsletter when she spoke on Ward MM's behalf at the National LASA Congress. But how much do you really know about our General Manager?

Most meaningful moment: It's going to sound corny but this would be the moment that I realised how incredible the impact is that our amazing team can have on aged care (nationally and internationally). It was the moment that I recognised I was definitely in the right role.

My biggest challenge: Toning down the Scottish accent! It's taken 9 years in Australia but I think I'm almost there...

I'd be lost without: My wonderful other half Ant who makes sure that I include 'down time' into my ever busy schedule. It also wouldn't be a lie to say that I may be slightly addicted to sugar...