



From the Clinical Director

As this edition of the Ward MM electronic newsletter is distributed to our valued colleagues and clients, here in Australia summer will be in full swing. We hope you've all had an enjoyable Christmas (however long ago that might seem!), and that at least some of you are having some well-deserved down time so that you can enjoy the warm weather, and perhaps some traditional Australian summertime activities like time at the beach, outdoor eating at the BBQ, or maybe some time watching the tennis or cricket... The warm weather we tend to take for granted in Australia can be viewed with some degree of envy by our friends from colder climates, but of course we also know well the other side of the equation. As the temperatures start to rise into the upper 30s C, or even beyond into the 40s the comfort level can start to dwindle and we often seek refuge indoors away from the sun.

Although summer days can be fun, it is also important to bear in mind that there can be significant health risks associated with the hot weather. For example, the World Health Organisation states that "Australia and New Zealand have the highest incidence and mortality rates of melanoma in the world, according to Australia's Department of Health and Aging. In those two countries, the risk of developing melanoma before the age of 75 is 1 in 24 for males and 1 in 34 for females."

In a previous edition of the newsletter we have highlighted medications that can predispose patients to photosensitivity reactions – in their mild manifestation these reactions may simply resemble uncomfortable sunburn.

However, severe photosensitivity reactions (including the so-called "phototoxic" reactions) can be a medical emergency and require urgent assessment and management. These problems are of course best avoided by avoiding direct exposure to strong sunlight during the period spanning treatment, and for several days afterwards (as the residual drug can be circulating for some time after therapy is complete. Another consideration is the use of a high protection factor sunblock, long sleeves and a suitable hat. Caucasian people are at increased, particularly those of very fair complexion. Although some sunlight exposure is desirable to assist with maintaining vitamin D status and promoting healthy circadian patterns and a normal sleep-wake cycle, this is best achieved during period of the day when the UV radiation is less intense (e.g. cool of the morning or late afternoon/early evening).

Severe photosensitivity reactions can be a medical emergency.

Hot weather can present special health hazards for older people. With the exception of some remote Pacific Island states, electricity prices in Australia amongst the highest in the world, and some older people on limited/fixed incomes are apprehensive that the extensive use of air conditioning may result in unaffordable power bills. The risk of over-heating, dehydration and serious medical complications is real, especially during sustained periods of very hot weather. A friendly phone call or drop-in visit to see an older person can prove to be life-saving during a heat wave. This edition of our newsletter covers more detailed information about medicines and extreme heat – your Ward MM pharmacist is always available to answer your detailed questions about this issue.

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



Feature Article:

Medications and hot weather

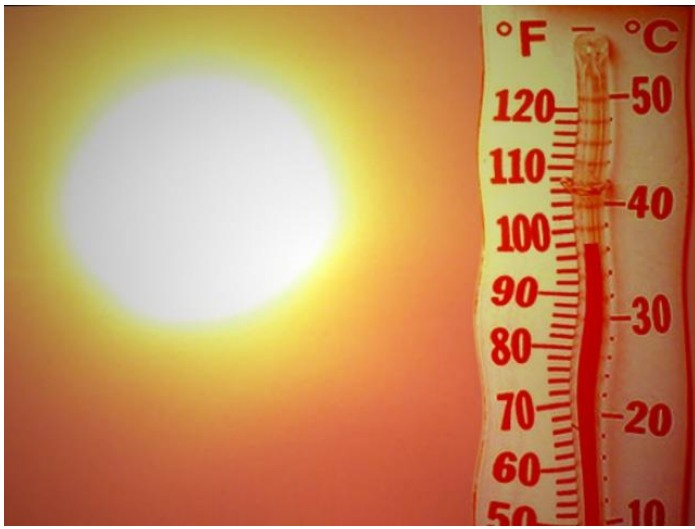
During the year 2003 in Europe, it is thought that some 70,000 excess deaths occurred during a prolonged summer heatwave, prompting the publication of several papers in medical literature, including reviews examining increased harm related to medications. In Australia, individual states have developed specific information to help people better manage in heatwaves.

Heat-waves that have long duration and high intensity have the greatest impact on mortality, with older people at increased risk, and the use of some medicines is an important predisposing factor to heat-wave related harm. Few medicines carry explicit warnings in Consumer Medicine Information that specifically address potential adverse effects during a heatwave.

Serious heat-related conditions include dehydration, heat cramps, heat syncope, heat exhaustion and heat stroke (a medical emergency).

Medication-related harm during extreme heat can arise from a wide variety of underlying mechanisms. For example, medications that have significant anticholinergic activity (e.g. some antidepressants, antipsychotics and drugs used for urinary incontinence) are potentially problematic due to their propensity to cause hypohidrosis (reduced sweating). The anticonvulsant topiramate (also used for migraine and some psychiatric conditions) is known to cause potentially serious hypohidrosis.

Other mechanisms that can contribute to a risk of medication-related harm during periods of extreme heat include dehydration and electrolyte imbalance such as hyponatremia (which can be related to treatment with diuretics such as frusemide or thiazides), ACE inhibitors (e.g. perindopril, ramipril), or Angiotensin Receptor Antagonists (such as candesartan, irbesartan). In addition, dehydration can be related to medicines that contribute to vomiting or diarrhoea – examples include SSRI antidepressants, especially in the early stages of treatment.



Some drugs contribute to heat-related problems by reduced thirst (e.g. ACE inhibitors, carbamazepine, and some anti-parkinsonian drugs). In the context of dehydration there is an increased risk of hypotension and postural hypotension (which may increase fainting and falls risk).

If dehydration does occur, decreased renal function may follow, and in turn this creates risk of serious toxicity associated with renally cleared drugs such as digoxin, lithium, metformin and many others. It is also important to note that sedation and increased confusion associated with some medications may affect judgment and perception of heat, or attention to maintaining hydration.

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

The Ward MM freecall number 1800 WARDMM (1800 927 366) can be used at any time to seek advice about the issues raised here, or indeed any medication-related matters.

Announcement

Ward MM Aged Care Medication Masterclass

**Mental Health in Aged Care
March 2016**

Exact Date TBA

(No cost)

To register interest in this event email:
info@wardmm.com.au

Did you know?

Recently several pharmacists from the Ward MM team had a paper published in the prestigious international journal **The Consultant Pharmacist**. The paper dealt with the complex area of cross-sensitivity between penicillins and cephalosporin antibiotics.

Take home messages include:

- Where possible, establish the precise nature of the penicillin allergic reaction
- Cephalosporins can be given to patients with a penicillin allergy IF the cephalosporin has a different side-chain and the patient has not experienced a previous anaphylactic reaction with the penicillin

Readers who are interested to obtain more detail can see the full citation at <http://www.ingentaconnect.com/content/ascp/tcp/2015/00000030/00000012/art00004>

Alternatively, a full copy of the paper can be obtained by contacting Ward MM by email at info@wardmm.com.au.

Quick Tip

Medications and dry mouth.

There is a very large range of medications associated with dry mouth, including many over-the-counter drugs.

The most commonly implicated agents causing this problem include:

- many antidepressants,
- pregabalin,
- promethazine and;
- opioid analgesics including oxycodone and tramadol

This event books out so please RSVP as soon as you receive your

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. The Ward MM RMMR referral form mentions medication-related geriatric syndromes – what are these?

A. Many (if not most) older people will eventually develop medical complications that referred to as geriatric syndromes. These are often multifactorial and involve multiple organ systems, and may be related to the medication taken.

In some cases there may be a cascade effect, where one geriatric syndrome may contribute to/exacerbate several others. A number of geriatric syndromes may be present in the same patient simultaneously.

Drug treatment can both contribute to, and be a part of the management of geriatric syndromes. Polypharmacy (taking multiple drugs at a time) is common amongst the elderly, and there is a complicated balance required in the adjustment of pharmacotherapy to achieve optimal treatment outcomes and reducing the likelihood of iatrogenic complications for older people. Doctors, pharmacists and nurses and other health professionals will need to work cooperatively to identify, document, manage and prevent geriatric syndromes that are potentially medication-related. Although not exhaustive, the list of geriatric syndromes that may be related to medications may include:

- Weight-loss, nutritional defects - drugs may contribute to inadequate calorie intake through adverse effects such as dysphagia, anorexia, nausea, dysgeusia. Some medications are associated with specific nutritional defects: vitamin D deficiency can result from treatment with anticonvulsants such as carbamazepine, vitamin B12 deficiency is sometimes related to treatment with metformin and possibly also proton pump inhibitors (PPIs). Hypomagnesaemia has been associated with PPI treatment, and may cause symptoms such as leg cramps and cardiac rhythm abnormalities.
- Many drugs may contribute to falls and injuries experienced by older people, mediated through a range of mechanisms. Medications that cause prominent orthostasis may contribute to falls through postural hypotension
- Delirium: Although the precise cause for delirium in an older person may not be isolated, medications can certainly contribute, and common examples include corticosteroids, psychotropic drugs, and drugs with significant anticholinergic effects.
- Many other geriatric syndromes may be related to medications, including clinically important syndromes such as pressure sores, incontinence, muscle weakness, constipation, osteoporosis, sleep disturbance and pain syndromes – for more information speak to your Ward MM pharmacist.



Meet your Ward MM Team Member

Caroline Holdstock travels far and wide across NSW where she manages the Ward MM pharmacist team.

Most meaningful moment: I have had many, watching my two now adult daughters grow up and evolve into the beautiful and inspiring young women they have become.

My biggest challenge: Deciding to return to pharmacy after a 14 year break and having to relearn things, and learn about a lot of new things. My re-entry course was like learning a foreign language and accreditation was really challenging. Now the challenge is to keep up with all the new information which is still emerging and using it to help the elderly and give them a voice.

I'd be lost without: Well I never thought I would say this but it has to be my mobile phone! Now my mobile office is carried in my backpack it enables me to function efficiently and keep in contact with everything I need to. My pink lipstick comes a very close second though.....