Clinical Snippets August 2025

1. Desmopressin in nocturnal enuresis in children

A recent PEARL from the Cochrane organisation looked at the effectiveness of desmopressin for treating nocturnal enuresis in children. It was noted the overall quality of evidence in the studies reviewed was low to very low.

- The bottom line was that desmopressin may reduce the mean number of wet nights per week by 1–2 compared with placebo, with higher doses potentially offering greater benefit. Its effectiveness compared with alarm therapy or tricyclics is unclear. Combining desmopressin with alarm training probably reduces the number of wet nights per week compared with desmopressin alone.

- Desmopressin probably results in an increase in the number of children achieving 14 consecutive dry nights by the end of treatment compared with placebo. Its effectiveness compared with alarm therapy or tricyclics remains uncertain for this outcome. Combining desmopressin with alarm training or anticholinergics may increase the number of children achieving 14 consecutive dry nights by the end of treatment compared with desmopressin alone.

- Health Pathways have a helpful Enuresis in Children pathway that notes medications for primary nocturnal enuresis are rarely indicated. With respect to desmopressin, the Pathway notes:

    - 60 to 70% of patients will respond
    - Response not sustained on drug withdrawal
    - Safety concerns regarding water intoxication: Hyponatraemia, cerebral oedema, convulsions; Small number of deaths in the USA occurred in otherwise healthy children on desmopressin for nocturnal enuresis. Oral formulation safer than intranasal
    - Minimise risk by using lowest effective dose and restricting fluid from 1 hour prior to 8 hours post-dose
    - Consider for short-term use on nights away from home: 1 to 2-week trial period at home is suggested first to determine if response is adequate.
    - Discrete use of padded pull-up underpants may prove a safer and more effective alternative.
    - Desmopressin tablets and wafers are fully funded without special authority
    - For longer term use, a specialist review is suggested. An alarm programme should either have been trialled first or considered inappropriate due to child or family circumstances.

- The NZ Formulary for Children emphasises the potential risk of hyponatraemia due to fluid overload noting patients being treated for primary nocturnal enuresis or nocturia should be warned to avoid fluid overload (including ingesting water during swimming) and to stop taking desmopressin during an acute illness with fever, vomiting or diarrhoea (until fluid balance is normal). The risk of hyponatraemia can also be minimised by keeping to the recommended starting doses.

2. Prescriber Update

The September 2025 issue of Prescriber Update includes a few pertinent reminders:

(i) **Fluoroquinolones**: There is another reminder that fluoroquinolones have been associated with prolonged, disabling, and potentially persistent/irreversible serious adverse reactions, including tendonitis/tendon rupture, peripheral neuropathy and psychiatric reactions including psychosis or depression leading to suicidal ideation. Only prescribe fluoroquinolones when other antibiotics normally used for the infection are inappropriate and advise patients to promptly report any symptoms/signs of an adverse reaction.

(ii) **Macrolides**: At the June 2025 meeting it was recommended all macrolide antibiotics should include the increased risk of adverse cardiovascular outcomes on the Medsafe data sheet (currently only listed for clarithromycin). Meta-analyses and large cohort studies indicate that macrolide use is associated with a 2- to 3-fold increased risk of sudden cardiac death or ventricular tachyarrhythmia compared to non-macrolide antibiotics, with an absolute risk increase of approximately 118 additional events per 1 million treatment courses. The risk is highest during the first week of therapy and is largely confined to the duration of treatment. It is most pronounced with erythromycin and clarithromycin, while azithromycin also carries risk but to a lesser extent. Roxithromycin appears to have a lower risk profile. Patients with underlying cardiac disease or those taking concomitant QT-prolonging medications are at increased risk.

(iii) **Adult ADHD medication**: There is a several page section on adult ADHD medication noting psychiatric effects, cardiovascular effects, and risk of seizures should all be considered when prescribing these medicines. Some specific statements include:

- Treatment of ADHD with stimulants should not be initiated in patients with acute psychosis, acute mania, acute suicidality or signs of suicidal tendency. Monitor patients for onset or exacerbation of aggressive behaviour which may occur during treatment.
- Do not use lisdexamfetamine in individuals with tics or Tourette's syndrome. Methylphenidate is associated with the onset or exacerbation of motor and verbal tics, including worsening of Tourette's syndrome. There have been reports of tics with atomoxetine.
- Adults with structural cardiac abnormalities or other serious cardiac problems (eg, cardiomyopathy, heart rhythm abnormalities) should not be treated with these medicines. Some patients can have clinically relevant increases in blood pressure or heart rate so regularly review blood pressure and cardiovascular status during treatment.
- Additional potential adverse effects mentioned include lowered seizure threshold, risk of serotonin syndrome when co-administered with other serotonergic agents, risk of abuse and (with atomoxetine) risk of liver injury.

(iv) **Pisa Syndrome**: Pisa syndrome refers to an abnormal posture characterised by involuntary leaning to one side when upright (>10 degrees constant lateral flexion). The person may have difficulty walking and standing up straight.

- Anticholinesterase inhibitors and antipsychotics are the most frequently reported medicines associated with Pisa syndrome. Some antidepressants, anti-Parkinson agents, lithium and valproate have also been implicated.
- Medicine-induced Pisa syndrome may appear months to years after starting the medicine. It usually resolves after stopping the suspected medicine or lowering the dose.

3. ADHD resources

- Use of the Australasian ADHD Professionals Association (AADPA) *Australian Evidence-Based Clinical Practice Guideline for Attention Deficit Hyperactivity Disorder* is recommended as part of ADHD assessment and management. These guidelines have been endorsed by the RANZCP and the Royal Australasian College of Physicians.

- The New Zealand Clinical Principles Framework for Attention Deficit Hyperactivity Disorder has now been completed by the clinical reference group and was recently published by the Ministry of Health. While the framework is not a clinical guideline, it incorporates the broad clinical principles from existing clinical practice guidelines and was written with reference to the Royal Australian and New Zealand College of Psychiatrists' position statement #55 – ADHD across the lifespan.

- A series of training modules for GPs wishing to undertake assessment and management of ADHD in adults will be released by the Goodfellow Unit later this year, in anticipation of GPs and NPs being able to complete stimulant Special Authority applications from February.

- The British Journal of General Practice has recently published a guide for primary care clinicians managing ADHD medication side effects which contains practical information for screening and managing adverse effects of ADHD medications.

4. National Community Referral Criteria for Imaging

Te Whatu Ora has introduced mandatory national criteria for Community Referred Radiology (CRR) from 1 September 2025, replacing the previous regionally adapted framework. These changes aim to standardise access and improve equity nationwide. Key changes include:

- national, non-modifiable criteria
- expanded referral eligibility (now includes GPs, urgent care doctors, and nurse practitioners)
- defined priority timeframes (e.g. acute, urgent, 2–6 weeks)
- new triage and liaison roles to support referrals
- digital tracking and integration with ERMS, BPAC, and HealthLink

- clear responsibilities for follow-up and service provision

The 114 page document is available here with a supporting explanatory document for primary care also available.

There is a Goodfellow Unit webinar Navigating radiology: Referral to result taking place on Tuesday evening 30 September. This is advertised as: *Learn about the new Community Radiology Programme and Regional Hubs, including the tools and context to confidently refer under the new system*.

5. CT Imaging and Cancer Risk

Issue 20 of GP Practice Review included a study published recently in JAMA on the projected lifetime cancer risks from current CT imaging in the USA. The review notes that CT is an extremely useful medical imaging test however the risk of cancer associated with the exposure to ionising radiation used to perform the procedure is unknown. These researchers estimated the number of future cancers that could result from the 93 million CT scans performed in the United States in 2023. The risk model projected that CT scans in 2023 could result in approximately 103,000 future cancers. The per-examination cancer risks were higher in children and adolescents, but higher CT utilisation in adults meant that most of the projected cancers would occur in adults. These findings suggest that if current CT utilisation practices continue in the United States, CT-associated cancers could potentially comprise 5% of all new cancer diagnoses annually. Lung cancer and colon cancer were projected to be the two cancers to be increased the most due to CT scan exposure. The reviewer notes *This study provides interesting information regarding the cancer risk associated with CT scans. Many patients are unlikely to consider the risks associated with medical imaging, including of incidental findings. This paper will help to guide discussions with patients by emphasising that medical imaging is not a benign intervention and that careful consideration regarding how any result will guide management is required before referring a patient for any imaging procedure.*

6. Covid-19 antiviral eligibility

Pharmac has announced that from 1 September 2025, the COVID-19 antivirals nirmatrelvir with ritonavir (branded as Paxlovid) and remdesivir (branded as Veklury) will be funded for people aged 50 years or over with an active COVID-19 infection who are at high risk of hospitalisation or death from COVID-19.

This decision will improve access to these COVID-19 antivirals for people aged between 50 and 65 years who are high risk and not already eligible under the other access criteria. People who can currently access funded antivirals will continue to have access to them under the updated criteria and the Pharmac Paxlovid access criteria assessment tool has been updated to reflect the new criteria.

BPAC have recently released a supporting article that discusses what patients may be at increased risk of hospitalisation, with a table of various morbidities that might be considered. The article concludes:

In general, consider COVID-19 antivirals in a patient aged 50 – 64 years if they have any of the following factors:

- Māori or Pacific ethnicity
- Socioeconomic deprivation that means they do not have a stable setting in which to recover from COVID-19, or a reliable means of caring for themselves, seeking help or responding to follow up
- Are not fully vaccinated against COVID-19 (primary course) and never had COVID-19 before
- One or two of the medical co-morbidities from Table 1 if there is clinical concern about the effect on recovery from COVID-19

7. Reminder re hyperkalaemia

A recent NZ Doctor article reviewed causes of hyperkalaemia.

(i) Impaired renal function – for individuals with pre-existing impaired renal function, serum potassium levels may be elevated. These individuals are more susceptible to hyperkalaemia if they become dehydrated or take medicines that have a detrimental additive effect on serum potassium levels.

(ii) Dietary factors – it is worth exploring whether any dietary changes could increase serum potassium levels, particularly during the fruit seasons (eg, bananas, oranges, avocados and tomatoes).

(iii) ACE inhibitors and ARBs – these are among the most commonly recognised potential causes of hyperkalaemia, particularly if a person is unwell and reduces fluid intake, leading to dehydration. Additionally, there are possible interactions with other medicines, such as NSAIDs, trimethoprim/co-trimoxazole and potassium-sparing diuretics (eg, amiloride and spironolactone).

(iv) Potassium-sparing diuretics – potassium-sparing diuretics such as amiloride reduce the passive renal excretion of potassium. It is important to note that this action differs from that of spironolactone (and eplerenone), which is an aldosterone antagonist. Importantly, in heart failure, the renin–aldosterone–angiotensin system is activated, highlighting the specific benefit of spironolactone and its lesser risk of hyperkalaemia in heart failure.

(v) Beta-blockers – This adverse effect is primarily seen with non-selective beta-blockers Carvedilol is non-selective, and although metoprolol is a selective beta-blocker, hyperkalaemia has been observed with it. Bisoprolol is usually considered the most cardioselective beta-blocker. The hyperkalaemia seen with beta-blockers is usually mild and dose related.

(vi) Trimethoprim – reduces the passive renal excretion of potassium. The interaction between trimethoprim/co-trimoxazole used for over 10 days and ACE inhibitors/ARBs or spironolactone is significant and may be overlooked.

(vii) NSAIDs – can cause hypoaldosteronism, and hence reduce potassium excretion, but may also contribute by reducing kidney function.

8. Widened access to meningococcal B vaccine

Pharmac has announced that from 1st September, 2025, access to the meningococcal B vaccine (Bexsero) will be widened to include all children aged under five years. Currently, meningococcal B vaccination is funded for children up to age 12 months as part of the childhood immunisation programme; it is scheduled to be given as three doses, usually at ages three, five and 12 months. The timing of administration remains the same. A catch-up meningococcal B vaccination programme has also been available for children aged 13 – 59 months since March, 2023 but ends on 31st August, 2025. This change will replace the current catch-up programme, and means that all children aged under five years will be able to complete the full meningococcal B vaccination course if it was not done within the first 12 months of life.

Eligibility criteria for funded meningococcal B vaccination for older children and adults at high risk remain the same; click here for funding criteria.

9. Resources

- The Cunliffe (TP) General Dermatology Diagnostic Tool on the Primary Care Dermatology Society website
- Tablet ID guide - Medlook