



Message from the Tonic Media Network Editorial Committee*

Welcome to another edition of *Practice Connect* – your personal, practice and patient focussed newsletter with up-to-date news and information.

Understanding the effect of cumulative surgeries on older people's cognition

As surgical technologies advance, more older people will be considered candidates for surgery, but this expansion may have unintended consequences.

A University of Sydney led study has revealed multiple surgeries on older patients can have an effect on memory, reaction time, task-switching and problem-solving with each additional surgery.

In this [new study](#), researchers used data from the United Kingdom's Biobank to analyse half a million people aged 40 to 69 and followed over 20 years of brain scans, cognitive tests and medical records.

These patients underwent procedures, ranging from day surgery to heart bypass operations, with diagnostics and neurosurgery excluded. As part of the study, patients then underwent brain MRIs and cognitive function testing looking for signs of neurodegeneration.

The study found that, with each additional surgery, patients' overall reaction time slowed by 0.3 milliseconds. Cognitive flexibility, problem-solving, and the ability to remember pictures and numbers also decreased with each additional surgery.

"The results suggest that the cognitive decline per surgery may seem small, but those changes and losses in neurodegeneration really start to add up after multiple surgeries," says lead researcher Dr Jennifer Taylor from the University of Sydney's Faculty of Medicine and Health.

"We found that surgeries are safe on average but also that the burden of multiple surgeries on the brain health of older patients should not be underestimated," Dr Taylor added.

This information should be considered when planning surgeries for older adults, particularly those who might undergo multiple operations.

Healthcare providers might also need to consider strategies to protect brain health during and after surgery, such as rehabilitation/enhanced recovery programs, or cognitive 'prehabilitation' in elective surgeries. While surgical treatment should not be withheld, it is important to consider ways to optimise cognitive health when considering surgery.

Further information

[Association between surgical admissions, cognition, and neurodegeneration in older people - a population-based study from the UK Biobank: The Lancet](#)

GPs need support for postpartum contraception provision

Contraception for mothers of newborn babies can often be overlooked amidst the focus on the health of the newborn baby and the significant adjustments required following the birth of the child.

A [Monash University-led study](#) has found that early access to contraception information and services postnatally can support family planning and encourage adequate spacing between pregnancies, ensuring better health outcomes for both mothers and babies. This can help avoid unintended pregnancies.

The study delved into the views and experiences of 23 Australian GPs providing contraceptive care during the '6-week check'.

Senior author, Dr Jessica Botfield, said GPs were well placed to deliver contraceptive care, including provision of information and education, which new mothers needed to support their decision-making.

Dr Botfield suggested that discussions about contraception should be an essential part of the 6-week check and other postnatal check-ups with GPs.

"Access to contraception information and services to plan for and space pregnancies is critical, particularly in the postpartum period when women may be at risk of an unintended pregnancy soon after giving birth," Dr Botfield said.

The GPs interviewed in the study made several suggestions on how to overcome the challenges of providing postpartum contraceptive care including:

- Development of national guidelines for postpartum contraceptive care (note: the recently-updated RACGP 'Red Book' now refers to contraception in their '[interconception](#)' chapter, which provides some guidance for GPs)
- Prioritising collaboration with other maternity providers, including midwives and child and family health nurses
- Improving access to contraceptive education and training for GPs, including for long-acting reversible contraceptive (LARC) methods such as IUDs and implants
- Provision of financial incentives for GPs to upskill/undertake contraception and LARC training.

Use your Tonic TV to communicate to mothers

If your practice has a Tonic TV, we can help you promote your services and important messages. You have access to 3 minutes every hour to promote your practice using either static slides or supplying us with videos of a 30 or 60 second duration.

A slide appears on screen for 15 seconds and can promote important information such as: Operating hours, new staff, services offered such as screenings, regular checkups, local health updates, seasonal vaccination reminders, special events and clinics.

We can create the slides for you. Simply contact us with the information you'd like to share on screens, and we will design slides to promote your practice.

Further information

[General practitioners' views and experiences of postpartum contraception counselling and provision, a qualitative study](#): Medical Journal of Australia

Antidepressants prescribed for pain in older patients not effective

Chronic pain is relatively common among older adults, often associated with long-term conditions like arthritis.

University of Sydney research has found people over 65 are being prescribed antidepressants as pain treatment based on international guidelines that use limited evidence. In fact, researchers found that in the last 40 years there have been only 15 trials involving about 1400 participants globally focusing on the benefit of antidepressants for pain in older people.

[The study](#) fills a much-needed gap in research by bringing together the information from these trials to look at the efficacy and harms of antidepressants for acute and chronic non-cancer pain in those over 65-years old.

Lead author Dr Sujita Narayan, a Research Fellow at the University's Institute for Musculoskeletal Health said international guidelines recommending antidepressants for chronic pain are heavily based on studies that either exclude older adults or include only a small number of them.

"We shouldn't rely on findings from studies with younger people and apply them to older adults because they are different - older people's bodies undergo changes that alter how they respond to medications. This can lead to different effects in older people compared to younger people," said Dr Narayan.

The study found a lack of evidence to inform the use of antidepressants for most pain conditions in older adults, and urges prescribing and treatment practices that consider the unique needs and risks of older adults.

Researchers highlight the need for more inclusive trials, with older people that represent an exponentially growing proportion of the population.

The study also supports guidelines on the management of chronic non-cancer pain in older people recommending a multidimensional approach using non-pharmacological strategies, such as physical exercise and cognitive behaviour therapy based on trials done specifically in older people.

Further information

[Efficacy and safety of antidepressants for pain in older adults - A systematic review and meta-analysis](#): British Journal of Clinical Pharmacology

Vaping teens twice as likely to have mental health issues

Vaping has surged among young Australians in recent years, especially adolescents in their early teens. Adolescence is also when many mental health challenges, such as depression and anxiety begin to emerge. While previous research, mostly from the US, has suggested a link between vaping and mental health problems in adolescents, there's less information specific to Australia.

A [new study](#) from the Matilda Centre at the University of Sydney explored this connection, focusing on the mental health impacts of e-cigarette use in young Australians.

The researchers conducted a large-scale survey involving more than 5000 students from Year 7 and 8 across 40 schools in New South Wales, Queensland, and Western Australia. They completed an online survey between May and October 2023. The survey collected information on vape use and several mental health indicators, including depression, anxiety, stress and overall wellbeing.

The study found those who reported severe depressive symptoms were over twice as likely to have tried e-cigarettes, compared to those reporting no depressive symptoms.

Data showed overall higher e-cigarette use among those with poorer mental health, including severe depressive symptoms, moderate and high stress, and low wellbeing.

The findings show a critical need for effective mental health support at the same time as vaping prevention during early adolescence, when these issues first emerge.

While the study can't establish a direct cause-and-effect relationship, the authors say it brings home the need for prevention strategies that address both mental health and vaping in adolescents.

According to Dr Lauren Gardner from the University of Sydney's Matilda Centre, more research is needed to understand the complex relationship between mental health and vaping.

"These findings highlight the urgent need for prevention and early intervention approaches, backed by evidence, to support both the short and long-term health and wellbeing of young people."

The Matilda Centre previously found the average age a teenager begins to vape is 14. Other research (independent of the University of Sydney) has found vaping rates among 12 to 15-year-olds increasing from 10 percent to 24 percent between 2017 to 2023.

Further information

[E-cigarette use and mental health during early adolescence - An Australian survey among over 5000 young people](#): Australian and New Zealand Journal of Psychiatry

The four main viruses currently active in the community

While COVID and Influenza rates have been declining, there are currently four main viruses circulating around the community which explains why people are getting sick.

These viruses are adenovirus, human metapneumovirus, parainfluenza and rhinovirus.

According to Dr Norman Swan, they can all cause cold and flu symptoms like fever, runny nose, sneezing, cough and lethargy. Although they do have some differences between them.

Adenovirus can also cause gastroenteritis, conjunctivitis and bronchitis. Sometimes it can even cause symptoms of a bladder infection.

Human metapneumovirus is mostly a mild disease, but it can be severe the first time you get it or if you're immunocompromised. In addition to cold and flu symptoms, it can cause a wheeze, like respiratory syncytial virus, which is related to Human metapneumovirus which can also cause pneumonia and ear infections.

Parainfluenza, which tends to be worse in the under-fives and the over-65s, can cause a barking cough and croup.

Rhinovirus is of course the classic common cold virus and there are many different types. They can cause middle ear infections, sinusitis, bronchitis and pneumonia.

Some of the precautions people can take if they are experiencing symptoms is to ensure good hand hygiene, practice sensible social distancing, stay away from school, daycare or work, and wear a

good mask if you must go out. Of course, people should see their medical professional if symptoms persist.

Further information

[Respiratory viruses fact sheet](#): NSW Health

New class of long-acting medicine a game changer for high cholesterol patients

According to the Heart Foundation, 42% of Australian adults are living with high cholesterol, which is most common in people aged 55 to 64 years of age.

If diagnosed, many of these people will be taking a cholesterol lowering medicines daily. Although this comes with the risk of people not keeping up this regime, especially as they are most likely to be on the medicines for the longer term.

In what is a game changer, there have been advances in pharmaceutical processing technologies in recent years that have resulted in the development of medicines that provide coverage ranging from weeks to months after one injection.

One example is Inclisiran (Leqvio®), which is a cholesterol-lowering medication that's given by a doctor or other healthcare provider every six months after an initial dose, and a second at three months.

It works by improving the liver's natural ability to prevent the production of a protein that plays a key role in keeping cholesterol circulating in the system. This reduces the amount of LDL-C in the bloodstream.

According to the manufacturer, the subcutaneous injection can be used alone or in combination with statins. It can also be used for patients who are statin-intolerant.

It was listed on the Pharmaceutical Benefits Scheme earlier this year.

Medical professionals believe that these new classes of long-acting medicines will be welcomed by patients with high cholesterol.

There is some international debate about the targets for LDL cholesterol levels. The base line for patients is having their GP do a risk score. If it's very high – for example someone who's had a heart attack or stroke or angina - then some authorities argue the target should be less than 1.4 mmol/l. If high but the person has not had a cardiovascular event, then under 1.8 mmol/l is a commonly set target.

Further information

<https://australianprescriber.tg.org.au/articles/managing-hypercholesterolaemia.html#treatment-targets-for-ldl-c-concentration> : Australian Prescriber

https://assets.contentstack.io/v3/assets/blt8a393bb3b76c0ede/blt64cda689a04c618d/65960d4fb e5d26a4f565a12e/Cholesterol-Management-infographic_V-2.pdf : Heart Foundation

[Key statistics - Risk factors for cardiovascular disease](#): Heart Foundation

[Inclisiran \(Leqvio®\) details](#): TGA website

*Dr Norman Swan AM and Dr John Aloizos AM