

Message from the Tonic Media Network Editorial Committee*

Welcome to another edition of Practice Connect - a newsletter designed for you, your practice and your patients with up-to-date news and information.

Is the Alzheimer's drug donanemab really a turning point for treatment?

About 400,000 Australians are living with dementia and most of them have Alzheimer's disease. Alzheimer's disease is thought to be caused by the abnormal build-up of proteins in and around brain cells.

According to the <u>National Institute on Aging</u>, one of the proteins involved is called beta amyloid, deposits of which form plaques around brain cells. Another is tau which accumulates in specific brain regions involved in memory

In recent years, the treatment trials have moved earlier in the Alzheimer's process before too much brain damage has occurred.

A pharmaceutical company recently announced the trial results of an Alzheimer's disease medication - donanemab. The clinical trial of donanemab has now been peer reviewed and published in the <u>Journal</u> <u>of the American Medical Association</u> (JAMA) indicating it may decelerate decline in the disease's early stages.

A randomised clinical trial for the use of donanemab indicates that the drug could slow the progression of disease by up to 35%.

'Among participants with early symptomatic Alzheimer disease and amyloid and tau pathology, donanemab treatment significantly slowed clinical progression at 76 weeks,' the article in JAMA stated.

However not everyone is convinced - an international group of specialists and researchers are concerned that the benefits of these drugs don't necessarily merit the risks or the price tag. One of this group is Professor Alberto Espay from the University of Cincinnati, who researches degenerative diseases of the brain.

Professor Alberto Espay told ABC TV "The percentages of relative change sound amazing...when we hear 25% or 30% or even 20% improvement in a disease of any kind, you think that's very large, but what's actually much more important is actually knowing where people were at the beginning of the trial and where they end, that's actually more meaningful".

However, there is some concern over possible side effects. Of the 853 people on the drug, 52 had symptoms from brain swelling and there were three treatment related deaths.

Low-cost ketamine shows promise in treating severe depression

About two-thirds of people with depression won't have any luck with the first treatment they try, according to Harvard University.

A promising treatment for severe depression is ketamine - which was known as a recreational drug by some people, although it's been used in medicine for a long time.

One problem is cost. An approved version of ketamine as a nasal spray costs \$800 per dose and that doesn't include the two hour session with a psychiatrist to monitor for side effects. The costs add up with twice weekly injections for a month and then maintenance doses. A cheap version of ketamine exists in injectable form which is commonly used as a sedative or pain reliever and costs \$5 per dose.

In new Australian-led research, the low-cost version of ketamine to treat severe depression has performed strongly in a double-blind trial that compared it with placebo.

When compared to a placebo, patients who were treated with generic ketamine were ten times more likely to see their symptoms improve according to <u>research published in the British Journal of</u> <u>Psychiatry.</u>

The study found that more than one in five participants achieved total remission from their symptoms after a month of bi-weekly injections, while a third had their symptoms improve by at least 50 per cent

Lead Researcher, Professor Colleen Loo from the University of New South Wales said, "For people with treatment-resistant depression – so those who have not benefitted from different modes of talk-therapy, commonly prescribed antidepressants, or electroconvulsive therapy – 20 per cent remission is actually quite good".

According to the University of New South Wales, researchers will next be looking at larger trials of generic ketamine over longer periods.

The research was a collaboration between six academic clinical mood disorder units in Australia and one in New Zealand and was funded by the Australian National Health and Medical Research Council (NHMRC).

Menopause: Are we over-medicalising this inevitable transition?

Most women become menopausal naturally between the ages of 45 and 55 years according to <u>Australasian Menopause Society</u>. Women can also experience early menopause due to health conditions or after surgery.

Menopause affects every woman differently. Some women deal with hot flushes, urinary problems insomnia, aching joints and muscles and mood changes, among other symptoms.

There are treatments available for the women who have symptoms which are troublesome and/or prolonged. But some experts argue over-medicalisation could be contributing to negative experiences.

Martha Hickey is the Professor of Obstetrics and Gynaecology at University of Melbourne and warns that we are over-medicalising this inevitable transition in women and creating self-fulfilling expectations based on fear.

"It's a natural progression of life. And really what we've discovered is that if you give women who go through menopause potent sex steroids for decades and decades... breast cancer risk is increased," Professor Hickey told ABC Radio National.

For more information about the increased breast cancer risk, read <u>Type and timing of menopausal</u> <u>hormone therapy and breast cancer risk: individual participant meta-analysis of the worldwide</u> <u>epidemiological evidence</u>

Professor Hickey highlighted that most women don't want to take treatment for menopause unless they've got severe symptoms. So it's more about 'what are the options in case I need them.

While there are many treatment options available, according to <u>Jean Hailes for Women's Health</u> some of the non-medical treatments include complementary medicine, therapies and over-the-counter products.

Women are encouraged to speak with their GP who will consider the person's individual situation and explain the different treatment options available.

Does chess, puzzles and journaling protect against dementia?

The Australian Institute of Health and Welfare estimates there were 401,300 Australians living with dementia last year. With Australia's ageing and growing population, it's predicted dementia diagnoses will more than double in the next three decades.

As the body of research around dementia and cognitive decline continues to grow, we discover more about which factors can help slow down or protect against these conditions.

Its well-known social connection is important, and diet, exercise and genetics all play a part. But what about working out the brain?

A <u>Monash University study</u> of more than 10,000 older Australians with a median age of 74 has shed light on how to best help patients lower their dementia risk.

The research found that those who routinely engage in literacy and mental acuity tasks are 11% less likely to develop the condition. Tasks included attending education classes, keeping a journal, playing games such as chess and crosswords, and using computers.

Meanwhile, researchers found creative hobbies such as craft, knitting, painting and reading are less likely to reduce risk, but could still decrease it by 7%.

'The cognitive stimulation from such activities can increase resilience against brain pathologies by increasing the number of neurons, enhancing synaptic activity, and permitting higher efficiency in using brain networks,' the study found.

The researchers didn't find that social networks and outings had a significant influence on someone's risk of developing dementia. We know from other studies that having strong social connections has a protective effect against dementia, so this was an unusual finding.

But the researchers said that among the cohort of people they studied, most reported strong existing social networks or, at the least, good social connections in earlier parts of their life. The authors suggest that this might be responsible for a good baseline level of protection against dementia in the study, upon which activities like chess, computer use and journaling created further variability.

Are sleep disorders underdiagnosed in young people?

Nearly half (48%) of all Australian adults report at least 2 sleep-related problems according to the Australian Institute of Health and Welfare.

Sleep disorders (like sleep apnoea and insomnia) have knock on effects for a person's health and work life. Now a new <u>Australian study</u> suggests there are a significant number of young people going undiagnosed.

This research used data from the Raine Study, a longitudinal birth cohort study in WA. After exclusions, 554 people were included in the study and were aged 22. They had completed detailed sleep assessment and lab tests, using validated measures to check for the presence of insomnia, sleep apnoea or restless legs syndrome. They were also tested on their workplace productivity and performance using a validated questionnaire from the World Health Organization.

More than one in five people in the study were found to have a sleep disorder – 90 people had insomnia, 30 were diagnosed with sleep apnoea, and two had restless legs syndrome. But less than a fifth of those had been previously diagnosed by a doctor, indicating a high rate of underdiagnosis among young people. This shows many young people are unaware they have a sleep disorder, or know they have some problems with their sleep but haven't seen their doctor about it.

When it came to productivity, those with a sleep disorder were at a significant disadvantage. Their workplace productivity loss was 40 per cent greater than those without a sleep disorder. That was mostly down to "presenteeism" – where you go to work but don't fulfill your duties. The authors believe we need to increase awareness of sleep disorders and that they can significantly affect many groups of people, including young people, given the significant impact they have on life, on work, and even on someone's sleeping partner!

Can social isolation be linked to early death and heart disease?

People who are socially isolated don't often have contact with other people and may live alone. It is estimated that around 1 in 5 (19%) older. Australians are socially isolated

Loneliness impacts over five million Australians. Various countries around the world, most notably the UK, have announced sweeping measures to combat what's termed a "loneliness epidemic" – more people feeling lonely or isolated than ever before. But how harmful is it to be lonely and how is it shaped by your perceptions?

In this <u>study</u> researchers studied these two separate but related phenomena and considered the impact of both factors on lifespan.

After reviewing the available literature, they turned up 90 papers which considered these connections among more than two million people. Some of the papers also looked at more specific questions, such as the links between loneliness and cardiovascular disease or cancer. 29 of the studies were from the United States but there was a good cross-section of countries, mostly developed nations comparable to Australia.

The researchers found that both social isolation and loneliness were linked to increased all-cause death and cancer death.

Social isolation also increased one's risk of death from cardiovascular disease. The interplay between these two distinct factors - social isolation and loneliness - was a bit less clear.

Some studies show they have a synergistic effect (seemingly combining to increase harmful health outcomes) but here that wasn't detected. The effects were seen across both sexes, though we also know there are differences in how men and women tend to perceive loneliness and social connection (with women generally tending to be more susceptible to feeling lonely, while having larger social networks than men).

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