EVIDENCE SUMMARY



Medicinal cannabis: Nausea and vomiting

This fact sheet summarises the evidence and clinical guidance in the Therapeutic Goods Administration's (TGA) <u>Guidance for the use of medicinal cannabis for the prevention or management of nausea and vomiting in Australia</u>.

There has been increasing interest in recent years regarding medicinal cannabis^{*}. However, there is a limited body of evidence to support its efficacy and safety in clinical practice.¹⁻³

While anecdotal reports, animal data and some research on human subjects have suggested some therapeutic potential, there is insufficient evidence from high quality studies, such as randomised controlled trials (RCTs), for most conditions.²

In response the TGA has published guidance documents to assist health professionals and patients in the use of medicinal cannabis, including for nausea and vomiting.

Note that medicinal cannabis is not recommended as a first line treatment in any condition. Prescribing should always be considered on a case-by-case basis and once all other standard approved treatments have been unsuccessful.

Evidence⁴

About the TGA Guidance for the use of medicinal cannabis in the treatment of nausea and vomiting in Australian patients:

- A systematic review of 11 systematic reviews of nausea and vomiting conditions including: chemotherapy-induced nausea and vomiting (CINV), radiotherapy-induced nausea and vomiting (RINV), cancer-associated nausea and vomiting, chronic disease-associated nausea and vomiting, postoperative nausea and vomiting (PONV), and nausea and vomiting arising from long-term concomitant medication administration.
- ▶ The review also included treatment of reduced appetite in conditions such as HIV/AIDs, cancer and CINV.
- Pregnancy-related nausea and vomiting was outside the scope of this review. Regardless, the review stated that medicinal cannabis is contraindicated for pregnancy.
- ▶ 57 studies, including mostly randomised controlled trials (RCTs), were included; GRADE (grading of recommendations, assessment, development and evaluation) approach to evaluate evidence found the large majority were moderate to low quality.

Efficacy

The systematic review found limited evidence, the quality of evidence was moderate at best and there is no current high-quality evidence for medicinal cannabis (as a class of products) in the treatment of established nausea and vomiting in adults for any condition.

It only found a potential benefit in CINV in comparison to placebo and no consistently reported beneficial effect of medicinal cannabis in the management of vomiting occurring without nausea.

With regards to specific products, it found low to moderate quality evidence that dronabinol, a THC (delta-9 tetrahydrocannabinol) synthetic product that is not TGA-registered,^{5,6} may increase appetite in people living with AIDS related conditions.

*NPS MedicineWise has adopted the term 'medicinal cannabis', which is used by the TGA, many health departments and affiliated organisations. Variations include cannabis medicines, cannabinoids, cannabis-based products (CBP).

Adverse events

The most commonly reported adverse events were dysphoria and/or depression (13%), hallucinations (6%), paranoid delusions (5%), drowsiness (proportion not provided) and dry mouth (proportion not provided).

Drug-drug interactions

There is no evidence to provide guidance on drug-drug interactions. More research is needed on drug-drug interactions in nausea and vomiting.

Clinical guidance⁴

- Medicinal cannabis is not recommended as a first-line treatment for nausea and vomiting in adults for any condition. It is contraindicated for pregnant women.
- The most recently registered classes of antiemetics for the treatment of nausea and vomiting, such as the 5HT 3 and neurokinin 1 receptor antagonists (eg palonosetron and aprepitant),⁷ have superseded those against which medicinal cannabis products have been studied. Medicinal cannabis products are therefore likely to be inferior to newer antiemetics.
- In the absence of high-quality evidence, the treating doctor should consider the risks and benefits of either medicinal cannabis monotherapy or as an adjunctive treatment for nausea and vomiting in adults.
- ▶ THC (delta-9 tetrahydrocannabinol) synthetic products such as dronabinol or THC extract from a plant (not TGA-registered)^{5,6} can sometimes be effective for nausea and vomiting.
- ▶ There is little information on dose-response. Starting doses should be low and the dose increased in response to lack of efficacy until toxicity outweighs any benefit.
- ▶ Be aware of the common adverse events.

Prescribing guidance

The NSW Cannabis Medicines Prescribing Guidance is a suite of resources intended to assist medical practitioners in their prescribing and management of cannabis medicines (for NSW patients within current regulatory frameworks and clinical practice).

Visit the **Australian Centre for Cannabinoid Clinical and Research Excellence** (ACRE) to download the documents.

Further information

Studies included in the TGA guidance document are **found here**.

National sources:

NPS MedicineWise

Office of Drug Control

<u>TGA</u>

State and territory health departments:

<u>ACT</u>

Northern Territory

<u>NSW</u>

<u>Queensland</u>

South Australia

<u>Tasmania</u>

<u>Victoria</u>

Western Australia

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- Therapeutic Goods Administration. Guidance for the use of medicinal cannabis in the treatment of palliative care patients in Australia. Canberra: Government of Australia, Department of Health, 2017. <u>https://www.tga.gov.au/</u> <u>sites/default/files/guidance-use-medicinal-cannabis-treatment-palliative-care-patients-australia.pdf</u> (accessed 10 May 2020).

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