

COLCHICINE - SAFE PRESCRIBING - TOE THE LINE!!

- ▶ DANGEROUS WHEN NOT USED CORRECTLY
- ▶ AVOID PRESCRIBING AS A FIRST-LINE TREATMENT
- ▶ ALWAYS FOLLOW NEW, SAFER DOSING RECOMMENDATIONS
- ▶ ENSURE PATIENTS UNDERSTAND THE RISKS
- ▶ KNOW THAT EVEN A COUPLE OF TABLETS MAY BE FATAL FOR CHILDREN
- ▶ PRESCRIBE SMALLER QUANTITIES

COLCHICINE CAN CAUSE SIGNIFICANT TOXICITY

Colchicine is considered to be a 'high-risk' medicine as it has the potential to cause significant harm when not used correctly¹. A case series of nine Auckland patients who each presented with a significant colchicine overdose showed that the majority of overdoses were accidental, and all but one resulted in death¹.

Fatal poisonings have been reported in patients who have taken as little as 7mg², although some patients have taken up to 60mg and survived³. Symptoms of acute colchicine toxicity usually appear 2 to 12 hours after ingestion⁴, and often before the analgesic effects start⁵. Toxic effects may include gastrointestinal (GI) symptoms, electrolyte derangement, haematological effects, renal failure, and hepatic damage⁶.

Side-effects aren't always limited to overdose. Up to 80% of patients have GI toxicity while taking therapeutic doses⁴, and in one study, 91% of patients taking colchicine reported diarrhoea and vomiting before they experienced any symptomatic relief from their gout⁷. For this reason, it used to be common practice to use the onset of diarrhoea as a dose titration end-point¹. Side-effects may also occur on prophylactic therapy. These include GI symptoms, and rarely bone marrow suppression, myopathy, and neuropathy⁸.

If toxicity is suspected, prompt hospital admission is essential. There is no antidote for colchicine toxicity, and the treatment options for overdose remain limited⁴.

Extra care is required when prescribing colchicine for patients who are more susceptible to colchicine toxicity.

These include **older people, those with hepatic impairment, renal dysfunction, and people who weigh less than 50kg**. Other treatments should be considered for these individuals, or lower doses of colchicine used. Colchicine is contra-indicated in severe renal or hepatic disease⁹.

Children are very vulnerable to colchicine poisoning in the home. **Doses as small as one or two tablets can cause serious toxicity and even death¹⁰**. Colchicine should always be stored well out of reach of children (and grandchildren)¹¹.

AVOID PRESCRIBING COLCHICINE AS A FIRST-LINE TREATMENT

Colchicine is not considered to be a first-line therapy for the treatment of acute gout. In most patients, non-steroidal anti-inflammatory drugs (NSAIDs), or oral steroids, are the treatment of choice¹².

Colchicine is an option for the treatment of acute gout (particularly if taken during the first 24 hours) if NSAIDs and oral steroids are contraindicated, or these agents have been used but not produced the desired effect or caused unacceptable side-effects^{4,6,12}.

The elderly are sensitive to cumulative toxicity with colchicine, and because of their age-related renal impairment, they should be prescribed alternative treatments whenever possible. If colchicine is prescribed, use half the recommended dose; close monitoring for toxicity is advised⁹.

For further advice on the management of gout, including the use of colchicine prophylaxis, please see the bpac website: www.bpac.org.nz (keyword 'gout')⁶.

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ALWAYS FOLLOW NEW, SAFER COLCHICINE DOSING RECOMMENDATIONS

Using large doses of colchicine to treat acute gout is no longer appropriate, especially in patients susceptible to colchicine toxicity, and it is no longer considered safe to continue dosing until GI side-effects occur^{4,6,9,11,12}.

The recommended dosing advice for colchicine in the treatment of acute gout is now:

2 tablets (2 x 0.5mg tablet) at the same time, followed by **1 tablet (0.5 mg) every six hours** until relief is obtained, up to a **maximum dose of five tablets (2.5mg) in the first 24 hours**, or **12 tablets (6mg) total over 4 days**⁴.

Patients should be reminded that at least **three days** must elapse between courses of acute treatment to avoid toxicity from colchicine accumulation⁴.

ENSURE PATIENTS UNDERSTAND THE RISKS WITH COLCHICINE

Patients are at risk if they have a poor understanding of how to take colchicine, or lack awareness of its side-effects and the consequences of overdose¹. Appropriate patient education in the safe use of colchicine is important given the medicine's narrow therapeutic margin and propensity for causing harm⁹.

This is especially true of those for whom English is not their first language^{1,6,11}. A case series report of nine colchicine

overdoses from Auckland showed that all of the accidental poisonings occurred in either Pacific Island or Maori patients. Even allowing for increased prevalence in these groups, this suggests that a special effort is needed when colchicine is prescribed for these patients. Cultural and language barriers may need addressing¹.

Patients should be told to stop colchicine **immediately**, even if the acute symptoms of an attack haven't resolved, and to see their doctor if they develop:

- abdominal pain
- diarrhoea, or nausea and vomiting
- burning sensation of the throat, stomach or skin⁹

PRESCRIBE COLCHICINE MORE SAFELY

There are a few additional steps that prescribers can take to improve the safe prescribing of colchicine for the treatment of acute gout:

- Double-check all prescriptions to ensure they fit with the latest dosing recommendations¹¹
- Consider limiting prescriptions for acute gout to a maximum of 12 tablets per script^{6,11}
- Remove colchicine from any 'favourites'/personal medications list in the practice software, or change the prescribing instructions to fit with the latest recommendations (with a limit of 12 tablets per script)^{6,11}

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ACKNOWLEDGMENTS

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For further information on other high-risk medicines visit our website at: www.saferx.co.nz

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