

## COLCHICINE- SAFE PRESCRIBING - TOE THE LINE!

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- ▶ ASSESS IF COLCHICINE IS APPROPRIATE AS A FIRST-LINE TREATMENT
- ▶ CONSIDER RENAL FUNCTION AND DRUG INTERACTIONS WITH OTHER MEDICINES
- ▶ ENSURE PATIENTS UNDERSTAND THE RISKS ASSOCIATED WITH COLCHICINE

Colchicine inhibits the inflammatory response to urate crystals that cause pain and inflammation during a flare of gout. Colchicine also helps to prevent flares and relieve residual pain following a flare. This is especially useful while urate-lowering medicines such as allopurinol, probenecid, benzbromarone or febuxostat are being initiated.

Make sure patients understand that they should continue these without interruption during a gout flare.

### ASSESS IF COLCHICINE IS APPROPRIATE AS A FIRST-LINE TREATMENT

The most appropriate therapy for a gout flare should be based upon patient preference, prior response to therapy and associated comorbidities. For some patients NSAIDs or oral corticosteroids will be most appropriate. Colchicine is useful if patients have an increased risk of toxicity with NSAIDs or prednisone, eg diabetes, or peptic ulcer disease. Doses of colchicine need to be adjusted if renal function is compromised, or if there are interactions with other medicines that delay colchicine metabolism. (See table below).

**Table 1: Colchicine dose recommendations for gout flares**

| Renal function (eGFR)                        | Initial dose     | Continuing dose*              | Maximum dose*  |
|--|------------------|-------------------------------|--|
| Over 50mL/min/1.73m <sup>2</sup>             | 1mg (2 tablets)  | 0.5mg (1 tablet) 1 hour later | 1.5mg per course<br>6mg over 4 days                              |
| 10-50mL/min/1.73m <sup>2</sup><br>Or elderly | 0.5mg (1 tablet) | 0.5mg (1 tablet) every 12-24h | 1mg (2 tablets) in first 24 hours<br>3mg (6 tablets) over 4 days |
| Under 10mL/min/1.73m <sup>2</sup>            | Avoid            | Avoid                         | Avoid  |

\*Stop when relief obtained or at the first sign of toxicity

### CONSIDER RENAL FUNCTION AND DRUG INTERACTIONS WITH OTHER MEDICINES

Lower doses of colchicine are recommended for the elderly, for patients with hepatic or renal impairment, and for patients who weigh less than 50kg.

**Colchicine is contraindicated in severe renal or hepatic disease.**

The elderly are particularly sensitive to toxicity with colchicine due to age-related renal impairment. Prescribe **half** the recommended dose (see Table 1) and ensure they are aware of the signs of toxicity. Acute renal failure has occurred in elderly patients taking colchicine who become dehydrated.

All patients should be encouraged to use the lowest effective dose of colchicine because toxicity is dose-related.

It is important that there is a gap of at least **3 days** between courses of acute treatment to avoid toxicity from colchicine accumulation.

#### Colchicine prophylaxis

Colchicine prophylaxis therapy (0.5mg daily or twice daily, or on alternate days) may be commenced the day following treatment for a gout flare.

Colchicine prevents flares of gout when patients start urate-lowering medicines (eg allopurinol or febuxostat). It is important to continue with colchicine prophylaxis for 3-6 months after target serum urate has been achieved with urate-lowering medicines.

#### Notable interactions

Colchicine is **contraindicated** if patients have renal or hepatic impairment **and** they are taking other medicines that increase the risk of colchicine toxicity. These medicines include macrolides (eg erythromycin, clarithromycin), imidazoles (eg fluconazole, ketoconazole, itraconazole), protease inhibitors (eg ritonavir), diltiazem, verapamil and ciclosporin.

Patients who are taking these medicines without renal or hepatic impairment may take colchicine at a reduced dose. See the New Zealand Formulary [www.nzf.org.nz](http://www.nzf.org.nz) for a comprehensive list.

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Patients who are taking statins or fibrates in combination with colchicine, should be advised to promptly report any unexplained muscle pain or weakness; there have been some case reports of rhabdomyolysis and myopathy with this combination.

### ENSURE PATIENTS UNDERSTAND THE RISKS ASSOCIATED WITH COLCHICINE

*Appropriate patient education is important given the narrow therapeutic range of colchicine.* Patients are at increased risk of toxicity if they have a poor understanding of how to take colchicine, possible side-effects and consequences of overdose.

Inform patients to stop colchicine, and see their doctor if they develop:

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

Toxic effects may not appear until 24 hours after ingestion; if toxicity is suspected, admission to a hospital with intensive care facilities is essential. There is no antidote; charcoal may be considered but treatment is generally supportive.

Remind patients to keep all medicines well out of reach and out of sight of children and grandchildren. Children are very vulnerable to colchicine poisoning; **Doses as small as 1 or 2 tablets can cause serious toxicity.**

### KEY REFERENCES

1. Healthcare Logistics Colgout New Zealand Datasheet; 26-01-2016 [www.medsafe.govt.nz/profs/datasheet/c/Colgouttab.pdf](http://www.medsafe.govt.nz/profs/datasheet/c/Colgouttab.pdf) (Accessed 21-01-19)
2. Dalbeth N, Gow P. Colchicine prescribing in patients with gout. The New Zealand Medical Journal 2011;124(1339):4796 <http://journal.nzma.org.nz/journal/124-1339/4796/content.pdf> (Accessed 21-01-19)
3. Dalbeth N, Stamp L. Managing gout in primary care Part 2. Best Practice Journal 2018 <https://bpac.org.nz/2018/gout-part2.aspx> (Accessed 21-01-19)

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[CLICK HERE FOR FURTHER INFORMATION ON COLCHICINE AND A FULL REFERENCE LIST](#)

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