Colchicine is indicated for the treatment of acute gout; it is best initiated within 24 hours of an acute attack. Colchicine also helps to reduce the incidence of acute attacks and relieve residual pain following an attack. This is especially useful while urate-lowering medicines, such as allopurinol, are being initiated.

Make sure patients understand that they should continue their established urate-lowering medicines (eg allopurinol or febuxostat) without interruption during an acute attack of gout.

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

The most appropriate monotherapy for an acute attack of gout should be based upon patient preference, prior response to therapy and associated comorbidities. For some patients NSAIDs (non-steroidal anti-inflammatory drugs) and sometimes oral corticosteroids will be most appropriate. Colchicine is useful for patients who are at an increased risk of toxicity with NSAIDs and prednisone, eg patients with diabetes, renal impairment 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 below].

**Note:** If the response to colchicine is inadequate, try other options as monotherapy such as NSAIDs or corticosteroids. Co-administration of NSAIDs or prednisone with colchicine may be considered in severe pain, an acute polyarticular gout attack, or an attack involving 1-2 large joints.

**CONSIDER RENAL FUNCTION AND 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.**

**Table 1:**

Colchicine dose recommendations for acute gout attacks

<table>
<thead>
<tr>
<th>Renal function (eGFR)</th>
<th>Initial Dose*</th>
<th>Continuing Dose*</th>
<th>Maximum Dose*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 50mL/min/1.73m²</td>
<td>1mg (2 tablets)</td>
<td>0.5mg (1 tablet)</td>
<td>Then if needed, after 12 hours, up to 0.5mg three times daily until the acute attack resolves. (Total maximum 2mg colchicine per day)</td>
</tr>
<tr>
<td>10-50mL/min/1.73m²</td>
<td>0.5mg (1 tablet)</td>
<td>0.5mg (1 tablet) every 12-24h</td>
<td>1mg (2 tablets) in first 24 hours 3mg (6 tablets) over 4 days</td>
</tr>
<tr>
<td>Under 10mL/min/1.73m²</td>
<td>Avoid</td>
<td>Avoid</td>
<td>Avoid</td>
</tr>
</tbody>
</table>

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

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**

Low-dose colchicine (0.5mg daily or twice daily) prevents flares of gout when patients start urate-lowering medicines (eg allopurinol or febuxostat). This may be commenced the day following treatment for an acute attack.

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

ENSURE PATIENTS UNDERSTAND THE RISKS ASSOCIATED WITH COLCHICINE

During an acute attack, patients are likely to start treatment with colchicine by themselves at home. Appropriate patient education is important given the narrow therapeutic range of colchicine. Patients are at risk of toxicity if they have a poor understanding of how to take colchicine, possible side-effects and consequences of overdose.

Patients should stop colchicine, and see their doctor if they develop:

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

Ask the patient to take note of the dose taken so they know to use lower doses during subsequent attacks of gout. Symptoms may not appear until 24 hours after ingestion, if toxicity is suspected, prompt admission to a hospital is essential.

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.

ACKNOWLEDGEMENTS

We wish to thank Nicola Dalbeth, Rheumatologist and Professor, Department of Medicine, University of Auckland and Peter Gow, Associate Professor of Rheumatology, Middlemore Hospital for their valuable contribution to this bulletin.

KEY REFERENCES