Colchicine for pericarditis pain (unlicensed indication)
PRESCRIBING INFORMATION FOR PRIMARY CARE

RAG List Status
Colchicine for pericarditis pain (unlicensed indication) is classified as a GREEN (following specialist initiation) drug by GMMMG.

What is it?
Colchicine is licensed for the treatment of gout; the mechanism of action is not fully understood but acts against the inflammatory response. When used in pericarditis colchicine improves the response to medical therapy, improves remission rates and prevents recurrences.

Clinical Guidance:
European Society of Cardiology – Guidelines for the diagnosis and management of pericardial diseases
1. Colchicine is recommended as first line-line therapy for acute pericarditis as an adjunct to aspirin / NSAID therapy.
2. Colchicine can also be used in combination with corticosteroids where there is contraindication or failure of aspirin / NSAIDs, and when an infectious cause has been excluded or when there is a specific indication such as autoimmune disease.

When should GPs be asked to prescribe?
GP will only be asked to prescribe when the patient has received a diagnosis of pericarditis made by a consultant cardiologist. The initial supply will be made by the initiating consultant. The consultant will also communicate the duration of therapy to the GP.

Preparations available
Colchicine 500 micrograms tablets

Dosage and Administration

<table>
<thead>
<tr>
<th>Body weight 70kg and over</th>
<th>500 microgram twice daily</th>
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<tbody>
<tr>
<td>Body weight less than 70kg</td>
<td>500 microgram once daily</td>
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Course should be continued for up to 3 months in acute pericarditis and 6 months in recurrent pericarditis. Longer durations may be required if patients are still symptomatic.

Dose Modifications
Colchicine has a narrow therapeutic window and is extremely toxic and may be fatal in overdose. Patients at particular risk of toxicity are those with renal or hepatic impairment, gastrointestinal or cardiac disease, and patients at extremes of age.
Given its narrow therapeutic window, creatinine clearance (CrCl) should be used to calculate renal function (not eGFR). See MHRA DSU for further information.
Dose reduction is also required with concurrent use of some medicines- see section on ‘Drug Interactions’ overleaf.

<table>
<thead>
<tr>
<th>Dose Adjustment: Renal Impairment</th>
<th>Dose Adjustment: Elderly (&gt; 70 years)</th>
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<tbody>
<tr>
<td>CrCl 35-49 ml/min = 500 micrograms once daily</td>
<td>Reduce dose by 50%; consider further dose adjustment if CrCl &lt;50ml</td>
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<tr>
<td>CrCl 10-34 ml/min = 500 micrograms every 2-3 days</td>
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Contraindications
- Hypersensitivity to colchicine or to any of the excipients.
- Patients with blood dyscrasias
- Pregnancy or breastfeeding
- Women of childbearing potential unless using effective contraception
- Patients with severe renal impairment (CrCl <10ml/min)
- Patients with severe hepatic impairment
- Colchicine should not be used in patients undergoing haemodialysis
- Patients with renal or hepatic impairment who are taking a P-gp inhibitor or a strong CYP3A4 inhibitor. (See interaction section)

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Cautions
- Liver or hepatic impairment
- Gastrointestinal disorders
- Cardiovascular disease
- Elderly and debilitated patients
- Patients with abnormalities in blood counts

What are the main side-effects?
The most commonly reported adverse effects with colchicine are gastrointestinal (diarrhoea, nausea and abdominal pain) which can indicate toxicity. These may resolve with dose reduction, for example from twice daily to once daily dosing. Dose reduction can be actioned without seeking specialist advice, however specialist advice may be sought if symptoms are severe / do not resolve on dose reduction and result in discontinuation of therapy.

Rarely bone marrow depression with agranulocytosis, thrombocytopenia and aplastic anaemia can occur; this can be gradual or sudden. If patients develop signs or symptoms that could indicate blood cell dyscrasias, such as fever, stomatitis, sore throat, prolonged bleeding, bruising or skin disorders, treatment with colchicine should be immediately discontinued and a full haematological investigation should be conducted straight away.

Drug Interactions
Colchicine is associated with a large number of interactions, some of which are significant enough to contradict concurrent use, require dose adjustment and/or additional monitoring. The following list is not exhaustive; please see SPC and BNF for comprehensive information and recommended management.

Toxicity, including fatal cases, have been reported during concurrent use of CYP3A4 or P-gp inhibitors such as macrolides (clarithromycin and erythromycin), ciclosporin, ketoconazole, itraconazole, voriconazole, HIV protease inhibitors, calcium channel blockers (verapamil and diltiazem) and disulfiram.

- **Macrolides – Increased serum concentrations of colchicine and increased risk of toxicity.** Reduce colchicine dose to 25% of usual dose (e.g. 500mcg once daily on alternate days or 500mcg once weekly) and monitor for signs of toxicity (nausea, vomiting, and pancytopenia). If patient has renal or hepatic impairment then clarithromycin and telithromycin are strictly contraindicated; however it would be prudent to avoid all macrolides.

- **Azoles - Increased serum concentrations of colchicine and increased risk of toxicity.** Reduce colchicine dose to 25% of usual dose (e.g. 500mcg once daily on alternate days or 500mcg once weekly) and monitor for signs of toxicity (nausea, vomiting, and pancytopenia). If patient has renal or hepatic impairment then ketoconazole and itraconazole are strictly contraindicated; however it would be prudent to avoid all azoles.

- **HIV-protease inhibitors - Increased serum concentrations of colchicine and increased risk of toxicity.** Reduce colchicine dose to 25% of usual dose (e.g. 500mcg once daily on alternate days or 500mcg once weekly) and monitor for signs of toxicity (nausea, vomiting, and pancytopenia). If patient has renal or hepatic impairment then ritonavir, atazanavir and indinavir are strictly contraindicated; however it would be prudent to avoid all protease inhibitors.

- **Diltiazem & verapamil – Increased serum concentration of colchicine and increased risk of toxicity.** Reduce colchicine dose to 50% of usual dose (e.g. 500mcg once daily or 500mcg once on alternate days) and monitor for signs of toxicity (nausea, vomiting, and pancytopenia).

- **Ciclosporin - Increased serum concentrations of colchicine and increased risk of toxicity.** Additionally there is an increased risk of myopathy and rhabdomyolysis. Reduce colchicine dose to 25% of usual dose (e.g. 500mcg once daily on alternate days or 500mcg once weekly) and monitor for signs of toxicity (nausea, vomiting, and pancytopenia). Ciclosporin is contraindicated with colchicine in patients with renal or hepatic impairment.

- **Digoxin, fibrates & statins – Increased risk of myopathy and rhabdomyolysis.** Consider therapy modification or dose reduction. Patients should report any signs of muscle pains or weakness.

- **Grapefruit juice - Increased serum concentrations of colchicine and increased risk of toxicity.** Avoid grapefruit juice.

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Monitoring
Routine monitoring is not necessary, however renal function and LFTs may be indicated in patients with a history of kidney or liver impairment, or concomitantly taking nephrotoxic or hepatotoxic medicines. The GP should contact cardiology if guidance is needed in interrupting results.

Key information for patients
- Avoid grapefruit juice throughout the course of colchicine: there is a risk of increased colchicine levels and toxicity.
- If nausea, vomiting, abdominal pain, diarrhoea, or a high temperature, swollen mouth, sore throat, or unusual bleeding occurs stop therapy and seek medical advice.
- Some people find it gentler on the stomach to take colchicine with or after food (especially if also taking aspirin / NSAIDs/ corticosteroids.
- If you forget to take your colchicine, take it as soon as you remember. Unless it’s nearly time for your next dose. In which case, skip the missed dose and take the next one at the usual time. Never have an extra dose to make up for a forgotten one. If you accidentally take too much colchicine seek medical advice.
- There’s very little information about taking herbal medicines and supplements with colchicine: these should be avoided.

References
SPC: Colchicine 500 microgram Tablets. Last Updated on eMC 20-Aug-2019. Wockhardt UK Ltd


BNF. Colchicine. www.bnf.nice.org.uk/drug/colchicine.html

NHS.uk. Colchicine: https://www.nhs.uk/medicines/colchicine/