**colchicine**  
(kol-chi-seen)  

**Drug Class:** Antigout agents  

**Pregnancy Category D**  

**Indications**  

Prophylaxis and treatment of acute attack of gout arthritis.

**Contraindications**  

- Hypersensitivity
- Use of P-glycoprotein inhibitors or strong CYP3A4 inhibitors

**Adverse Reactions/Side Effects**  

GI: diarrhea, nausea, vomiting, abdominal pain.  

**Interactions**  

- Concurrent use of strong CYP3A4 inhibitors, including atazanavir, clarithromycin, darunavir/ritonavir, indinavir, irtraconazole, ketoconazole, lopinavir/ritonavir, nefazodone, nelfinavir, ritonavir, saquinavir, telithromycin, tipranavir/ritonavir, may ↑ levels and risk of toxicity.  

- Collaborate dose in patients with normal renal or hepatic function; concurrent use in patients with renal or hepatic impairment is contraindicated. Concurrent use of P-glycoprotein inhibitors, including cyclosporine or omeprazole may ↑ levels and risk of toxicity.  

**Route/Dosage**  

**Treatment of Acute Gout Attacks**  

PO (Adults): 1.2 mg initially, then 0.6 mg 1 hr later (maximum dose of 3.6 mg in 24 hr). Concurrent use of moderate CYP3A4 inhibitors (eg, atazanavir, clarithromycin, fluconazole, fosamprenavir, gemfibrozil, itraconazole, ketoconazole, indinavir, lopinavir/ritonavir, nefazodone, nelfinavir, ritonavir, saquinavir, telithromycin, tipranavir/ritonavir) — 0.6 mg 1 dose, then 0.3 mg 1 hr later (do not repeat treatment course for > 3 days). Concurrent use of P-glycoprotein inhibitors (cytochrome P450 3A4 substrates) in patients with normal renal and hepatic function — 0.6 mg 1 dose (do not repeat for > 3 days).  

**Pharmacokinetics**  

**Absorption:** Absorbed from the GI tract, then re-enters GI tract from biliary secretions.  

**Distribution:** Absorbed from the GI tract, then re-enters GI tract from biliary secretions.  

**Metabolism and Excretion:** Concentrates in WBCs.  

**Half-life:** 27–31 hr.  

**Concentrations in WBCs.**  

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**Concentration in WBCs.**  

**Time/Action Profile (anti-inflammatory activity)**  

**Drug-Food:** Grapefruit juice may ↑ levels and risk of toxicity.  

**Drug-Drug:** Concurrent use of strong CYP3A4 inhibitors in patients with normal renal and hepatic function; concurrent use in patients with renal or hepatic impairment is contraindicated. Moderate CYP3A4 inhibitors, including aprepitant, dilatiazem, erythromycin, fluconazole, fosamprenavir, gemfibrozil, itraconazole, ketoconazole, nefazodone, nelfinavir, ritonavir, saquinavir, telithromycin, tipranavir/ritonavir — 0.6 mg 1 dose, then 0.3 mg 1 hr later (do not repeat treatment course for > 3 days). Concurrent use of P-glycoprotein inhibitors (cytochrome P450 3A4 substrates) in patients with normal renal and hepatic function — 0.6 mg 1 dose (do not repeat for > 3 days).  

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Renal Impairment

**PO (Adults):** CCr \(\leq 30\) mL/min—1.2 mg initially, then 0.6 mg 1 hr later; do not repeat treatment course for \(\geq 2\) wk.

**Prevention of Acute Gout Attacks**

**PO (Adults):** 0.6 mg once or twice daily; concomitant use of strong CYP3A4 inhibitors (atazanavir, clarithromycin, darunavir/ritonavir, indinavir, itraconazole, ketoconazole, lopinavir/ritonavir, nefazodone, nelfinavir, ritonavir, saquinavir, telithromycin, tipranavir/ritonavir) or P-glycoprotein inhibitors (cyclosporine, ranolazine) in patients with normal renal and hepatic function—If original dose was 0.6 mg twice daily, p to 0.3 mg once daily; if original dose was 0.6 mg once daily, p to 0.3 mg every other day.

**Concomitant use of moderate CYP3A4 inhibitors (aprepitant, diltiazem, erythromycin, fluconazole, fosamprenavir, grapefruit juice, verapamil)—** If original dose was 0.6 mg twice daily, p to 0.3 mg twice daily or 0.6 mg once daily; if original dose was 0.6 mg once daily, p to 0.3 mg once daily.

**Renal Impairment**

**PO (Adults):** CCr 30–50 mL/min—dose p may be necessary; CCr \(\leq 30\) mL/min or dialysis—0.3 mg/day.

**Familial Mediterranean Fever**

**PO (Adults and Children \(\geq 12\) yr):** 1.2–2.4 mg daily (in 1–2 divided doses); may \(q\) or \(p\) dose in 0.3 mg/day increments based on safety and efficacy; concomitant use of strong CYP3A4 inhibitors (atazanavir, clarithromycin, darunavir/ritonavir, indinavir, itraconazole, ketoconazole, lopinavir/ritonavir, nefazodone, nelfinavir, ritonavir, saquinavir, telithromycin, tipranavir/ritonavir) or P-glycoprotein inhibitors (cyclosporine, ranolazine) in patients with normal renal and hepatic function—Do not exceed 0.6 mg/day (may be given as 0.3 mg twice daily); concomitant use of moderate CYP3A4 inhibitors (aprepitant, diltiazem, erythromycin, fluconazole, fosamprenavir, grapefruit juice, verapamil)—Do not exceed 1.2 mg/day (may be given as 0.6 mg twice daily).

**PO (Children 6–12 yr):** 0.9–1.8 mg daily (in 1–2 divided doses).

**PO (Children 4–6 yr):** 0.3–1.8 mg daily (in 1–2 divided doses).

**NURSING IMPLICATIONS**

**Assessment**

- Monitor intake and output ratios. Fluids should be encouraged to promote a urinary output of at least 2000 mL/day.

- Gout: Assess involved joints for pain, mobility, and swelling throughout therapy. During initiation of therapy, measure drug response every 1–2 hr.

- Familial Mediterranean fever: Assess for signs and symptoms of familial Mediterranean fever (abdominal pain, chest pain, fever, chills, recurrent joint pain, red and swollen skin lesions) periodically during therapy.

- **Lab Test Considerations:** In patients receiving prolonged therapy, monitor baseline and periodic CBC; report significant changes in values. May cause platelet count, leukopenia, aplastic anemia, and agranulocytosis.

- May cause in AST and alkaline phosphatase.

- May interfere with results of urinary 17-hydroxycorticosteroid concentrations.

- **Toxicity and Overdose:** High alert: Assess patient for toxicity (muscle pain or weakness, tingling or numbness in fingers or toes, pale or gray color to lips, tongue, or palms of your hands; severe diarrhea or vomiting; unusual bleeding, bruising, sore throat, fatigue, malaise, or weakness or tenderness). If these symptoms occur, discontinue colchicine and treat symptomatically. Opioids may be needed to treat diarrhea.

**Potential Nursing Diagnoses**

**Science-based Indications**

**Impaired Airflow (Indications)**

**Implementation**

- Do not confuse colchicine with Cortrosyn.

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colchicine

- Advise patient to avoid grapefruit and grapefruit juice during therapy; may increase risk of toxicity.
- Advise patient to follow recommendations of health care professional regarding weight loss, diet, and alcohol consumption.
- Instruct patient to report muscle pain or weakness, tingling or numbness in fingers or toes, pale or gray color in lips, tongue, or palms of your hands; severe diarrhea or vomiting; unusual bleeding, bruising, sore throat, fatigue, malaise, or weakness or tiredness promptly. Medication should be withheld if symptoms of toxicity occur.
- Instruct patient to notify health care professional of all Rx or OTC medications, vitamins, or herbal products being taken and to notify health care professional before taking any other Rx, OTC, or herbal products.
- Surgery may precipitate an acute attack of gout. Advise patient to confer with health care professional regarding dose 3 days before surgical or dental procedure.

Evaluation/Desired Outcomes

- Decrease in pain and swelling in affected joints within 12 hr.
- Relief of symptoms within 24–48 hr.
- Prevention of acute gout attacks.
- Reduced number of attacks of familial Mediterranean fever.

Why was this drug prescribed for your patient?