



Guidance to support the primary care team manage a patient with acute gout

Learn how to determine the best treatment options for a patient suffering an acute gout attack using key resources and tools through MedicinesComplete.

Expert, evidence-based knowledge to support the best patient care



Available through

 **Medicines
Complete**



Guidance to support the primary care team manage a patient with acute gout

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Jim, a 67-year-old man, presents to his GP practice with a suspected acute gout attack.

He explains that over the past two days one of his big toes has become extremely painful and swollen. He describes being treated for gout some years ago when he had similar symptoms. Jim is currently taking aspirin 75 mg and atorvastatin 40 mg daily for cardiovascular disease. His medical history also includes chronic kidney disease (CKD), and his most recent eGFR was measured as 45 mL/minute/1.73 m².

Assess treatment options using MedicinesComplete

After examination, the GP refers to British National Formulary (BNF) on MedicinesComplete to check the current management advice for acute gout.

The 'Gout' treatment summary in BNF provides information on the usual treatment options for acute attacks of gout. These are colchicine, high doses of a non-steroidal anti-inflammatory drug (NSAID), or a short course of an oral corticosteroid.

The screenshot shows the MedicinesComplete website interface. At the top, there is a search bar with 'Gout' entered. Below the search bar, the BNF logo is visible, along with a navigation menu containing icons for various medical topics. The main content area displays the BNF entry for 'Gout', including a sub-section menu on the left with options like 'Overview', 'Acute attacks of gout', 'Long-term control of gout', and 'Useful resources'. The 'Overview' section is selected, showing a detailed description of gout as a common form of inflammatory arthritis characterized by raised uric acid concentration in the blood (hyperuricaemia) and the deposition of urate crystals in joints and other tissues. It also mentions the distinct phases of gout: asymptomatic hyperuricaemia, acute attacks (flares), and chronic tophaceous gout. The text advises that specialist referral or advice should be sought for the management of gout during pregnancy, in individuals aged under 30 years, or in those with complications (such as joint damage, renal stones).

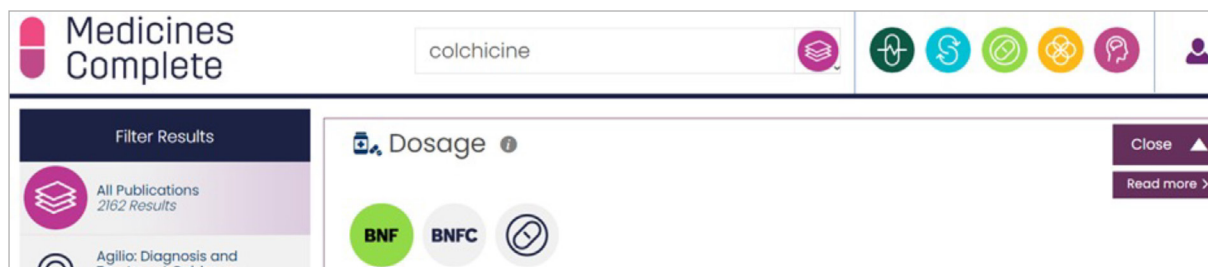


Jim's care record shows that he was treated with an NSAID for his previous gout flare, however the GP would prefer to avoid using an NSAID given Jim's impaired renal function. The GP therefore decides to look at colchicine as a treatment option.

The GP begins by checking the dosage card for colchicine on MedicinesComplete to confirm the dose and assess its suitability for Jim.



Clicking on the dosage banner expands the dosage card to display the available dosing information for colchicine in BNF, BNF for Children (BNFC), and Martindale: The Complete Drug Reference (Martindale). Selecting the icons at the top of the dosage card allows switching between BNF, BNFC, and Martindale, to see the available dosing information in each of these publications.





The dosage card provides a detailed breakdown of each indication and dose for colchicine. For BNF and BNFC, this includes any dose adjustments required due to drug interactions.

Medicines Complete

Colchicine

Filter Results

- All Publications 2162 Results
- Agilia: Diagnosis and Treatment Guidance 47 Results
- AHFS Drug Information 228 Results
- ASHP Injectable Drug Information 0 Results
- BNF 91 Results

Dosage

BNF BNFC

IMPORTANT SAFETY INFORMATION

Acute gout
By mouth

Adult
500 micrograms 2–4 times a day until symptoms relieved, total dose per course should not exceed 6 mg, do not repeat course within 3 days.

Close
Read more >

The GP confirms that the standard dose of colchicine for acute gout in BNF is 500 micrograms 2 to 4 times a day, to be taken until symptoms are relieved. The total dose per course should not exceed 6 mg and a course should not be repeated within 3 days. Clicking 'Important safety information' highlights that colchicine has a narrow therapeutic window and there is a risk of serious and fatal toxicity in overdose.

Jim has CKD, and therefore the GP needs to check whether any adjustments to the standard dose are required, and if any other considerations are needed when using colchicine in renal impairment. Selecting 'Read more' displays the full prescribing information in the BNF colchicine drug monograph. Selecting 'Renal impairment' from the list of available monograph sections displays advice on the use of colchicine for patients with renal impairment.

Medicines Complete

Colchicine

BNF

BNF

Highlight search Evidence grading

Renal impairment

Caution if eGFR 10–50 mL/minute/1.73 m²; avoid if eGFR less than 10 mL/minute/1.73 m².

Dose adjustments

Reduce dose or increase dosage interval if eGFR 10–50 mL/minute/1.73 m². See [Prescribing in renal impairment](#).

The GP contacts the practice pharmacist to check what dose adjustment would be appropriate for Jim. The GP also asks the pharmacist to check for potential interactions with Jim's current medications.



The pharmacist begins by checking for guidance on the dose of colchicine in patients with CKD. BNF advises to use with caution, and to reduce the dose or increase the dosage interval if eGFR 10–50 mL/minute/1.73 m². Martindale concurs that this advice reflects UK recommendations. The pharmacist decides that increasing the dosage interval is a practical option, given that only 500 microgram tablets are available.

The screenshot shows the Martindale interface for Colchicine. The search bar contains 'Colchicine'. The left sidebar has 'Subsections' and 'Related Content' tabs. Under 'Subsections', 'Colchicine' is selected. The main content area shows the following text:

When oral colchicine is used for the *treatment* of acute **gout**, licensed product information in the UK suggests a dose reduction or an increased interval between doses in patients with a creatinine clearance (CC) of 10 to 50 mL/min, and contra-indicates its use in patients with severe renal impairment (CC less than 10 mL/min), or those on dialysis. In the USA, no dose reduction is considered necessary in patients with mild to moderate renal impairment (CC 30 to 80 mL/min), although patients should be monitored closely for adverse effects. Patients with severe renal impairment (CC less than 30 mL/min) also do not require a dose reduction, but treatment courses should not be repeated more than once every 2 weeks; alternative therapy should be considered in those patients who require repeated courses. In dialysis patients, the total recommended dose for acute gout should be reduced to a single oral dose of 600 micrograms, not repeated more than once every 2 weeks.

Check for potential interactions using Stockley's Interactions Checker

The pharmacist then checks for interactions with Jim's existing drug regimen and refers to Stockley's Interactions Checker, by selecting the light blue icon at the top of the screen. Two results are shown, with an action suggested for a potential interaction between atorvastatin and colchicine. Jim should be advised to report any unexplained muscle pain, tenderness, or weakness.

The screenshot shows the Stockley's Drug Interactions Checker interface. The search bar contains 'Search Stockley's Drug Interactions'. The left sidebar has 'Filter by warnings' with three options: 'Show all warnings' (2 Results), 'Give guidance about possible adverse effects and/or consider some monitoring' (1 Results), and 'No interaction, or no interaction of clinical significance' (1 Results). The main content area shows '2 results for: colchicine – aspirin – atorvastatin'.

| Severity | Action | Evidence | Explanation | Action |
|------------------|-------------|----------|--|--|
| Severe | Information | Case | Atorvastatin appears to slightly increase the exposure to colchicine. Case reports describe myopathy or rhabdomyolysis in patients given colchicine with atorvastatin. | The general significance of the case reports is unclear; however, advise patients to report any unexplained muscle pain, tenderness or weakness. |
| Nothing expected | Information | Study | No clinically relevant pharmacokinetic interaction occurs between aspirin (low-dose) and atorvastatin. A case report describes acute pancreatitis related to the concurrent use of both drugs. | This isolated report is unlikely to be of general relevance. |



Clicking on the Stockley's Drug Interactions icon at the bottom of each interaction message links to the full interactions' monograph, with a summary box, detailed information on the 'Clinical evidence' supporting the interaction, the 'Mechanism', and its 'Importance and management' in practice. Each monograph is fully referenced.

The pharmacist decides to check whether any other advice should be given to Jim to ensure that colchicine is used safely and effectively.

Identify and prevent adverse drug reactions (ADRs) using Martindale's ADR Checker

The pharmacist refers to Martindale's ADR Checker to check for reported ADRs to colchicine, by selecting the light green icon at the top of the screen.

The search box in Martindale's ADR Checker enables a search by individual drug or multiple drugs, drug group(s), ADR(s), and body system. The results are listed in order of severity and frequency. Potentially severe ADRs are flagged with a red warning symbol.

Search All Publications

Martindale's ADR Checker

Filter

ADR messages for: Colchicine

Key

Results 1 - 20 of 21, sorted by severity and frequency.

| Drug | ADR | Frequency | Route | Management Summary |
|------------|---|--|-------|--|
| Colchicine | <div>Agranulocytosis</div> <div></div> | <div>Frequency Unknown</div> <div></div> | Oral | <div>Discontinue the drug</div> <div>Discontinue immediately if agranulocytosis occurs or is suspected (fever, sore throat, stomatitis, excessive bleeding or bruising) and conduct a full haematological examination. Monitor full blood count periodically as the change in blood counts may be gradual or very sudden.</div> <div>For further information, see Agranulocytosis.</div> |
| Colchicine | <div>Aplastic Anaemia</div> <div></div> | <div>Frequency Unknown</div> <div></div> | Oral | <div>Discontinue the drug</div> <div>Discontinue immediately if aplastic anaemia occurs or is suspected (fever, sore throat, stomatitis, excessive bleeding or bruising) and conduct a full haematological examination. Monitor full blood count periodically as the change in blood counts may be gradual or very sudden.</div> |

| | | | | |
|------------|----------------|--------|------|---|
| Colchicine | Abdominal Pain | Common | Oral | <div>Reduce the dose</div> <div>Reduce dose or consider discontinuation (narrow therapeutic window); abdominal pain is often a first sign of toxicity.</div> |
| Colchicine | Diarrhoea | Common | Oral | <div>Reduce the dose</div> <div>Reduce dose or consider discontinuation (narrow therapeutic window); diarrhoea is often a first sign of toxicity.</div> <div>For further information, see Diarrhoea.</div> |
| Colchicine | Nausea | Common | Oral | <div>Reduce the dose</div> <div>Reduce dose or consider discontinuation (narrow therapeutic window); nausea is often a first sign of toxicity.</div> <div>For further information, see Nausea and vomiting.</div> |
| Colchicine | Vomiting | Common | Oral | <div>Reduce the dose</div> <div>Reduce dose or consider discontinuation (narrow therapeutic window); vomiting is often a first sign of toxicity.</div> <div>For further information, see Nausea and vomiting.</div> |



Common ADRs for colchicine include abdominal pain, diarrhoea, nausea, and vomiting. Jim should be advised to be alert for any of these reactions. Severe ADRs include aplastic anaemia. Jim should be advised to seek immediate medical attention if he develops symptoms of infection such as fever, sore throat, mouth ulcers, or excessive tiredness.

The 'Management Summary' on the right of the screen gives guidance on the action to be taken if an ADR occurs. Where available, a link to a Martindale ADR profile provides further information on an ADR – this includes information on the mechanism, causes, management, and prevention of ADRs. The ADR profile for 'Hyperuricaemia and gout' provides lifestyle advice for patients who develop gout.

The screenshot shows the Martindale Complete website interface. The search bar at the top contains the text 'Hyperuricaemia and gout'. On the left, a sidebar lists various categories: Mechanism, Presentation, Investigations, Susceptibility, Causes, Frequency, Timescale, Management, and Prevention. The main content area displays the title 'Patients who develop gout should be advised to; [A]' followed by a list of management advice:

- Aim for an ideal body weight – avoiding crash or high protein/low carbohydrate diets [A]
- Eat sensibly – restrict their red meat and protein intake, particularly foods rich in purines (such as liver, kidneys, and seafood) [A]
- Drink alcohol sensibly – avoid binge drinking and restrict alcohol consumption to 21 units per week for men and 14 units per week for women, with at least two alcohol-free days a week [A]
- Avoid dehydration by drinking water (up to 2 litres/day unless there is a medical contraindication) [A]
- Drink skimmed milk or consume low-fat dairy products (up to 2 servings daily) [A]
- Limit consumption of sugary drinks and snacks [A]
- Take regular exercise – but avoid intense muscular exercise and trauma to joints [A]
- Stop smoking – see CKS topic on Smoking cessation [A]

Report ADRs (side effects) via the MHRA Yellow Card scheme

If a serious suspected ADR occurs with colchicine, this should be reported via the MHRA Yellow Card scheme, even if the effect is well recognised. The Yellow Card reporting site is easily accessed via Martindale's ADR Checker by clicking on 'Report an ADR'.

The screenshot shows the Martindale Complete website interface. The search bar at the top contains the text 'Search All Publications'. Below the search bar, there is a section titled 'Martindale's ADR Checker' with a sub-header 'Publication last updated on 10-Sep-24'. The text below states: 'The authoritative source in managing adverse drug reactions, allowing you to quickly search for ADRs and the drugs that may cause them, with a red flag system to identify the most severe. The tool provides concise clinical management advice with quick links to more comprehensive ADR Profiles in Martindale.' Below this, there is a link 'About Martindale's ADR Checker'. At the bottom of this section, there is a button 'Report an ADR (Yellow Card)'. Below the button, there is a section titled 'Search ADRs' with a sub-header 'Drug/s'. Below this, there is a table with four columns: 'Drug/s', 'Drug Group/s', 'ADR/s', and 'Body System'.

| Drug/s | Drug Group/s | ADR/s | Body System |
|--------|--------------|-------|-------------|
| | | | |



The Yellow Card reporting site can also be accessed via BNF.

The screenshot shows the BNF (British National Formulary) website. The main heading is 'Adverse reactions to drugs'. Below this, there is a section titled 'Yellow Card scheme'. The text explains that any drug may produce unwanted or unexpected adverse reactions, and that rapid detection and recording of adverse drug reactions is of vital importance. It also states that healthcare professionals and coroners are urged to report suspected adverse drug reactions directly to the Medicines and Healthcare products Regulatory Agency (MHRA) through the Yellow Card scheme using the online form on the Yellow Card website (<https://yellowcard.mhra.gov.uk>), or by downloading and using the Yellow Card app. Reporting is also integrated into some clinical systems such as EMIS, SystmOne, Vision, MIDatabank, and Ulysses.

Additional counselling points

BNF drug monographs include a 'Patient and carer advice' section for drugs with special counselling needs. For colchicine, this section includes advice on reporting signs and symptoms of colchicine toxicity and blood disorders. It also recommends counselling patients, and, if appropriate, their carers, on how colchicine should be used for the treatment of acute gout.

The screenshot shows the Medicines Complete website. The search bar contains 'Colchicine'. The main heading is 'Patient and carer advice'. The text states that patients and their carers should be instructed to stop treatment and seek urgent medical attention if signs or symptoms of toxicity or blood disorders occur. It also includes a section titled 'When used for Acute gout:' which states that patients and their carers should be counselled on how colchicine should be used, including when to stop treatment, total dose per course, and when the course can be repeated.

Next steps

After consideration of the available evidence-based information, the GP and the pharmacist concluded that colchicine is a reasonable choice of therapy for Jim, although the frequency of administration should be reduced due to his CKD. Jim should be given lifestyle advice and counselled on how to safely use colchicine for acute gout, the potential adverse effects of its use (including in combination with atorvastatin), and what to do if adverse effects occur. Following the acute gout attack, options for the long-term control of gout should be considered.



Stockley's Drug Interactions

Stockley's Drug Interactions reliably supports health professionals decide the best course of action regarding drug interactions to deliver the best patient outcomes. Expertly authored, Stockley's Drug Interactions covers interactions between therapeutic drugs, proprietary medicines, herbal medicines, foodstuffs, drinks, pesticides, and drugs of abuse.



Stockley's Drug Interactions

Stockley's Interactions Checker supports health professionals safely manage the selection of drugs at the point of care. This essential tool provides a simple snapshot of the severity, description, and management guidance and links to the full record in Stockley's Drug Interactions if further detail is required.



Martindale: The Complete Drug Reference

Health and industry professionals globally rely on Martindale: The Complete Drug Reference for concise and specific detail to quickly understand the characteristics and clinical uses of drugs, herbals, and other pharmaceutical substances.



Martindale's ADR Checker

Martindale's ADR Checker provides concise clinical management advice with a severity flag system to support health professionals when managing patients with adverse drug reactions. Answers can be found quickly, summarised by frequency, age and route. Further detail is available through in-depth ADR Profiles in Martindale: The Complete Drug Reference.



British National Formulary

Practical and evidence based, BNF is the only drug formulary in the world that is both independent, and has rigorous, accredited content creation processes. An integral part of the UK's healthcare infrastructure and relied on by health professionals who prescribe, dispense, and administer medicines globally, BNF supports safe and effective decision-making at the point of care.



Access this essential knowledge today

MedicinesComplete makes it easy for health professionals to access essential medicines information at the point of care. Providing trusted evidence-based knowledge for confident decision-making and effective patient care.



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