



Treating a patient with an acute gout attack

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





Treating a patient with an acute gout attack

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



Jim, a 67-year-old male with a history of gout presents with a suspected acute gout attack. He explains he is currently taking aspirin and atorvastatin to manage his cardiovascular disease.

Jim is prescribed colchicine by his doctor. When he goes to pick up his prescription, the pharmacist decides to check if there are any interactions and adverse drug reactions with his current medications.

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

The dosage card provides a detailed breakdown of each indication and dose for colchicine, including any adjustments that are required, for example due to drug interactions.



By selecting the icons at the top of the dosage card, it is possible to switch between the **British National Formulary (BNF)** and **Martindale: The Complete Drug Reference**.

Medicines Complete Colchicine

Search results for *Colchicine*

Stedman's Medical Dictionary Definition

Filter Results

- All Publications 2019 Results
- Agilio: Diagnosis and Treatment Guidance 48 Results
- AHFS Drug Information 206 Results
- ASHP Injectable Drug Information 0 Results
- BNF BNF 85 Results

Dosage

BNF BNFC [Martindale Icon]

Colchicine is used for the relief of acute gout (👤) and for the prophylaxis of acute attacks, particularly during the first few months of treatment with allopurinol or uricosurics. Colchicine produces a dramatic response in acute gout, probably by reducing the inflammatory reaction to urate crystals; this effect might be due to several actions including decreased lactic acid production by leucocytes. It is not an analgesic and has no effect on blood concentrations of uric acid, or on the excretion of uric acid. Colchicine also appears to inhibit β -tubulin polymerisation, inhibiting the activation, degranulation and migration of neutrophils, which may mediate some gout symptoms.

Colchicine is used for the treatment of familial Mediterranean fever and has also been used in several other conditions including amyloidosis, Behçet's syndrome, pericarditis, primary biliary cirrhosis, and pyoderma



The pharmacist confirms the dose of colchicine for acute gout using the BNF.


Practical management advice with Stockley's Interactions Checker

As Jim is taking aspirin and atorvastatin for his cardiovascular disease, the pharmacist decides to check for interactions with his existing regimen and refers to Stockley's Interactions Checker, by selecting the icon at the top of the page.













Identify and prevent adverse drug reactions

To check for reported adverse drug reactions to colchicine and treatment management advice, the pharmacist selects Martindale's ADR Checker.



Martindale's ADR Checker enables search by multiple drugs, drug class, body system and ADR/s. The results are listed in order of frequency, those that carry risk of a severe adverse drug reaction are flagged with a red warning symbol and the frequency of a reported ADR occurring is highlighted. Further details on the mechanisms, causes, management and prevention of adverse drug reactions can be found in the ADR Profiles linked to.

Medicines Complete		Search All Publications		Martindale's ADR Checker	
Filter ADR messages for: Colchicine + Aspirin + Atorvastatin					
Colchicine	Agranulocytosis 	? Frequency Unknown	Oral	 Discontinue the drug 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.  For further information, see Agranulocytosis .	
Colchicine	Aplastic Anaemia 	? Frequency Unknown	Oral	 Discontinue the drug 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.	
Colchicine	Bone Marrow Depression 	? Frequency Unknown	Oral	 Discontinue the drug Discontinue immediately if bone marrow depression 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.	
Atorvastatin	Immune-Mediated Necrotising Myopathy 	? Frequency Unknown	Oral	 Seek specialist advice May occur during or after discontinuation of treatment.  For further information, see Myopathy .	

To find out what other precautions should be taken alongside monitoring Jim for myopathy, the pharmacist clicks on the ADR Profile for agranulocytosis.



Medicines Complete

Martindale: The Complete Drug Reference

Publication last updated on 14-Mar-2023 >

Information and background on conventional and complementary drugs and associated compounds, international proprietary names, and disease treatments.

Evidence grading ■

Subsections

Related Content

- Overview
- Mechanism
- Presentation
- Investigations
- Susceptibility
- Causes
- Frequency
- Timescale
- Management
- Prevention
- Advice
- Resources

Agranulocytosis

Martindale's
ADR Checker

Overview

Agranulocytosis is a rare, life-threatening condition characterised by a profound decrease in the number of circulating granulocytes (neutrophils, basophils, and eosinophils) in the blood, with an absolute neutrophil count (ANC) of less than 0.5×10^9 cells/L.²

Neutrophils play a critical role in fighting infection—the normal ANC is 2.5 to 7.5×10^9 cells/L. Neutropenia is present where there is an abnormally low number of neutrophils in the blood.

This summary will **not** focus on cytotoxic drug-induced agranulocytosis.

Mechanism

The mechanism is not well understood, but is generally categorised into two basic categories.³

Immune-mediated

There are three proposed mechanisms of immune-mediated agranulocytosis: the hapten mechanism, the immune-complex mechanism, and the autoimmune mechanism.

In all of these, the reduction in circulating granulocytes occurs via antibody-mediated cell destruction, complement activation, or phagocytic elimination through the mononuclear phagocyte system.^{2,4} Normally, in immune-mediated mechanisms, agranulocytosis occurs within days to a few weeks after drug exposure, with rapid appearance of symptoms; re-challenge is associated with prompt recurrence, even with small doses.⁴

Common side effects of colchicine include abdominal pain, diarrhoea, nausea and vomiting and Jim is also advised to report these side-effects.

The pharmacist reviews the list of additional rare severe side effects, including aplastic anaemia, bone marrow depression and thrombocytopenia, and advises Jim to seek immediate medical attention if he develops symptoms of infection such as fever, sore throat, mouth ulcers, or excessive tiredness.

Click for more information on presentation, causes and management using the ADR Profiles found in **Martindale's ADR Checker**.

The pharmacist also wants to check if his current medication aspirin could be causing the gout. After reviewing the ADR profile for Hyperuricemia and Gout, the pharmacist notes that low-dose aspirin use has been suggested to increase the risk of recurrent gout attacks. The pharmacist calls Jim's doctor to ask him to review the need for aspirin.



Medicines Complete

Hyperuricaemia and gout

Martindale: The Complete Drug Reference Evidence grading

Subsections	Related Content
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Causes

Please note that this is a clinical commentary of the most common causes of hyperuricaemia and gout, and is not an exhaustive list. For a list of implicated drugs, search in the ADR Checker. Drugs appear according to their mechanism as described under Causes.

Increased uric acid reabsorption


Aspirin (low dose)

Although aspirin exerts a uricosuric effect by inhibiting urate reabsorption at high doses, it acts as an exchange substrate and facilitates urate reabsorption at low doses (≤ 325 mg daily).^{2,7} Low-dose aspirin use has been suggested to increase the risk of recurrent gout attacks approximately two-fold.⁸

Calcineurin inhibitors

Ciclosporin may cause hyperuricaemia by increasing proximal uric acid reabsorption particularly in patients with volume depletion due to diuretic use and where the glomerular filtration rate is reduced.² Hyperuricaemia has been seen in over 80% of renal transplant patients taking ciclosporin.⁹ Tacrolimus, may also cause hyperuricaemia in renal transplant patients, evidence as to whether it is less likely to do so than ciclosporin is conflicting.²

The pharmacist would like to understand more about the diagnosis, risk factors and management of gout and consults the health topic in Agilio: Diagnosis and Treatment Guidance.



Information on the treatment and long-term management of gout can be found in the comprehensive summaries in **Agilio: Diagnosis and Treatment Guidance**.

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Gout

Agilio: Diagnosis and Treatment Guidance
Publication last updated on 11-Apr-2023
Practical clinical guidance for common conditions and symptoms.

Subsections	Related Content
Summary	
Have I got the right topic?	
How up-to-date is this topic?	
Goals and outcome measures	
Background information	
Diagnosis	
Management	
Prescribing information	
Supporting evidence	
How this topic was developed	
References	

Gout

Last revised: 01-Jun-2022

Gout: Summary

- Gout is a type of arthritis caused by monosodium urate crystals forming inside and around joints, causing sudden flares of severe pain, heat, and swelling.
 - Any joint can be affected, but it most commonly affects distal joints, including toes, knees, ankles, and finger joints.
- Hyperuricaemia is the most important risk factor in the development of gout.
- Other risk factors for hyperuricaemia and gout include:
 - Increasing age.
 - Family history of hyperuricaemia and gout.
 - Genetics.
 - Excess body weight or obesity.



Informs prescribing decisions

After seeing the evidence-based information, the pharmacist concludes she will dispense colchicine but with the caveat that Jim is monitored for adverse drug reactions, which are more likely as he is taking atorvastatin. The pharmacist asks the doctor to review the risks and benefits of aspirin as it may be causing recurrent gout.



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.



BNF

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.



Agilio: Diagnosis and Treatment Guidance

Covering over 370 clinical topics for use in primary care, Agilio: Diagnosis and Treatment Guidance supports confident decision-making at the point of care. Referenced, with links to source evidence and covering over 1,200 clinical presentations or patient scenarios, this product supports you to assess symptoms, diagnose the disease and identify treatment options, including concise prescribing information.

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.



Find out more today

For information and to contact our team
go to [PharmaceuticalPress.com](https://www.pharmaceuticalpress.com)

Available through



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