CPD December 2023

**[Dr Sharon Rees](https://twitter.com/reesprescribe)**

Day 1: Cited for centuries as a herbal remedy for joint pain, [#colchicine](https://twitter.com/hashtag/colchicine?src=hashtag_click) also has a long history as a treatment for gout. An alkaloid derived from the bulbs of the autumn crocus (Colchicum), the drug is extracted & purified for use

Day 2: [#colchicine](https://twitter.com/hashtag/colchicine?src=hashtag_click) is an oral agent licensed for use in acute gout & short-term gout prophylaxis. Because of toxicity, the treatment duration is limited; acute dose 500mcg x2-4/day max 6mg per course. No repeat for minimum of 3 days. Unlicensed use for prophylaxis of familial Mediterranean fever

Day 3: [#colchicine](https://twitter.com/hashtag/colchicine?src=hashtag_click) has high oral bioavailability, low Vd & some liver metabolism via CYP3A4 & Pgp, but most is not broken down. Excretion is via bile & unchanged drug in faeces with around 20% in urine. T½ 7-9 hrs. Has a narrow therapeutic index. Avoid if severe renal/hepatic impairment

Day 4: [#colchicine](https://twitter.com/hashtag/colchicine?src=hashtag_click) suppresses inflammation by several mechanisms. Best known is accumulation in neutrophils, where the drug disrupts cytoskeletal functions & impaired actions such as cell division & chemotaxis

Day 5: Common adverse drug effects include GI disorders; frequency is unknown for blood disorders e.g aplastic anaemia, bone marrow suppression, as well as alopecia, menstrual irregularities & nerve disorders (NOT exhaustive)

Day 6: Drug-drug interactions: All drugs increasing exposure ([#colchicine](https://twitter.com/hashtag/colchicine?src=hashtag_click) has a narrow therapeutic index) have a ‘severe’ warning, e.g ritonavir, fluconazole, mirabegron, verapamil. Concurrent use with statins reported to cause rhabdomyolysis;caution/monitor (NOT exhaustive). NHS site & SPC for [#colchicine](https://twitter.com/hashtag/colchicine?src=hashtag_click) advise to avoid/dose reduction if grapefruit juice consumption (this increases exposure), but BNF omits in interactions list

Day 7: [#colchicine](https://twitter.com/hashtag/colchicine?src=hashtag_click) is under investigation for wider anti-inflammatory roles e.g ischaemic heart disease, pericardial disease, liver disease (not exhaustive). There is also ongoing research into roles for COVID-19 cardiovascular complications

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In addition to the tweets, read the BNF treatment summary on gout, as well as the monograph on colchicine and the SPC for colchicine.

<https://bnf.nice.org.uk/treatment-summaries/gout/>

<https://bnf.nice.org.uk/drugs/colchicine/>

<https://www.medicines.org.uk/emc/product/6415/smpc#gref>

1. **Colchicine is derived from a fungus**

**TRUE or FALSE**

1. **Colchicine is used first-line for treatment of acute gout**

**TRUE or FALSE**

1. **The duration of treatment for colchicine is kept very short so as to minimise toxicity**

**TRUE or FALSE**

1. **Colchicine is mostly excreted unchanged which has implications for renal impairment**

**TRUE or FALSE**

1. **Which of the following is FALSE?**
2. **Colchicine accumulates in white blood cells**
3. **Colchicine impairs cell division**
4. **Colchicine impairs the movement of white blood cells by binding to tubulin**
5. **Colchicine inhibits cyclooxygenase production**
6. **Colchicine has a narrow therapeutic index**

**TRUE or FALSE**

1. **Which of the following is a common adverse drug effect for colchicine?**
2. **Menstrual problems**
3. **Diarrhoea**
4. **Aplastic anaemia**
5. **Alopecia**
6. **Drugs which increase exposure to colchicine are likely to be categorised as having a ‘severe’ drug-drug interaction**

**TRUE or FALSE**

1. **Which of the following is NOT a group of signs for colchicine toxicity?**
2. **Sweating, palpitations, ear pain**
3. **Nausea/vomiting, abdominal pain, bloody diarrhoea**
4. **Respiratory distress, convulsions, arrythmias**
5. **Bone marrow depression, organ failure**
6. **Colchicine is being investigated for deployment in neurological diseases, such as dementia**

**TRUE or FALSE**