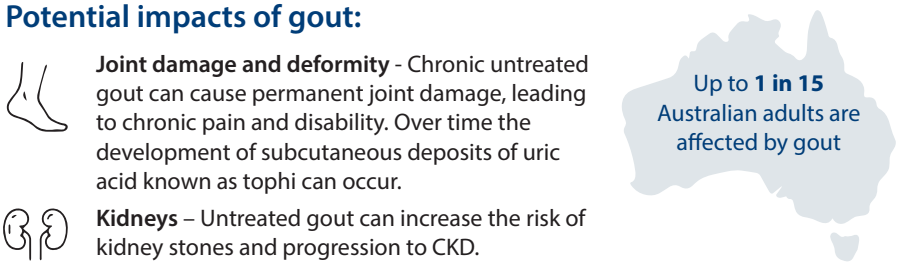
Pharmacist Quick Reference Guide to Gout

GOUT: It's more than just a sore toe!

Potential impacts of gout:

Joint damage and deformity - Chronic untreated gout can cause permanent joint damage, leading to chronic pain and disability. Over time the development of subcutaneous deposits of uric acid known as tophi can occur.



Kidneys – Untreated gout can increase the risk of kidney stones and progression to CKD.

Mental health - There is a strong stigma that gout is caused by lifestyle factors and is self-inflicted. This poses a significant barrier to timely access of care.

Cardiovascular – Gout flares are associated with an increased risk of cardiovascular events.

About Gout

Gout is an inflammatory arthritis.

It results from reduced excretion of uric acid causing plasma uric acid levels to rise (hyperuricaemia) and accumulate in joints and other tissues (e.g. subcutaneously and kidneys).

Genetics is the main cause of gout.

Other risk factors for developing gout include CKD, T2DM, obesity, hypertension, dyslipidaemia and some medicines (e.g. diuretics).

The role of the pharmacist

Empower the patient to make an informed decision

- Shared decision making
- Address misconceptions
- Reduce stigma

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Encourage regular monitoring

Use a care plan to record pathology and ULT titration plan

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Support patients with their gout medicines

- Review adherence
- Address any medicine concerns
- Consider **Home Medicine Review** or **MedsCheck**

Gout Decision Support Tool

My Gout Plan

Patient education

- Know your target serum urate level.
- Understand the role of urate-lowering therapy (ULT), how the dose may change and flare prophylaxis.
- In addition to ULT, adequate hydration, regular exercise and an appropriate diet are recommended.
- Some purine-rich foods can trigger flares in some patients, but they do not cause gout.
- You may experience gout flares while you start your ULT, taking flare prevention medicine will help.
- Do not stop taking or change your gout medicines without talking to your healthcare professional.

Gout and Diet Factsheet

At each review

- Check medicine adherence and discuss importance of long-term therapy.
- Ask about the frequency and severity of flares.
- Address patient questions and concerns.
- Discuss dietary and lifestyle changes.

Monthly monitoring of serum urate levels is recommended when initiating ULT and during dose adjustments.

Gout – Factsheet

Review medicines

- Medicines may either increase or decrease the risk of gout flare.

Decrease risk:
- fenofibrate
- losartan

Increase risk:
- thiazide diuretics
- loop diuretics
- aspirin*

*Avoid analgesic doses of aspirin during a gout flare. (Do not stop low-dose aspirin).

Medicines to manage gout flares

Practice Points	Dosing
NSAIDs (except aspirin) • preferred in younger people • selective NSAIDs may have fewer adverse effects • consider COX-2 selective if increased GI toxicity risk (concurrent PPI may be warranted) • consider naproxen if patient has increased CVD risk.	celecoxib: 100 to 200 mg orally once to twice daily ibuprofen: IR 200 to 400 mg orally 3 or 4 times daily, 3 or 4 times daily indomethacin: 25 to 50 mg orally 2 to 4 times daily, 2 to 4 times daily naproxen: IR 250 to 500 mg orally twice daily Use until symptoms subside.
Corticosteroids Oral: • lower incidence of adverse effects than NSAIDs. Intra-articular injection: • quick onset of action	Oral: prednis(ol)one 15 to 30 mg daily for 3 to 5 days or until symptoms subside. Injection: up to 2 affected sites.
Colchicine • second line use when NSAIDS and corticosteroids are contraindicated • avoid in severe renal and/or hepatic impairment • not recommended for patients already taking colchicine flare prophylaxis • cease if severe vomiting or diarrhoea occur.	Colchicine 1 mg orally initially, then 500 micrograms 1 hour later, as a single one day course (total 1.5 mg). This recommended low-dose regimen is as effective and safer than higher-dose regimens. Do not repeat the course within 3 days.
Refer to the Gout Treatment Algorithm for further information.	

Medicines to treat gout

Urate-lowering therapy

Allopurinol 50 to 100 mg orally once daily** increased every 4 weeks by 50 -100 mg until target serum urate level is achieved (up to a maximum of 900 mg per day).

Febuxostat can be used when allopurinol is contraindicated or not tolerated.

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Flare prophylaxis

Colchicine 500 micrograms orally once daily for at least 6 months. Dosage should be reduced in reduced kidney function or in people who experience diarrhoea.

Colchicine prophylaxis is recommended for all patients starting ULT and when doses are changed.

Allopurinol practice points:

Stop allopurinol immediately if a rash develops.

Avoid allopurinol and febuxostat in those taking azathioprine or mercaptopurine.

**Increased dosing interval on initiation and slower up-titration is required in reduced kidney function. See Gout Treatment Algorithm for dosing.

Colchicine practice points:

Contraindications - blood dyscrasias or use with CYP3A4 and/or P-glycoprotein inhibitors.

Dosage reduction to 250 micrograms once daily is required if CrCl <30 mL/min.

ULT is safe to start and modify during a flare.
Do NOT stop ULT during a flare, illness or perioperatively.

Treat to target serum urate level

Tophi, chronic gouty arthritis, recurrent flares (<0.3 mmol/L) or non-tophaceous (<0.36 mmol/L)

Once level achieved, maintain dose and review level at 6 months and then annually

Gout Treatment Algorithm

Quality Use of Medicines Alliance

Helping consumers and health professionals make safe and wise decisions about medicines and diagnostics. Funded by the Australian Government through the Quality Use of Diagnostics, Therapeutics and Pathology Program.

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