South East London Guideline for the Management of Gout in Primary Care

This guidance was developed on behalf of the South East London Integrated Medicines Optimisation Committee (SEL IMOC) through the Committee's rheumatology sub-group. Development was led by a rheumatology specialist at King's College Hospital with support from the Lambeth borough Medicines Optimisation Team

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South East London Integrated Medicines Optimisation Committee (SEL IMOC). A partnership between NHS organisations in South East London: South East London Clinical Commissioning Group (covering the boroughs of Bexley/Bromley/Greenwich/ Lambeth/Lewisham and Southwark) and GSTFT/KCH /SLaM/ Oxleas NHS Foundation Trusts and Lewisham & Greenwich NHS Trust

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Diagnosis

Clinical diagnosis is important. Common presenting features include:

- Typical joint sites (hallux, mid-foot, ankle)
- One or few joints affected (can be polyarticular in longstanding gout or patients on diuretics)
- Onset of symptoms over hours
- Episodic flares, often with resolution between flares
- Presence of tophi

Serum urate testing is important for diagnosis and therapeutic monitoring, with the following caveats:

- Urate levels can be normal during flares; if normal, consider repeat testing 2 weeks after the flare
- Hyperuricaemia without clinical features of gout does not equate to a diagnosis of gout, and is not an indication for urate-lowering therapy.

Refer to rheumatology if diagnostic uncertainty.
Atypical presentations are common, particularly in elderly patients and women. Gout is highly unlikely in pre-menopausal women.

Red flags

- Consideration must always be given to **septic arthritis** in any patient presenting with an acutely painful, swollen joint.
- Risk factors for septic arthritis include:
    - Prior joint replacement
    - Pre-existing joint damage
    - Recent intra-articular injection
    - Intravenous drug use
    - Immunosuppression.
- Joint aspiration is the gold standard for diagnosis of gout and exclusion of septic arthritis, but may not be possible in primary care.
- Refer to ED for same-day joint aspiration if septic arthritis is suspected or being considered.

Treatment of flares

Colchicine 500 micrograms TDS (OD/BD if CKD or elderly), typically for 5-7 days.

or

NSAID (e.g. naproxen 500mg BD) with gastroprotection, typically for 5-7 days.

or

Prednisolone 20-30mg OD with gastroprotection, typically for 5-7 days; for polyarticular or resistant flares or if contraindications to colchicine and NSAIDs.

- *Choice of treatment depends on risk factors and patient preference.*
- *Colchicine use in clinical practice and as recommended in guidelines often exceeds the maximum 6mg per course referenced in the BNF.*
- *Suggested colchicine doses in CKD: 500 micrograms BD if GFR 30-60 ml/min; 500 micrograms OD if GFR 15-30 ml/min; avoid if GFR <15 ml/min.*
- *Check for medication interactions with colchicine, e.g. statins, macrolides.*
- *Choice of prednisolone dose depends on individual risk factors, including infection risk, patient weight and comorbidities.*
- ***Do not stop urate-lowering therapy (ULT) during flares.***
- *Advise patient to return if symptoms worsen or if no improvement in 1-2 days.*
- *Advise patients to commence treatment as soon as possible after the onset of symptoms; consider providing patients with a **rescue pack**, to be initiated at the onset of flare symptoms.*
- ***Adjunct measures** include rest, ice and elevation of the affected joint.*
- *Combination therapy can be considered in treatment-resistant flares.*

Advice for patients, GPs and self-care

- **Education** should be provided for all patients on the diagnosis, how to manage flares, and the importance of ULT in preventing flares, disability and gout-associated comorbidities, such as renal impairment.
- Provide written information on gout and commonly used medications; available at Versus Arthritis and UK Gout Society.
- Provide lifestyle advice: **reduce consumption of purine-rich foods** (e.g. shellfish, red meat), fructose (e.g. sweetened drinks) and alcohol
- Advise good intake of fruit, vegetables, fibre and low-fat dairy products.
- Advise maintaining a healthy weight (reduces urate levels).
- **Screen patients for comorbidities** annually, including diabetes mellitus, dyslipidaemia, hypertension and renal impairment.
- **Limit the use of diuretics**, where possible.

Prevention of flares: urate-lowering therapy

First line: Initiate **allopurinol** 100mg OD (50mg OD if renal impairment), then uptitrate in 100mg increments (50mg increments if renal impairment) every 4 weeks until a serum urate **≤300 micromol/L** is achieved.

Second line: Initiate **febuxostat** 80mg OD instead of allopurinol, if allopurinol contraindicated or ongoing flares despite maximally tolerated allopurinol. Increase to 120mg OD after 4 weeks if required to achieve serum urate **≤300 micromol/L**.

Refer to rheumatology: if ongoing flares despite maximally tolerated allopurinol/febuxostat, contraindications to both medications, or if flares despite a urate persistently ≤300 micromol/L.

Consider prophylaxis against flares during ULT initiation and uptitration (typically for 3-6 months)**.** *First line*: colchicine 500 micrograms OD or BD. *Second line*: low-dose NSAID with gastroprotection, unless contraindicated.

- *ULT should be offered to **all patients** with gout, including first flares.*
- *ULT should be strongly encouraged if any of the following: recurrent flares, tophi, persistent arthritis, joint damage, renal impairment, urolithiasis, diuretic use, comorbidities or diagnosis of gout at a young age.*
- ***ULT can be initiated during flares**, alongside treatment for the flare.*
- ***Allopurinol doses >300mg OD are frequently required to achieve urate targets.** Maximum recommended dose is 900mg daily in normal renal function (doses above 300mg should be split). If GFR 20-60 ml/min, max. recommended dose is 300mg daily. If GFR <20 ml/min, seek rheumatology advice.*
- *Seek rheumatology advice if GFR <30 ml/min and febuxostat being considered.*
- *Check renal function before initiating ULT. Check LFTs before initiating febuxostat and periodically during treatment (e.g. after dose changes or if signs of liver dysfunction).*
- *Consider referral to a **practice pharmacist**, if available, to facilitate ULT titration.*
- *Patient information leaflets are available for allopurinol and febuxostat.*
- *Patients initiating ULT should be advised to **monitor for a new rash**; stop medication and seek medical attention if so. Severe cutaneous reactions are rare (0.1-0.4%) but more common in patients of Asian and Black ethnicity. Patients with previous hypersensitivity reactions to allopurinol are at increased risk of hypersensitivity reactions to febuxostat.*
- *Do not initiate allopurinol or febuxostat in patients taking azathioprine or mercaptopurine (risk of fatal myelosuppression).*
- *Avoid febuxostat in patients with pre-existing major cardiovascular disease, e.g. MI, stroke.*
- ***ULT should continue lifelong**; most patients flare within 5 years of stopping. Consider annual monitoring of urate levels to ensure patients remain at target.*

References: BSR Guideline for the Management of Gout, 2017; ACR Guideline for the Management of Gout, 2020; EULAR evidence-based recommendations for the management of gout, 2016; Dalbeth N, *et al*. Gout. Nat Rev Dis Primers, 2019.