EPSOM and ST HELIER HOSPITALS NHS TRUST GOUT GUIDELINES FOR GPs
(ADAPTED FROM BSR GUIDELINES AND NICE CKS)

NHS
Epsom and St Helier University Hospitals NHS Trust

Gout:

Gout is the most common inflammatory arthritis. It is a disorder of purine metabolism characterized by hyperuricaemia and deposition of Monosodium Urate crystals in joints, cartilage, bursae. Tophi occur in approximately 50% of people with untreated gout after 10 years. The 'gold standard' for diagnosing gout is demonstration of monosodium urate crystals in synovial fluid or tophi on microscopy.

Management of Acute Gout:

1. **Admit the patient if Septic arthritis is suspected** (Gout and Sepsis can co-exist)
2. **Treat as early as possible.**
3. **Self-management:**
   - Advise patient to rest and elevate the limb, consider an ice pack.
   - Discuss lifestyle issues such as weight loss, exercise, diet, alcohol consumption, and fluid intake.
4. **Pharmacological management:**

First-line treatment:

NSAIDs

- Naproxen 500mg BD or Indomethacin 50mg TDS. (consider lower dose in elderly)
- Continue treatment until 1-2 days after the attack has resolved.
- Co-prescribe a proton pump inhibitor (PPI) for gastric protection.
- If effective, continue for 48 hours after the attack has settled
- See CKS NSAID prescribing guidelines for a comprehensive list of contraindications to NSAIDs2

Colchicine

- Oral Colchicine 500mcg BD – TDS. Reduce the dose if patient develops diarrhoea.
- Continue until symptoms resolve or total 6mg per course. Do not repeat the course within 3 days.
- Colchicine is contraindicated in patients with severe renal impairment (eGFR <10 ml/min/1.73 m2. Dose should be reduced in patients with eGFR 10-50 ml/min/1.73 m2. It is contraindicated in patients with blood disorders
- Check drug interactions. Use lower doses in elderly and in patients taking potent inhibitors of cytochrome P450

Second-line treatment:

Corticosteroids:

- Prednisolone 25-35mg daily for 5 days as long as no contraindications. (lower dose where co-morbidities)
- Joint aspiration and injection of corticosteroid is a highly effective treatment of acute monoarticular gout, once diagnosis has been confirmed and septic arthritis excluded.

5. **Do not stop Allopurinol or Febuxostat during an acute attack of gout if patient is already established on these.**
6. **Review after the acute attack**
   - Acute gout generally resolves within 2 weeks
   - If response to treatment is an inadequate after 1-2 days, review the diagnosis and exclude any other underlying pathology.
   - Check compliance with treatment and if unable to tolerate the chosen treatment, consider switching to alternative first-line drug provided there are no contraindications.
   - If response to monotherapy is insufficient, consider combining treatments.
7. **Refer to a specialist or seek specialist advice when:**
   - The diagnosis is uncertain or a patient has persistent symptoms despite maximum doses of anti-inflammatory medication
   - An intra-articular steroid injection is indicated but the facilities or expertise are not available in primary care.

Preventing Gout – Management of chronic Gout

1. **Urate-lowering therapy (ULT)** should be offered to all patients gout and should be prescribed to patients with:
   - Two or more attacks of acute gout in 12 months.
   - Gouty tophi, joint damage or chronic gouty arthritis.
   - Renal impairment (eGFR less than 60 ml/min).
   - A history of urinary stones.
   - Diuretic use.
2. **Start urate-lowering therapy** after the acute attack has resolved, usually 2-3 weeks after the acute attack.
   - Consider Losartan if an ACE inhibitor is required for control of hypertension as this has a uricosuric effect.
   - If diuretic drugs are being used to treat hypertension, alternative anti-hypertensive agent should be considered.
3. **Allopurinol is the recommended first-line urate-lowering agent.**
   - Start allopurinol at a low dose of 50-100 mg once a day, increased by 100 mg increments approximately every 4 weeks until the serum uric acid (SUA) level is below 300 micromol/L. The maximum dose of Allopurinol in patients with normal hepatic and renal function is 900mg daily in divided doses.
   - Lower doses are used in elderly patients and patients with renal and hepatic impairment. Allopurinol is usually given once a day. However, doses of over 300 mg per day should be taken in divided doses.
   - If eGFR is between 30-60 mL/min/1.73m2 , prescribe an Allopurinol starting dose of 50 mg once a day (when providing a 50 mg dose check that the 100 mg tablets are scored). If eGFR is below 30 L/min/1.73m2, lower starting dose should be used. Refer these patients for specialist advice.
   - Check urate levels and renal function check every 4 weeks, (patients with renal impairment 2 weekly) for the first 3 months.
   - Advise patients who develop a rash to stop allopurinol immediately and seek prompt medical advice. Rarely, Stevens Johnsons syndrome (SJS) or toxic epidermal necrolysis (TEN) can occur. A rash can be first sign of a hypersensitivity reaction.
   - Advise patients starting allopurinol to be cautious about driving or using machinery until they are reasonably certain that allopurinol does not adversely affect their performance. (similar advice should be given for Febuxostat)
4. **Febuxostat is second-line therapy if allopurinol is not tolerated or is contraindicated.**
   - Avoid febuxostat in all CVD patients.
   - Start at a 80mg daily dose and increase to 120mg after 6-8 weeks if SUA level is above 300 micromol/L.
   - A prior history of hypersensitivity to allopurinol may indicate potential hypersensitivity to febuxostat.
   - Check liver function tests prior to initiation. In patients with mild hepatic impairment, the maximum dose is 80 mg daily. No dose adjustment is needed if creatinine clearance is above 30 ml/min.

5. **Prescribe Colchicine when initiating /increasing the dose of ULT as prophylaxis against acute attacks and continue for up to 6 months.**
   - Give 500 micrograms of colchicine once or twice a day when starting allopurinol or febuxostat.
   - Use colchicine for prophylaxis of gout with caution in people with renal impairment. Limit the dose to:
     - 500 micrograms once a day for people with an eGFR of 30-60 mL/minute/1.72m2.
     - 500 micrograms every 2-3 days in people with eGFR 10-30 mL/minute/1.72m2.
   - If colchicine cannot be tolerated, consider a low-dose NSAIDs with gastroprotection if not contraindicated.
6. **Refer to a specialist or seek specialist advice when:**
   - Allopurinol and febuxostat are not tolerated or contraindicated; or failed to reach target urate level at maximum dose.
   - Complications are present, including urate kidney stones, recurrent urinary tract infection, troublesome tophi or renal impairment with eGFR below 30 mL/min/1.73m2
   - Patients with heart failure or Ischemic Heart disease intolerant of Allopurinol
7. **General Advice to patients with Gout:**
   - Aim for an ideal body weight. If overweight, using dietary modification to achieve a gradual weight reduction. Avoid 'crash' dieting.
   - Eat sensibly - avoid excessive consumption of sugar-sweetened soft drinks and foods rich in purines (such as meats and seafood). Encourage a diet inclusive of skimmed milk, low-fat yoghurt, soybeans and cherries.
   - Drink alcohol sensibly — avoid excessive alcohol intake and binge drinking, especially beers and spirits.
   - People with renal stones should be advised to avoid dehydration and encouraged to drink more than 2 litres of water a day.
   - Take regular exercise — but avoid intense muscular exercise and trauma to joints.
   - Consider taking vitamin C supplements.
   - Provide written information and patient support such as resources via the UK Gout Society. For more information, see www.ukgoutsociety.org.

References

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3. UK Gout Society. Patient Information Leaflets: Accessed via http://www.ukgoutsociety.org/
4. British Society for Rheumatology guideline for the Management of Gout. June 2017 accessed March 2019: https://doi.org/10.1093/rheumatology/kex156