How to manage Acute Gout in Primary Care

**Background**

**Epidemiology**
Gout is common;
- affects 1-2% pop
- more common in men

**Risk Factors**
- hyperuricaemia – but remember that most people with hyperuricaemia never suffer an attack of gout
- obesity
- excess alcohol (especially beer)
- drugs, especially diuretics (esp. thiazides)
- renal impairment
- metabolic syndrome – hypertension, hyperlipidaemia, T2DM

**Diagnosis**

**Presentation**
- attacks usually start very rapidly with pain, redness and swelling
- in >3/4 patients the first attack is in the 1st MTP, and this joint is involved at some stage in 90%
- almost any joint can be affected

**Differential Diagnosis**
- septic arthritis
- pseudo-gout (pyrophosphate arthritis)

**Investigations**
- urate – this sometimes falls during attacks, so if the urate is normal, it should be repeated once the acute attack has resolved
- UE/LFT. Consider glucose/lipids
- joint aspiration (large joints) for gram stain, culture and microscopy for urate crystals. This is not needed if the diagnosis has previously been established and there is no suspicion of septic arthritis.
- X-ray feet

**Management**

**Acute Gout**
- if the patient is on Allopurinol or Febuxostat **DO NOT STOP IT!**
- NSAID (e.g. Naproxen 500mg bd + PPI or Etoricoxib 120mg od ) or colchicine 0.5mg tds until the attack abates. Stop colchicine if GI upset.
- +/- Joint aspiration/injection (e.g. triamcinolone 40mg)
- +/- IM or oral corticosteroids are occasionally required where NSAIDs/colchicine are contraindicated, not tolerated or ineffective, and local aspiration/injection is not feasible (e.g. mid-foot)

**Referral**
- most patients are cared for in Primary Care
- referral to A&E is required for patients in which septic arthritis is suspected
- urgent (telephone) referral to rheumatology may be helpful for joint aspiration (for diagnosis, exclusion of sepsis and treatment)
How to manage Chronic Gout in Primary Care

**Holistic Care**
- **Treat/avoid Risk Factors**
  - weight loss
  - reduce alcohol (especially beer)
  - alter diet to avoid purine rich foods (red meat, seafood, fructose)
  - review medication, especially diuretics
  - treat metabolic syndrome – hypertension, hyperlipidaemia, T2DM – as required

- **Referral**
  - most patients are cared for in Primary Care
  - telephone advice from rheumatologists will often avoid the need for referral

**Diagnosis**
- **Who to treat?**
  Patients (who are likely to comply) with:
  - three acute attacks in a year OR
  - erosive change on X-rays (in the context of recurrent gout) OR
  - tophi OR
  - urate renal calculi (rare) OR
  - serum urate > 0.6 mmol/L

- **What is the aim?**
  - to prevent further acute attacks. Warn the patient that attacks may continue for ~6 months until treatment is established.
  - to reduce the size of tophi
  - to reduce joint damage
  - aim for URATE < 0.35 mmol/L. Until the target is achieved, the patient will require serial monitoring of serum urate
  - where possible, delay the start of treatment until 2 weeks after an acute attack has settled

**Management**
- **Drug Treatment**
  - treat the patient with Colchicine 0.5mg bd for the first 6 months of urate lowering therapy
  - if colchicine is not tolerated, consider NSAID instead (e.g. Naproxen 500mg bd + PPI)
  - start Allopurinol 100mg daily (or 50mg if eGFR<30)
  - every 4 weeks, check the serum urate. Escalate the dose of allopurinol (100 ➔ 200 ➔ 300 ➔ 600 ➔ 900mg daily) until the urate is ≤ 0.35 mmol/L
  - if the patient is intolerant of Allopurinol, then try Febuxostat 80mg daily increasing to 120mg daily if necessary to keep urate ≤ 0.35 mmol/L

- **Cautions**
  - do not use Febuxostat in patients with eGFR <30 ml/min, IHD or CCF
  - do not increase allopurinol above 100mg daily if eGFR <30, without discussion