Management of Gout in Primary Care

Management of Acute Gout:
Affected joints should be rested, elevated and kept cool, can use ice packs
Start anti-inflammatory/analgesic therapy as early as possible and continue for 1-2 weeks

1st line: Maximum dose of fast acting NSAID:
- Naproxen (750mg then 250mg every 8 hours)
- Diclofenac 50mg tds (caution in patients at higher risk of CVD, See MHRA Alert)
- Indometacin 50mg tds-qds
Co-prescribe a PPI (Lansoprazole or Omeprazole) for gastric protection in patients at high risk of peptic ulcers and gastric bleeds
If NSAIDS are effective, continue for 48 hours after attack has resolved.

2nd line: Colchicine 500 micrograms (µg) twice to four times per day, until symptoms are relieved. Do not exceed a total dose of 6mg per course. Course not to be repeated within three days.

3rd line: Corticosteroids
Oral -Prednisolone 20-40mg daily for 5 days
Intramuscular injection: (Off license use. One off deep IM into gluteal muscle)
- Methylprednisolone 40-120mg or
- Triamcinolone acetonide 40-80mg
The dose will depend on the size of the joint and the severity of the condition
Intra-articular injection: (Off license use. If single joint involvement only)
- Methylprednisolone 10-80mg (small and large joints)
- Hydrocortisone acetate 12.5- 25mg (small joints)
- Triamcinolone acetonide 20-40mg (large joints)

Consider paracetamol, with or without codeine, in addition to other drug treatment, or alone,

Do any of the following apply?
- Definite diagnosis of gout following second or further attacks within one year
- Presence of tophi
- Presence of gouty erosive disease
- Evidence of gout interstitial renal disease

Refer to Secondary Care
Immediately if Septic Arthritis is suspected
(Please note it is possible for both gout and septic arthritis to co-exist)
Or by routine referral if:
- Patient suffers complications relating to gout e.g. nephropathy
- Patient requires Intra-articular therapy and primary care are not able to provide
- There is diagnostic uncertainty
- The serum uric acid is unresponsive to uric acid lowering therapy
(See Page 2)
- If gout persists despite uric acid levels <360µmol/l (See page 2)

Review at 4-6 weeks
- Check Serum Uric Acid
- Measure blood pressure, blood for fasting glucose, renal function, and lipid profile
- Assess lifestyle factors (diet, exercise, alcohol) and provide advice. Patient information leaflets: www.ukgoutsociety.org
- Assess and treat underlying cardiovascular risk factors: obesity, hypertension, lipids, diabetes mellitus
- Consider drug-induced gout: diuretics (Inc. thiazide), B-blockers, ACE inhibitors and non-losartan angiotensin II receptor blockers increase serum urate.
- High doses of aspirin interfere with uric acid excretion and should be avoided during an attack
- Consider prophylactic medication if a person is having two or more attacks of gout in a year

Yes
Consider Long Term Treatment with Uric Acid Lowering Therapy

No
Reconsider Diagnosis. Persistent symptoms without definitive diagnosis should be referred to secondary care

Introduction: Gout is one of the most common forms of inflammatory arthritis. It is caused by accumulation of excess urate crystals (monosodium urate) in joint fluid, cartilage, bones, tendons, bursas, and other sites. Patients experience joint swelling and pain during gout attacks, known as acute gouty arthritis. In some patients, the frequency and duration of acute attacks increase over time and lead to chronic gout, which may be associated with deposits of uric acid crystals known as tophi.
Chronic Gout Management with Uric Acid Lowering Therapy (ULT)

1st line: Allopurinol (See also SPC)
- Commence at least 1-2 weeks after acute attack has passed, as Allopurinol may precipitate further attacks
- Start at 100mg once daily and titrate in 50-100mg increments every 4 weeks to achieve target Serum Uric Acid (SUA) <360 μmol/L
- Consider lower starting dose for in elderly patients, those with frequent attacks, those with renal and hepatic impairment
- Usual maintenance dose in mild conditions is 100mg-200mg daily, in moderately severe conditions 300mg-600mg daily and in severe conditions 700-900mg daily.
- Maximum dose of allopurinol is 900mg daily dependent on renal function. Doses over 300 mg daily should be taken in divided doses
- Co-prescribe prophylactic colchicine (500ug bd for up to 6 months) or an NSAID (Ibuprofen 200mg twice daily or Naproxen 250mg daily for up to 6 weeks, consider need for PPI) to prevent an acute attack
- If Colchicine and NSAIDs are contraindicated, consider low-dose oral prednisolone once a day for 4 to 12 weeks.

2nd line: Febuxostat (See also NICE TA 164 and SPC)
- Consider Febuxostat if allopurinol is not tolerated or is contra-indicated, ensuring an acute attack of gout has completely subsided
- Perform liver function test before starting treatment and periodically thereafter based on clinical judgement
- Start at 80mg once daily, to achieve target Serum Uric Acid (SUA) <360 μmol/L
- Increase dose to 120mg once daily after 4 weeks if target SUA is not reached
- Max 80mg daily in mild liver impairment (no information available in moderate-severe liver impairment)
- Avoid in patients with ischaemic heart disease and/or heart failure, or malignant disease
- Co-prescribe prophylactic colchicine (500ug bd for up to 6 months) or an NSAID (Ibuprofen 200mg twice daily or Naproxen 250mg daily for up to 6 weeks, consider need for PPI) to prevent an acute attack
- If Colchicine and NSAIDs are contraindicated, consider low-dose oral prednisolone once a day for 4 to 12 weeks

NB: Stop Febuxostat immediately if hypersensitivity occurs, do not restart MHRA Alert

Gout Attacks during ULT
- Manage the flares as appropriate
- Assess compliance with prophylactic medication or increase the dose if appropriate
- Review any trigger factors such as medication (for example diuretics), trauma, diet, weight gain, and excess alcohol consumption.
- Provide a home supply of medication to be used during an acute attack in order to minimize the impact on the person’s functioning.
- DO NOT interrupt uric acid lowering therapy during an acute attack unless there is a clinical reason
- Reassure the patient that continuous treatment with ULT will decrease the frequency and intensity of further attacks

Once Target SUA and clinical cure (tophi resolved, attacks ceased) achieved
- Consider reducing the dose of ULT to maintain SUA<360μmol/ L
- Check SUA annually to ensure target still maintained, otherwise adjust ULT
- Continue ULT lifelong, especially in patients at higher risk:
  - Who have renal impairment, gouty tophi, uric acid stones, or those taking long-term diuretics
  - Who have recurrent attacks of gout when trying to stop urate-lowering treatment
- Consider stopping ULT in patients who have had a normal serum uric acid level for many years with no acute attacks of gout, or patients whose modifiable risk factors were successfully addressed and clinical cure achieved

If the serum uric acid is unresponsive to uric acid lowering therapy or if symptoms persist despite uric acid levels <360μmol/L, refer patient to a specialist
Lifestyle advice
- Aim for an ideal body weight: but avoid crash dieting, and high protein/low carbohydrate diets.
- Eat sensibly by restricting the amount of red meat and avoiding a high protein intake. Avoid excessive consumption of foods rich in purines (such as liver, kidneys, and seafood), limit consumption of sugary drinks and snacks
- Drink skimmed milk or consume low-fat dairy products
- Avoid binge drinking and restrict alcohol consumption to 21 units per week for men and 14 units per week for women, with at least two alcohol-free days a week
- Avoid dehydration by drinking water (up to 2 litres/day unless there is a medical contraindication)
- Take regular exercise but avoid intense muscular exercise and trauma to joints
- Cardiovascular risk factors and co-morbid conditions such as cigarette smoking, hypertension, diabetes mellitus, dyslipidaemia, obesity and renal disease should be screened for in all patients with gout, reviewed at least annually and managed appropriately
- Consider taking vitamin C supplements.
- Provide written information and patient support via the UK Gout Society:
  - Gout
  - Diet
  - Related health problems
  - Treatments

Reference
7. EMC Summary of Product Characteristics. Allopurinol 100mg tablets. Last updated 16/06/17. (accessed October 2017)

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