GOUT GUIDELINES SDEC UHB NHS TRUST

Presentation:

- Sudden onset of intense joint pain (usually within 24 hrs) often starting over night
- Associated signs of inflammation (swelling and usually redness)
- Weight-bearing very difficult initially and often light touch intolerable
- Usually, complete resolution of symptoms within 1-2 weeks even without treatment.
- Typically affects lower limb but any joint can be affected even in a polyarticular pattern.

Gout can often present very similarly to septic arthritis, if in doubt please refer to Orthopaedics first to rule out septic arthritis for consideration of joint aspiration. See also trust guidelines for management of Acute Hot joints:

Acute hot joint, septic arthritis and gout

INVESTIGATIONS

- Best diagnostic test is **joint aspiration** to look for monosodium urate crystals.
  - Serum uric acid (SUA): Check if suspecting gout
  - Note: an acute gout attack lowers SUA by at least 10 % so a normal SUA does NOT rule out gout but a less than normal range makes gout unlikely.
  - SUA is most accurate between episodes of gout flares.

X-ray affected joint to look for gouty erosions to support a diagnosis and rule out bony injury.

ACUTE MANAGEMENT: there is no need to stop urate lower therapy (ULT) during an acute attack

Aim is to settle acute flare symptoms, continue for 1-2 weeks. Drug selection depends on patient age, preference, co-morbidities and co-prescription.

1st line

NSAIDS +\- PPI - Naproxen 500 mg BD or Diclofenac 50 mg TDS until attack resolved.

Colchicine 500 microgram BD/TDS
(Caution: higher doses may cause diarrhea)
Continue until attack resolves (1-2 weeks)

Steroids +\- PPI – Prednisolone 20-30 mg OD for 5 days

General measures:

- Patient education
- Weight reduction
- Ice-pack
- Reduce alcohol intake, keep hydrated
- Discontinue diuretic where appropriate

NOTE: If response to monotherapy is insufficient, treatment combination can be used e.g. Prednisolone and Colchicine

NOTE: Please note cautions and consider colchicine dose reduction in those taking potent inhibitors of cytochrome P450 3A4 (e.g. cimetidine, clarithromycin, erythromycin, fluoxetine, ketoconazole, protease inhibitors, tolbutamide), p-glycoprotein (e.g. clarithromycin, ciclosporin, erythromycin) or statins due to increased risk of myopathy and rhabdomyolysis.

2nd line

Intra-articular injection- for monoarthritic gout

STAT Intramuscular injection e.g. Depomedrone 80-120mg for polyarticular gout

CHRONIC MANAGEMENT

Aim is to prevent further attacks of gout by using urate lowering therapy (ULT).

Does the patient have any of the following?

- Two or more attacks of Gouty arthritis in 12 months
- Presence of Gouty tophi
- Presence of erosive chronic gouty arthritis on x-ray
- CKD 3-5

NO → ULT not indicated. If 1st attack of gout, check SUA 4 weeks post-attack. Ask GP to commence therapy after 2nd attack.

YES

1st line: Commence Allopurinol:

- Commence 50-100mg Allopurinol.
- The majority of patients will need anti-inflammatory prophylaxis for 3-6 months on initiation and up titration of ULT: eg colchicine 500mcg od-bd (see table below)
- Timing of ULT initiation is debated with ACR guidance recommending starting during the acute attack. This is to improve compliance and ensure therapy is started.[1]
- Check uric acid every 4-6 weeks, aiming for a SUA less than 300umol/l
- Increase Allopurinol by 50-100mg every 4-6 weeks until target SUA achieved (<300 umol/l), max dose=900mg/day.

2nd line: Commence Febuxostat:

- Similar instructions for commencement and prophylaxis as above.
- Commence 80mg OD, increase to 120mg OD after 4-6 weeks if target SUA not achieved
- AVOID in established ischaemic heart disease/heart failure.

NOTE: DO NOT STOP ULT during an acute attack of gout. Gout attacks are expected during up-titration of ULT and are helped by anti-inflammatory prophylaxis and should be managed as per acute table.

Renal adjustments

Allopurinol
Final dose according to eGFR

eGFR	
>50	Max 900mg daily in divided doses
20-50	200-300 daily
10-20	100-200 daily
<10	100 daily or alternate days

Colchicine
Acutely: Reduce dose in eGFR 10-50, avoid eGFR<10
Prophylaxis dose:

eGFR	
>60	500mcg OD/BD
30-60	500mcg OD
10-30	500mcg every 2-3 days
<10	Avoid

Febuxostat: Use in caution in eGFR<30

NSAIDs: Avoid in elderly patients or eGFR<30

FOLLOW-UP

- Most gout can be managed and followed up in primary care. Please provide instructions of ULT on discharge letter for GP as outlined above. Refer to Rheumatology when:
  - Attacks continue despite lowering serum urate <300umol/l.
  - Uncertain diagnosis – check RF/CCP antibodies and consider pseudo gout (calcium pyrophosphate deposition, usually associated with severe OA)
  - Refractory gout (e.g. drug intolerance) – having followed the advice above.

References:

1 2020 American College of Rheumatology Guideline for the Management of Gout

Further Guidelines:

British Society for Rheumatology: 2017

https://academic.oup.com/rheumatology/article/56/7/e1/3855179?login=false