Gout – How to fix it

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Disclosures (None are gout related)

- Personal Disclosures
 - Speaking and/or Consulting: Abbvie, Novartis, GSK, Pfizer, Eli Lilly, UCB Pharma, Janssen and Roche
 - Research Grant Funding: Novartis, Janssen, UCB Pharma
 - Conference Support: Bristol-Myers-Squibb, UCB, Pfizer

Questions to answer?

- What is gout? If you understand it, you can overpower it
- How do you treat acute gout flare?
- When do you start allopurinol?
- Can you start allopurinol during a flare?
- Do you use prophylaxis against gout flares when starting allopurinol?
- How fast do you increase allopurinol?
- What is the serum urate target?
- What do you do if they are allergic?
- What do you do if they have renal impairment?

Gout is a urate crystal overload disease **It is a chronic disease**





Diagnosis

- Common onset one waking in the morning
- Early hours of the morning
- Acute, severe pain in the lower limbs
- Co-morbidities are common, diabetes, obesity
- Serum urate is commonly normal

Acute gout flare treatment

- Non-steroidals at maximum dose, 1000mg naproxen
- Prednisone, 25mg for 3-4 days, then 12.5mg for 3-4 days
- Colchicine, NEED TO START EARLY, or much less effective
 - 1mg immediately, 0.5mg 6 hours later
 - Then 0.5mg twice a day ongoing
- Low dose therapy (as above) is just as effective as high dose therapy (RCT level evidence)

When do you start allopurinol?

- Guidelines suggest starting urate lowering therapy when someone has gout AND
 - 1. More than 1 flare per year
 - 2. Erosions
 - 3. Renal impairment
 - 4. Kidney stones

Can you start allopurinol during a flare? YES

Mean VAS Scores on Days 1-10 Allopurinol vs. Placebo



Taylor et al. Am J Med 2012;125(11):1126-1134.e7

Should you use prophylaxis against gout flares when starting allopurinol? YES

• Guidelines recommend it, colchicine can reduce flares by up to 80%



Figure 1. Mean number of acute gout flares at the 0-3 and 3-6 month time periods, and overall (n = 43: colchicine = 21, placebo = 22).

I use colchicine 0.5mg BD, but tell patients that if they get loose bowel motions to reduce to 0.5mg OD.

Borstad et al. J Rheumatol 2004;31;2429-2432

How long should I use prophylaxis for? Ages

- There is no RCT evidence on this but flares can occur long after reaching a patients serum urate target
- Usually 3 9 mnths



How fast do you increase allopurinol?

• eGFR > 30mL/min

• eGFR < 30mL/min

- Allopurinol 100mg 3-5 weeks
- Allopurinol 200mg 3-5 weeks
- Allopurinol 300mg 3-5 weeks
- Allopurinol 400mg 3-5 weeks
- Allopurinol 500mg 3-5 weeks

- Allopurinol 50mg 3-5 weeks
- Allopurinol 100mg 3-5 weeks
- Allopurinol 150mg 3-5 weeks
- Allopurinol 200mg 3-5 weeks
- Allopurinol 250mg 3-5 weeks

Stop when you get to the serum urate target < 0.36 (no tophi) or < 0.30 (tophi)

What is the serum urate target?

- If tophi not present
 - < 0.36 mmol/L

- If severe disease or tophi present, can go lower
 - < 0.30 mmol/L
 - Patients will get better quicker

What do you do if they are allergic to allopurinol?

- •Options:
 - Desensitize them to allopurinol
 - Use febuxostat
 - •Use probenecid
 - Refer to a rheumatologist

What do you do if they have renal impairment?

- NO, need to change serum urate target
- HOWEVER, need to up-titrate allopurinol at a slower rate
- This is due to the increase risk of adverse reactions if you up-titrate quickly.

My current approach to gout



My current approach

- Make diagnosis with crystal confirmation if at all possible & check urine
- Commence allopurinol
- Uptitrate based on renal function
- Monitor Serum urate regularly
- Titrate to SU of less than 0.36 mmol/L or 0.30mmol/L
- Once target reached should check urate every 6 months

Failure to reach target

- If fail to achieve target, consider
 - adherence/compliance/concordance
 - genetic problems
- Add in probenecid (I do this at ~600mg allopurinol mark)
- Check urate excretion on spot urine or 24 urine (don't want to precipitate urate renal stones)

Education Objective: Explain the cause

- Build up of urate in the body
- Crystallization in joints
- Inflammation and pain due to the body's immune response to crystals, not the crystals themselves



Gout Management Guide

Rheumatology Department, Royal Brisbane & Women's Hospital

STICKER HERE

Target Serum Urate / Uric Acid: Less than 0.36mmol/L

Your last serum Serum Urate / Uric Acid: Date:

Urate Lowering Therapy: Allopurinol / Febuxostat / Probenecid

Dose	How Often	How Long

DO NOT STOP ALLOPURINOL DURING AN ACUTE FLARE OF GOUT

Only Stop Allopurinol If You Develop a Rash – If so talk to your GP

Treatment to reduce chance of flares when lowering urate/uric acid

Medication:

How Often:

If a gout flare occurs then need more treatment

Medication:

Less than 0.36