10-MINUTE CONSULTATION

Management of recurrent gout

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An overweight 60 year old man tells you he has had four episodes of gout over the past year and wants to know how to reduce the chance of further attacks. He takes amlodipine for hypertension.

What issues you should cover

Confirm diagnosis—Is it really gout? A typical history of rapid onset, severe, self limiting joint pain reaching its maximum over 6-12 hours, with swelling and erythema, suggests gout, particularly if it involves the first metatarsophalangeal joint at some point. (This joint is affected in 90% of cases and is the first joint affected in 70%.) The presence of tophi support the diagnosis. Previous evidence of monosodium urate crystals from a joint aspirate (during or between attacks) would be the gold standard. A concentration of serum uric acid (SUA) of $\leq 380 \mu\text{mol/l}$ at least one month after an acute attack or $\leq 330 \mu\text{mol/l}$ during an attack makes gout an unlikely diagnosis.

Causes—Common risk factors include beer or spirit consumption, use of drugs (such as thiazides), and male sex. (See bmj.com for a full list of risk factors.)

Complications—These might include renal stones, nephropathy, or tophi.

Consider—Associated metabolic syndrome.

What you should do

During the consultation

- Measure his body mass index, waist circumference, and fasting glucose and lipid concentrations (to check for presence of metabolic syndrome). Calculate and manage his Framingham or cardiovascular risk score. Test his blood for SUA and renal function. Refer him for radiography only if you are unsure of the diagnosis.
- Explain that gout is caused by the formation of uric acid crystals in the joint, and give him information such as that at www.patient.co.uk/showdoc/23068747.

Reducing the risk of further attacks

- Advise him to lose weight. Dieting and exercise may reduce his serum urate concentration by around $100 \mu\text{mol/l}$ and will lessen his risk of developing metabolic syndrome. He should drink 2 l of fluid a day (especially if he has a history of renal stones). Restricting purine rich foods is difficult and usually less effective than weight loss where this is appropriate; dietary advice is available from the UK Gout Society (www.ukgoutsociety.org).
- Advise him to reduce his alcohol intake. He should avoid beer (rich in purine) and, ideally, spirits. Wine is not a major risk factor.

Drug treatment

- Stop or change any precipitating treatment, such as a thiazide diuretic, where this is appropriate.
- If tophi or urate nephropathy are present, or he often has attacks of gout (more than three a year), consider treatment with allopurinol: 100 mg initiated one month after an acute episode. Increase by 100 mg every four weeks, depending on his SUA concentration (as indicated in the *British National Formulary*). Aim for a concentration of $\leq 360 \mu\text{mol/l}$. Such a “go slow” regimen reduces the risk of allopurinol induced gout and toxicity. In cases of renal impairment start at 50 mg and titrate to a maximum of 100 mg. When starting allopurinol warn him that it may precipitate gout but that he should continue taking it and seek advice on a prescription for an anti-inflammatory drug (such as a non-steroidal anti-inflammatory drug (NSAID), colchicine, or a corticosteroid); that it may take many months for gout attacks to settle, even after urate concentrations normalise; and that he should come back if a rash appears.
- Begin prophylaxis against acute attacks during the first three months of allopurinol treatment, such as colchicine 0.5 mg twice daily begun two weeks before the allopurinol. Reduce the dosage of colchicine to 0.5 mg once a day if creatinine clearance is 35-49 ml/min or to 0.5 mg every second or third day if it is 10-35 ml/min. Warn him of the risk of diarrhoea. Prophylaxis may need to be lengthened if attacks continue or shortened if toxicity from the prophylactic drug occurs. A more widely used though less evidence based alternative is an oral NSAID (with or without gastrointestinal protection), which can be started at the same time as the allopurinol.
- If he has no history of urate stones consider switching amlodipine to losartan, as it has a mild uricosuric effect.

Ongoing care

- While he is taking allopurinol measure his renal function annually and monitor risk factors for metabolic syndrome or cardiovascular adverse events.
- Refer him to a specialist if he has urate renal stones or nephropathy or is intolerant to allopurinol.

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USEFUL READING

EULAR evidence based recommendations for gout. Part I: Diagnosis. *Ann Rheum Dis* 2006;65:1301-24

Prodigy guidance: Gout. www.prodigy.nhs.uk/gout

Dutch College of General Practitioners (NHG) practice guideline on gout. <http://nhg.artsennet.nl/upload/104/guidelines2/E72.htm>

This is part of a series of occasional articles on common problems in primary care. The BMJ welcomes contributions from GPs.