

CASE 5 Hypertensivewithgout

INFORMATION FOR THE DOCTOR

Name	Michael Abbot
Age	52
Social and family history	Married, two adult children
Past medical history	<ul style="list-style-type: none"> • Gout 8 weeks ago • Hypertension for five years; ankle swelling with amlodipine • Stomach upset and mood swings on statins – refuses statins • GORD 15 years ago
Current medication	<ul style="list-style-type: none"> • Ramipril 10mg daily • Hydrochlorothiazide 25mg daily • Naproxen 750mg stat followed by 250mg every 8 hours
Blood tests	<i>Blood tests done last week</i>
Plasma urate (2 years ago)	632 (210–480)
CRP	8 (<8)
Plasma fasting glucose	5.8mmol/L (3.65–5.5)
Fasting cholesterol	7.2mmol/L
Fasting HDL cholesterol	0.8mmol/l (0.8–1.8)
Total cholesterol:HDL	9
Fasting triglyceride*	2.9 (0.55–1.9)
TSH	1.89 (0.35–5.5)
Alkaline phosphatase	156IU/L (95–280)
Total bilirubin	14µmol/L (3–17)
Albumin	46g/L (35–50)
Creatinine level	99µmol/L (70–150)
U&Es	within the normal range
BMI	29
BP	146/86 (patient says home readings are consistently <140/90)

INFORMATION FOR THE PATIENT

You are Michael Abbot, a 52-year-old logistics manager, who has come to discuss the blood tests you had last week. The doctor you saw two months ago with a painful left foot suspected gout. She advised you to take anti-inflammatories and to return for a blood test 6–8 weeks after the attack settled. The doctor wanted to confirm her diagnosis of gout by doing the blood tests.

You had a very painful left foot with a swollen joint which was incredibly sore to touch. The skin was red and tender. For a week, you could hardly bear to put weight on it. The medication prescribed did help. You can now walk without difficulty, whereas when it first started, the pain had limited walking and any pressure put through the foot was agonising.

The doctor who advised getting a blood test to see if your uric acid was raised warned you not to get the test too soon after the first attack. You read about gout and your internet searching also advised getting a uric acid test 6 weeks after the attack. You expect the blood test to show a raised uric acid. You have read the advice about decreasing red meat and alcohol and want to know if this really works or whether you should just be put on tablets to prevent further attacks.

You present to the doctor expecting to discuss the blood tests and their implications. Your opening statement is *"I've come to discuss my blood tests"*.

Information to reveal if asked

General information about yourself:

- You work at a large logistics company. You take the train to and from work.
- When you were unwell with the painful foot, you could not walk to and from the train station and spent 5 days working from home. It was not the same as being in the office and you had to catch up with work on your return.
- You tend to socialise with colleagues; this usually involves some drinking after work.
- You have never smoked tobacco.

Further details about your condition:

- The foot pain two months ago was your first episode of gout. You do not have a family history of gout. Your dad died of a heart attack at the age of 68, but he smoked heavily. Your younger brother also has hypertension.
- If specifically asked about your lifestyle, you are a non-smoker. You drink no more than 3 pints of beer with colleagues 2–3 nights per week. You

share a bottle of wine with your wife on most weekends. You tend to drink most nights,

either wine with a meal or beer with colleagues. You don't drink to get drunk and rarely drink more than a bottle of wine on your own or more than 6 pints of beer in one night.

- You and your wife like cooking and eating. You like red meat. You enjoy doing a roast dinner every weekend.
- You like vegetables but don't consider salads or vegetarian food a proper main course.

Your ideas:

- You think that your foot pain was gout. You suspect that you may have to change your diet and eat less meat, but how much meat should you be eating? Is oily fish OK?
- You don't think that you drink heavily.
- In the past, the doctor tried you on two different statins, but even on small doses you experienced a 'dodgy stomach' and vile mood swings. When you stopped the statin, the symptoms disappeared and when you restarted, they recurred. You discussed the risks and benefits of statins and decided that you didn't want to take them.
- You developed ankle swelling with a previous BP tablet. You have been reluctant to take more tablets or increase the dosage of current medication because of your experience of drug side-effects.
- You have read about medication to prevent attacks of gout, but you'd prefer not to take a daily tablet.
- If the doctor offers to swap one tablet for another, rather than prescribe more tablets, you are more amenable. You'd like to know about possible side-effects.
- You don't think you are motivated enough to lose weight. You and your wife enjoy cooking, good food and going out to nice restaurants.

Your concerns:

- You are worried about taking daily tablets in case you develop side-effects.
- If you have to change your diet, your wife will be affected. It will be impossible to go out with her, or cook her a nice meal, and then eat salad while she has a steak.

Your expectations:

- You expect to get information about the blood tests and have a discussion about treatments for gout.

Medical history

You consider yourself to be 'in good nick'. Your home blood pressure monitoring shows your BP to be well controlled despite it always being a bit high in surgery.

~~You do not currently have any side-effects from your BP tablets.~~

Social history

You are happily married and your two adult children live away from home.

You enjoy your current social life.

Information to reveal if examined

If the doctor asks to do your blood pressure, hand him/her a card saying "BP consistently just slightly above 140/90".

SUGGESTED APPROACH TO THE CONSULTATION

Targeted history taking:

- What are Michael's symptoms now? What was his response to the anti-inflammatories? Did he experience any side-effects from the anti-inflammatories?
- Does he know why the blood tests were requested? What does he make of the raised uric acid? Does he have any ideas about how uric acid could be reduced? What would be the long-term effect of a raised uric acid?
- What are his concerns? Is he worried that his current social life, which revolves around food and alcohol, needs to be altered and the knock-on effect this will have on friends and family?
- What are his expectations: does he expect specific dietary and lifestyle advice; signposting to diets for patients with gout; medication?
- Is he prepared to revisit his risk factors for cardiovascular disease? He is not reaching target for cholesterol and BMI.
- Is he prepared to change his hypertension medication?

Targeted examination:

- This case does not require the candidate to perform a targeted physical examination.

Clinical management:

- Discuss the blood results and previous examination findings: he has a raised serum urate, cholesterol, triglycerides and BMI, all risk factors for CV disease.
- Discuss the risk of recurrent attacks of gout and the potential damage to several joints.
- Discuss what could be done about the raised uric acid: reduction in alcohol consumption (especially beer and spirits); reduction in meat, seafood and food containing fructose (corn syrup); losing weight; exercising more; changing his BP tablets from hydrochlorothiazide to losartan; optimising his BP and cholesterol treatments. Of these options, which one would he like to try first? Discuss that uric acid-reducing medication such as allopurinol is usually offered to patients who suffer two or more attacks of acute gout in a year.
- Address the patient's ideas: that it is too difficult to make lifestyle changes. Negotiate goals for Michael to work towards and ask him what help he may need in reaching these goals. Consider referral to the practice nurse for healthy eating and lifestyle advice.
- Address the patient's concerns about prophylactic daily medication and

making drastic lifestyle changes. If he stops hydrochlorothiazide, which can increase uric acid by 20%, and if he starts losartan, which can decrease uric acid by up to 20%, he may reduce his risk gout, improve his BP control and reduce the number of pills he takes.

- Address the patient's expectations about pill side-effects.
- Confirm his understanding of gout, its immediate treatment with anti-inflammatories (does he have a standby supply?), its link with cardiovascular disease and the treatment of these conditions by lifestyle modification.
- Arrange follow-up in four weeks to check BP and revisit cardiovascular risk factors.

Interpersonal skills:

This case tests the doctor's ability to negotiate with a patient to develop a shared management plan. It also tests the doctor's ability to maintain an adult–adult relationship with a patient who is so reluctant to make lifestyle changes that his behaviour borders on teenage stropiness.

Good communication with the patient:

- explores what the patient already knows and helps the patient to assimilate the new information to make his own decisions. The doctor could ask *"If you did nothing about your drinking, diet and exercise, what is the worst that could happen? If you made all the lifestyle changes, what is the best that could happen? What are the most realistic changes that you could make? If you had a friend in this situation, what would you advise him to do?"*
- Once the patient has committed to making some changes, the doctor gives focused information, support and follow-up.
- Good prescribing behaviour involves discussing how to discontinue current BP tablets and to start the new medication.

Poor communication with the patient:

- does not enquire sufficiently about his health understanding and sees his reluctance to make changes as being a stroppy or difficult patient. The poor communicator adopts a parent–child approach.
- instructs the patient. Instead of motivating the patient to change, the poor communicator lectures the patient on alcohol units and purine-rich food. Hence, the doctor appears patronising or inappropriately paternalistic.
- uses inappropriate or technical language (in explaining the test results and treatment options, including medication).

BACKGROUND KNOWLEDGE REQUIRED FOR THIS CASE

Suresh, E (2005) **Diagnosis and management of gout**. *Postgrad. Med. J.* **81**: s572–579. doi:10.1136/pgmj.2004.030692

There are three prerequisites for development of gout:

- Development of hyperuricaemia leading to urate saturation;
- Formation of monosodium urate crystals;
- Interactions between monosodium urate crystals and leucocytes.

Secondary causes of hyperuricaemia include:

- chronic renal failure
- ingestion of drugs that compete with urate for renal excretion including loop or thiazide diuretics, low-dose aspirin, or cyclosporin.
- Patients sometimes know when an acute episode is imminent, describing itching (possibly caused by prodromal mast cell degranulation and release of histamine).
- Acute episodes often begin at night – hence the suggestion “suspect gout when acute arthritis begins between 2 and 7am.”
- The episode builds to a peak over several hours with intense pain and increased sensitivity of overlying skin such that even pressure of bed covers cannot be tolerated.
- The reason for extreme pain in acute gout is unknown.
- Gout affects the first MTP joint in >70% of cases but other joints such as tarsal joints, ankles, knees, and wrists can also be affected. Central joints such as hips, shoulders, and spine are seldom affected, possibly because higher temperatures in these joints are not conducive to crystallisation.
- It is unclear why only one or two joints are affected at a time, but occasionally episodes can be polyarticular, especially later in the course of the disease.
- Fever is common and more likely with polyarticular episodes (in about 50%).
- Gout can also cause bursitis and tenosynovitis.
- Resolution is usual within a week, even without treatment.

Diet, drinking, and diuretics (correctable risk factors)

- An increased risk of gout was found with increased meat consumption (particularly beef, pork, lamb and seafood) but not with consumption of purine- rich vegetables.
- A rigid purine-free diet is, however, unpalatable, impractical, and can rarely be sustained.

- Serum urate concentrations and frequency of episodes can be reduced by weight reduction through calorie restriction, decreased intake of carbohydrates, and increased proportional intake of protein and unsaturated fat. Such a diet would also decrease plasma glucose, insulin, and triglyceride concentrations and improve insulin sensitivity, thereby reducing cardiovascular morbidity and mortality.
- Crash dieting and fasting should be avoided as they can precipitate acute episodes.
- Excess consumption of alcohol should be discouraged, as increasing alcohol intake is associated with an increasing risk of gout. Beer confers a larger risk than spirits, but moderate wine drinking does not seem to increase the risk of gout.
- Consider alternatives to diuretic therapy.