

## Managing gout

This is the lay version of the EULAR recommendations for the management of people with gout. The original publication can be downloaded from the EULAR website: [www.eular.org](http://www.eular.org).

Richette P, et al. 2016 updated EULAR evidence-based recommendations for the management of gout. *Ann Rheum Dis* 2017;76:29–42. [doi:10.1136/annrheumdis-2016-209707](https://doi.org/10.1136/annrheumdis-2016-209707)

### Introduction

EULAR recommendations give advice to doctors, nurses and patients about the best way to treat and manage diseases. EULAR has updated its recommendations on the management of people with gout.

Doctors, health professionals and patients worked together to develop these recommendations. Patients in the team ensured that the patient point of view was integrated in the recommendations. The authors looked at the evidence on drug treatments in people with gout.

### What do we already know?

Gout is a common disease that affects up to 2.5% of people in Europe. It can cause pain and disability. The symptoms tend to flare every so often. Flares develop over a few hours and cause severe pain in the joints.

Gout is caused by deposits of urate crystals in a person's joints. These deposits lead to inflammation. People with gout may also develop tophi, where urate crystals collect under the skin in hard, painful lumps. If you have gout, it is important to maintain low levels of serum uric acid (often shortened to SUA) in your blood. This will stop urate crystals forming and will allow to dissolve all your crystals.

Previous EULAR recommendations for gout were written in 2006. New drugs have become available since then, and so the recommendations have been updated.

### What do the recommendations say?

Overall, there are three overarching principles and eleven recommendations. The overarching principles say that every person who has gout should be told about how the disease develops, what complications or other associated diseases they might get, and what treatments are available. People with gout should also be told how to manage individual attacks, and how to keep urate levels low. Every person with gout should receive lifestyle advice on how to manage their weight. People with gout should avoid alcohol, sugary drinks, and not eat too much meat or seafood. Regular exercise should be advised. Finally, if you have gout your doctor should check whether you have any other linked diseases, and whether you are at risk of developing a cardiovascular disease in the future.

Each recommendation is based on available scientific evidence or expert opinion. The more stars a recommendation has the stronger the evidence is.

One star (\*) means it is a weak recommendation with limited scientific evidence.

Two stars (\*\*) means it is a weak recommendation with some scientific evidence.

Three stars (\*\*\*) means it is a strong recommendation with quite a lot of scientific evidence.

Four stars (\*\*\*\*) means it is a strong recommendation supported with a lot of scientific evidence.

- **Treat acute flares of gout as early as possible. The choice of drug depends on timing, contraindications, your previous experience with treatments, and the number and type of joints affected.\*\*\*\***

If you have gout, you should receive education from your doctor so that you are able to self-medicate at the first symptoms of a flare. The drug that you use will depend on a number of factors. Some people may have contraindications that mean they cannot take a particular drug. The choice of drug may also depend on how well you have responded to certain treatments in the past. Timing is also important, because some drugs need to be used within a certain number of hours after the flare starts. For example, colchicine works well when given within 12 hours of your symptoms starting. The number and types of joints affected by the flare may also influence which drugs are used.

- **The recommended first option for treating flares is colchicine (within 12 hours) and/or an NSAID or corticosteroid. \*\*\*\***

Within 12 hours of symptoms of a flare starting, the first-choice treatment is a 1 mg dose of colchicine followed 1 hour later by 0.5 mg. You can repeat the same scheme (1 mg dose of colchicine followed 1 hour later by 0.5 mg) the second day and the days after, if needed. An alternative is to use non-steroidal anti-inflammatory drugs (often shorted to NSAIDs) or steroids for 3 to 5 days. If you take NSAIDs, you may also need to take a proton-pump inhibitor (PPI) to protect your stomach. If you are given steroids, they might either be as pills, or as an injection. If you have kidney impairment, you should not take colchicine and NSAIDs. You should also not take colchicine if you are taking strong P-glycoprotein and/or types of enzyme inhibitors such as cyclosporine or some antibiotics, particularly macrolide such as clarithromycin. These drugs can interact with colchicine and cause dangerous side effects.

- **If you have frequent flares but are not able to take colchicine, you may be able to take NSAIDs, steroids or IL-1 blockers to treat flares.\*\*\*\* The dosage of your urate-lowering therapy should be adjusted, if needed, to help you achieve your SUA target once the flare resolved.\*\***

IL-1 blockers (canakinumab, anakinra) can be used if you are not able to take NSAIDs or steroids to treat flares. You must not take IL-1 blockers if you have any infections. After you have taken IL-1 blockers for a flare, it is important to adjust your urate-lowering therapy. This helps you to achieve your SUA target, and so avoid any future flares.

- **Your doctor should explain why you need to take extra treatment for the first 6 months of starting urate-lowering therapy.\*\*\***

When you first start urate-lowering therapy the deposits of urate that are in your body will start to be dissolved. This can put you more at risk of flares for a time. For the first 6 months of taking urate-lowering therapy, you should also receive an extra treatment of colchicine, 0.5–1 mg/day (or NSAIDs). This extra preventive treatment (sometimes called prophylaxis) is to stop flares and help you get the most from your treatment. If you have kidney impairment or are taking statins, the dose will be lower, and you should look out for any side effects. While you are taking colchicine you should not take strong

P-glycoprotein and/or a type of enzyme inhibitor called CYP3A4 inhibitors. This includes cyclosporine and macrolide antibiotics, particularly clarithromycin. These drugs can interact with colchicine and cause dangerous side effects. If you cannot take colchicine, then you may receive NSAIDs at a low dose. You doctor should fully explain this to you.

- **Urate-lowering therapy should be given to anyone with recurrent flares, tophi, joint pain related to gout or kidney stones. This should be discussed at the first clinic visit with every person who is diagnosed with gout. People with gout should receive full information and be**

**fully involved in decision-making about their urate-lowering therapy.\*\*\*\***

If you have recurrent flares, tophi, joint pain or kidney stones then you should receive urate-lowering therapy. Your doctor should talk to you about this as soon as you are diagnosed with gout. Some people need to start urate-lowering therapy as soon as possible. This includes people under the age of 40, those with very high SUA levels (more than 8.0 mg/dL or 480 mmol/L) or people who have other diseases such as kidney impairment, hypertension, ischaemic heart disease or heart failure. Your doctor should give you all the information you need to understand your medicine and why you need urate-lowering therapy.

- **People receiving urate-lowering therapy should have their SUA level monitored and maintained to <6 mg/dL (360 mmol/L). A lower target (<5 mg/dL; 300 mmol/L) might be given in people with severe gout until crystals have dissolved and the gout is better.\*\***

If you have gout, your doctor will monitor your SUA levels. Try to reduce your SUA level to under 6 mg/dL (360 mmol/L). A lower target (under 5 mg/dL or 300 mmol/L) might be given if you have severe gout with tophi, chronic arthropathy or very frequent attacks. Over the long-term, your SUA should not be below 3 mg/dL.

- **Your urate-lowering therapy should be started at a low dose and then gradually increased until you reach your target.\*\***

Urate-lowering therapy should start at a low dose and gradually increase until you reach your target. If you have gout you will need to maintain your target SUA under 6 mg/dL (360 mmol/L) for the rest of your life.

- **In people with normal kidney function, allopurinol is the first choice for urate-lowering therapy. Your doctor will start you at a low dose and increase it if needed every 2–4 weeks until the SUA target is reached.\*\*\*\* If the target cannot be reached with allopurinol, your doctor will switch you to febuxostat\*\*\*\* or a uricosuric.\*\*\***

If you have normal kidney function, allopurinol should be the first drug and used at a low dose (100 mg/day). This can be increased by 100 mg every 2–4 weeks until you reach your target. If you cannot reach your target with allopurinol, or if you cannot take allopurinol for any reason, then you can try febuxostat or a uricosuric drug such as benzbromarone or probenecid.

- **In people with renal impairment, the maximum dose of allopurinol should be adjusted. If the target cannot be achieved at this dose, you should be switched to febuxostat or benzbromarone.\*\***

If you have kidney impairment, your kidneys may not be able to get rid of allopurinol from your bloodstream. This could put you at risk of toxic side effects. The maximum dose of allopurinol that you can take will depend on the rules in your country. If your target cannot be achieved at the maximum allowed dose, and if you have an estimated glomerular filtration rate of more than 30 mL/min, you should be switched to febuxostat or benzbromarone.

- **If you have crystal-proven gout with tophi that is very debilitating and affects your quality of life, and which does not respond to other treatments, then you may try pegloticase.\*\*\*\***

People with very severe gout that does not respond to other treatments may try pegloticase. Once all tophi have disappeared, switch back to a standard urate-lowering therapy.

- **If you are receiving loop or thiazide diuretics, the diuretic might be swapped to another drug.\*\***

If you are taking a diuretic for hypertension (high blood pressure), then your doctor might switch you to losartan or calcium channel blockers instead.

## Summary

Overall, the recommendations highlight the general management for people with gout. If you have gout these recommendations will give you some guidance on what to expect from your doctor and what treatments you may be offered.

Recommendations with just one or two stars are based mainly on expert opinion and not backed up by appropriate clinical studies. These may be as important as those with three or four stars.

If you have any questions or concerns about your disease or your medication, you should speak to a health professional involved in your care.