

Sample

2014

Measuring serum urate levels

Practical tips and information for managing patients with Gout

During an acute gout attack

1. The recommended first-line treatment in an acute attack is a nonsteroidal anti-inflammatory drug (NSAID) you should begin this as soon as possible. A recommended regimen is naproxen 500 mg, repeated after 8 – 12 hours, then twice daily on the following day, tapering the dose as the attack resolves.¹
2. A corticosteroid or colchicine are second-line options if NSAIDs are contraindicated/ not tolerated.^{2,3}
3. Drug treatment to prevent recurrent attacks of gout (e.g. allopurinol) should never be started during an acute attack; they are usually started with NSAID cover 1–2 weeks after complete resolution of the attack.² Allopurinol should be continued during an acute attack if the person is already established on this treatment. Please see BPJ issue 51 for further information on allopurinol dosing.

NB: Serum urate levels can be misleadingly low during an acute attack so this is not a good time to measure.

Everyday management

People with gout should be encouraged to: maintain an ideal weight, exercise moderately (but rest, elevate and cool joints during an attack), include low fat dairy, soy, vegetable sources of protein and foods high in vitamin C in their diet.¹

Gout in New Zealand

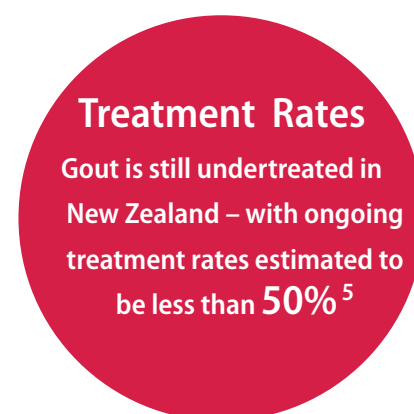
Gout is a common form of inflammatory arthritis that is caused by an inflammatory response to monosodium urate (MSU) crystals, which form in the presence of high urate concentrations.

Many factors contribute to hyperuricemia (high levels of serum urate), including: genetics, insulin resistance, hypertension, renal insufficiency, obesity, diet, use of diuretics and consumption of alcohol. The prevalence of gout in New Zealand is approximately 4% in adults ≥ 20 years, with higher rates in Māori (6%) and Pacific peoples (8%).^{1,5}

Table one below shows the estimated prevalence rates in New Zealand adults (those aged ≥ 20 years) in 2013.

Table 1. Prevalence rates of Gout in New Zealand adults, 2013

| Demographic factor | Estimated prevalence of gout in NZ population (%) ^{4,5} |
|-------------------------------|--|
| NZ population ≥ 20 years | 3.8 |
| European/Other | 3.2 |
| Māori | 6.0 |
| Pacific | 7.6 |
| Asian | 2.0 |



Urate lowering treatment is beneficial in people who experience recurrent attacks of gout, e.g. two or more attacks in one year, and people who have tophi, renal impairment or changes characteristic of gout on x-ray.⁵ Treating to achieve a target serum urate level of 0.36 mmol/L (or lower if clinically indicated) is associated with improved clinical outcomes for people with recurrent gout.¹

SAMPLE PRACTICE DATA

Measuring serum urate levels when initiating anti-gout therapy

NICE guidelines recommended that serum uric acid levels are monitored every three months while establishing new long term anti-gout treatments, then annually thereafter.³ For most patients aim for a serum uric acid level below <0.36 mmol/L.¹

Sample Medical Centre had **14** patients initiate a new anti-gout medicine in 2013, i.e. a dispensing of allopurinol, benzbromarone or probenecid and no long term anti-gout therapy in the preceding four months. N.B. Data not available for febuxostat, as this is not funded.

42.9%

of these patients had their serum uric acid levels checked within four months of starting this medicine.

1. Best Practice Journal, Issue 51. March 2013. Available at www.bpac.org.nz (Accessed Mar, 2014).
2. National Institute Health and Care Excellence. Available at <http://cks.nice.org.uk/gout> (Accessed Mar, 2014).
3. New Zealand Formulary. Available at www.nzf.org.nz (Accessed Mar, 2014).
4. Winnard et al. National prevalence of gout derived from administrative health data in Aotearoa New Zealand. *Rheumatology*. 2012; 51: 901-909.
5. Health Quality and Safety commission New Zealand. Atlas of Healthcare Variation. Available at www.hqsc.govt.nz/our-programmes/health-quality-evaluation/projects/atlas-of-healthcare-variation/ (Accessed Mar, 2014).