

Update: Gout in the Māori community

Contributors:

Olivia Gibbons – BHSc/BCom student, Rheumatology Department, Counties Manukau DHB

Dr Tony Merriman – Senior Research Fellow (Genetics), Department of Biochemistry, University of Otago

Key messages from “Treatment of Gout – Hit the target” BPJ 8

Gout is a major cause of arthritis in New Zealand with high rates of severe disease in Māori and Pacific peoples.

- Gout causes significant disability in Māori and Pacific men of working age.
- All patients with gout should have a cardiovascular risk assessment and intensive management of modifiable risk factors.
- Long term preventative therapy with allopurinol is critical for effective gout management.
- Diuretic therapy should be minimised in patients with gout
- Aim for a target serum uric acid level of <0.36 mmol/L

Evidence emerging of a genetic link

Māori men have the highest reported rates of gout in the world with the most recently published estimate being 10%.¹

A major factor in the higher incidence of gout in Māori is inherently higher levels of uric acid. Hyperuricaemia is likely to have both a genetic and environmental basis. Until recently very little information about the genetic basis of hyperuricaemia and gout in any population has been available. That has changed with the advent of genome-wide scanning.

A genetic variant within the GLUT9 gene which encodes for a glucose transporter has been associated with susceptibility to hyperuricaemia and gout. The GLUT9 variant has been studied in the New Zealand population as part of the “Genetics of gout in Aotearoa” study led by the University of Otago. The initial results indicate a higher level of the GLUT9 variant in Māori, which may partly explain why Māori have inherently higher uric acid levels.

Soft drinks and gout

Earlier this year consumption of sugar-sweetened, but not artificially-sweetened, soft drinks was identified as a risk factor for gout in a study of nearly 50,000 Canadian men. Whilst it is not yet known if sugary soft drinks are a risk factor for gout in Māori, advising gout patients to avoid sugary drinks may reduce the impact of their gout.^{1,2}

Māori perceptions of gout

In a qualitative study undertaken by Olivia Gibbons, interviews revealed that there is still lack of awareness of gout within the Māori community. Educating people that gout can start at a young age and that it is preventable and treatable is necessary at a community level. Often their knowledge of gout was based on jokes about over-indulgence, especially of alcohol and seafood, and of gout being an “old man’s disease”. It was very common for younger males in particular to think they had a sprain or injury and therefore not seek appropriate treatment.

Normalisation of gout occurs within the Māori community. Most interview participants had a family history of gout which frequently led to them thinking that it was normal and something they had to put up with. Usually, information about what gout is, what causes it and how to treat and prevent it were not discussed. It is important that clinicians and individuals do not accept that gout is inevitable. The message needs to be:

- Gout should not be ignored
- It is treatable
- It is preventable

Establishing relationships is important

One of the most consistent messages in interviews with Māori and their care providers was how important it is to establish a relationship. Patients interviewed during the study were more likely to demonstrate a stronger commitment to their health if they had a doctor whom they respected, trusted and with whom they had a good

relationship. This relationship was strengthened when doctors took a genuine interest in who their patients were and where they were from. Engagement with whānau was also important if lifestyle changes and the use of preventative medication were to be successful. As one clinician simply put it “care happens outside a consultation”.

Among participants in the study the key factors for effective treatment of gout were:

- The use of visual cues (e.g. graphed results showing uric acid results taken at regular time intervals)
- Receiving clear written instructions on the correct use of allopurinol
- Taking preventative medications on a regular and ongoing basis

A main theme to emerge from the study was that dietary advice was more likely to be accepted, if patients were told to moderate purine-rich foods in their diet, instead of being told to cut them out completely. Positive messages were useful in promoting adherence to preventative medication. If patients were told that they may be able to enjoy seafood and beer again in three to six months, once the allopurinol had started to work, they were more likely to continue their medication.

Three quarters of study participants also presented with hypertension, diabetes or obesity in addition to gout. These patients visited their GP on a regular basis with return visits presenting an ideal opportunity in which to screen for and treat other conditions.

Generally, if gout is well treated, then many of the patient’s other health problems are also well treated.

Further reading:

“Treatment of gout – Hit the target”. Best Practice Journal. Issue 8, September 2007. Available from:

<http://www.bpac.org.nz> keyword “Gout”

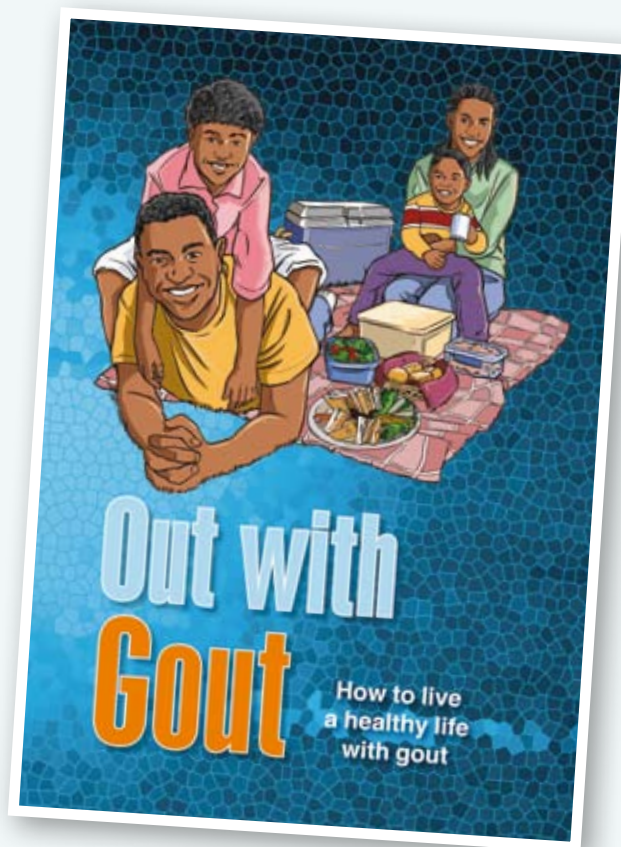
PHARMAC has recently updated their patient information brochure on gout – “Out with Gout”. This is available in English, Māori, Samoan, Tongan and Niuean language versions and can be accessed online at:

<http://www.pharmac.govt.nz/patients/campaigns#gout>

Alternatively, free hard copies can be ordered by phoning 0800 11 22 37 or emailing: resources@pharmac.govt.nz

Acknowledgements

We are grateful to Dr Peter Gow, Dr Nicola Dalbeth, Caran Barratt-Boyes and Dr Doone Winnard for their review of this article.



Olivia Gibbons (Te Arawa, Tuwharetoa) is a Health Sciences student in Auckland who is undertaking a qualitative study on gout. Her work includes interviews with Māori who have gout and their care providers. This study within South Auckland builds on earlier work undertaken by Dr Karen Lindsay and aims to identify key issues specific to Māori. Olivia is currently writing up her research but has

shared some information highlighting the main themes that emerged.

Dr Tony Merriman and his University of Otago research team are currently researching the genetics of gout with some interesting results. See BPJ 8 for more information on Tony’s work.

1. Klemp P, Stansfield SA, Castle B, Robertson MC. Gout is on the increase in New Zealand. *Ann Rheum Dis* 1997; 56(1):22-6.
2. Gao X, Qi I, Qiao N et al. Intake of added sugar and sugar-sweetened drink and serum uric acid concentration in US men and women. *Hypertension* 2007;50(2):306-12

3. Choi HK, Curhan G. Soft drinks, fructose consumption, and the risk of gout in men: prospective cohort study. *BMJ* 2008;336:309-312.