

Acute heart drugs should be reconsidered for Maori and Pacific Islanders

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Researchers at the University of Otago, New Zealand, say standard medication used for acute heart disease should be reconsidered for some Maori and Pacific Island patients because of drug resistance caused by high rates of Group A streptococcal infection, the same infection which leads to rheumatic fever.

The new study recently published in the prestigious *British Medical Journal Clinical Pathology* confirms research from [Australia](#) that [indigenous people](#) with [acute coronary syndrome](#) are more likely to have resistance to the standard heart drug streptokinase (SK).

“Many people living in communities with high endemic levels of Group A strep, have been previously infected by Group A streptococcus bacteria and will have antibodies to streptokinase. There’s therefore a real risk that when they have a heart attack and are given this drug it will not work for them,” explains Dr. Garry Nixon from the Department of General Practice and Rural Health in Dunedin.

The study involved 180 patients from the Hokianga, Thames and Central Otago admitted to hospital with a suspected heart attack.

“It’s clear from our results that patients in the Hokianga, the rural community with the highest proportion of Maori and lowest socio-economic status, have resistance to streptokinase medication which is 2.8 times higher than in Central Otago, with the lowest proportion of Maori and higher socio-economic status.”

Dr. Nixon says these very significant differences mean that newer fibrinolytic heart drugs should be used for patients with heart attacks in predominantly Maori rural communities. However, he says these fibrinolytic agents which are not affected by the immune system, are more expensive than SK drugs, affecting their uptake.

This new research provides strong support for the recent moves away from SK as a standard treatment for heart attacks in rural New Zealand, particularly in predominantly Maori communities.

“Perhaps most importantly this is a timely reminder of the need to exercise caution when translating the results of drug trials carried out on Caucasians to other ethnic groups such and Maori and Pacific Islanders. This is particularly important when a mechanism of [drug resistance](#), such as the one outlined in this study, has been identified.”

Dr. Nixon also points out that similar major health issues remain in the Pacific Islands where there are very high rates of Group A [streptococcal infection](#), increasing rates of ischaemic [heart disease](#) and a continued reliance on streptokinase as a result of limited health budgets.

People living in Samoa, the Cook Islands, French Polynesia and Tonga have some of the highest rates of rheumatic fever in the world. The study also says that Pacific Islanders living in NZ have an incidence of [rheumatic fever](#) which is even higher than Maori (1.5-2 times).

Provided by University of Otago

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