

TESTOSTERONE PRODUCING HORMONE LINKED TO HEART ATTACK IN OLDER MEN

Researchers have discovered that older men with high levels of a testosterone-producing hormone are twice as likely to experience a heart attack.

According to a study by the Western Australian Centre for Health and Ageing, published in this month's issue of the European Journal of Endocrinology, men with high levels of luteinising hormone (LH) are at greater risk of having a heart attack.

Luteinising hormone is produced by the pituitary gland and it controls the release of testosterone in men.

“This is the first time that LH levels have been identified as a marker of heart attack risk in older men. We found that men with lower testosterone and higher LH levels would be twice as likely to die, or be admitted to hospital because of heart disease,” says lead author Zoë Hyde, a PhD student from The University of Western Australia. Ms Hyde is based at WACHA, whose partners are UWA and the Western Australian Institute for Medical Research.

“This is an important finding because it suggests that low testosterone may be a risk factor for heart disease. We now need to conduct further studies to confirm that this is indeed the case,” Ms Hyde said.

“It would be premature to start treating coronary heart disease patients with testosterone replacement therapy. We don't yet fully understand the mechanism of this association, so we caution men not to jump the gun. We know that illness can lower testosterone levels, so we have to rule this out as an explanation.”

Coronary heart disease kills more Australians than any other single disease. Men are more affected by the disease than women. Older people are more susceptible to coronary heart disease.*

This research was funded by grants received from National Health and Medical Research Council, Bupa Health Foundation, a Clinical Investigator Award from the Sylvia and Charles Viertel Charitable Foundation and the Fremantle Hospital Medical Research Foundation.

This research is part of the Health In Men Study (HIMS) that has been following a group of men living in Perth, Western Australia since 1996. HIMS is the largest study of ageing men in Australia. The men were originally recruited for a trial of screening for abdominal aortic aneurysms.

Participants were randomly selected from the electoral roll (enrolment to vote being compulsory). Between 1996 and 1999, 12,203 of the men aged 65 years and older attended a clinic and completed a questionnaire, providing a range of demographic and risk factor data. Approximately 5 years later, 10,940 surviving men were invited to a follow-up study. Between 2001 and 2004, 5,585 men completed a second questionnaire, and 4,263 of these attended a clinic. Early morning blood samples were obtained from 4,249 clinic attendees.

*Australian Institute of Health and Welfare

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The Western Australian Centre for Health & Ageing (WACHA) is dedicated to researching issues associated with ageing in order to extend healthy life. To date the Centre has achieved notable success in cognitive impairment, mental health and Indigenous ageing. WACHA is one of Australia's most productive research centres.

WACHA is partnered with the WA Institute for Medical Research and the University of Western Australia and is a hospital based research centre.

MEDIA REFERENCE:

Christianne White WA Centre for Health and Ageing

(+61 8) 9224 2993



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