Statin benefit 'not affected' by low inflammation

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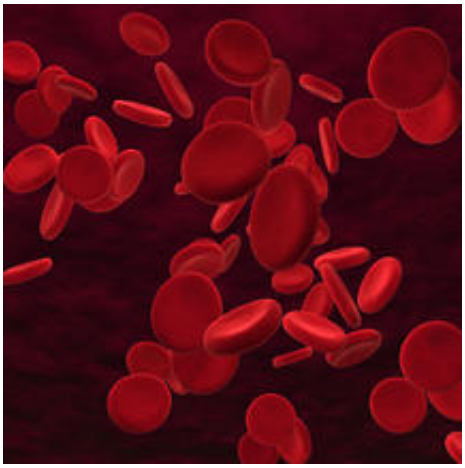

Low levels of inflammation-related proteins in the blood don't affect the benefits of statins

(PhysOrg.com) -- A new Oxford-led study shows that statins are at least as effective in reducing the risk of heart attack or stroke in patients with low levels of inflammation as they are in other patients.

It has been suggested that a person's level of systemic inflammation, as measured by levels of C-reactive protein (CRP) in the blood, could modify their response to statin therapy.

'We tested this in the largest statin trial, the Heart Protection Study, in which 20,000 people were randomised either to 40mg of simvastatin

daily or a placebo, and followed for an average of five years,' said Dr Jonathan Emberson of Oxford University's Clinical Trial Service Unit, who led the analysis reported in an upcoming issue of *The Lancet.*

The patients, from 69 UK hospitals, were all aged 40 to 80 years-old and at high risk of vascular events such as stroke or heart attack.

'We found that CRP concentration had no impact on the beneficial effect of simvastatin. Those allocated simvastatin experienced a significant reduction in the risk of a heart attack, stroke or revascularisation procedure of about one quarter, irrespective of their baseline CRP,' said Dr Emberson.

'We also found that simvastatin reduced the risk of such major vascular events by about one quarter even among people whose CRP and LDL cholesterol was already low before taking a statin,' he added.

Professor Jane Armitage, clinical coordinator of the Heart Protection Study and co-author of the paper, said: 'These findings suggest that CRP doesn't necessarily need to be measured before prescribing a statin, rather the decision of whether or not to treat with a statin should be based on an assessment of a patient's overall absolute risk.'

Provided by Oxford University