

New risk factor for prostate cancer

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(PhysOrg.com) -- The greater the levels of a protein called Insulin-like Growth Factor-1 (IGF-1), the greater the risk of prostate cancer, an Oxford University-led study has found. The results are published in the journal *Annals of Internal Medicine*.

IGF-1 levels are influenced by lifestyle factors such as diet, so the study could help in tailoring the advice given to men at high risk of developing prostate cancer.

An international team of researchers, funded by Cancer Research UK, analysed data from 12 previous independent studies on the relationship between blood concentrations of suspected prostate cancer risk factors, and subsequent onset of the disease.

Previously, some but not all studies had suggested a link between IGF-1 levels and increased risk of developing the disease.

'There is a need to identify risk factors for prostate cancer, especially those which can be targeted by therapy and/or lifestyle changes,' says lead author Dr Andrew Roddam of the Cancer Epidemiology Unit at the University of Oxford. 'Now we know this factor is associated with the disease we can start to examine how diet and lifestyle factors can affect its levels and whether changes could reduce a man's risk.'

Prostate cancer is the most common cancer in men in the UK, accounting for a quarter of all new cases of cancer diagnosed in men. More than 34,000 men in the UK are diagnosed with prostate cancer



each year. The disease causes around 10,000 deaths a year and is the second most common cause of cancer death in UK men after lung cancer.

'It is important to point out that there is no evidence to suggest that measurement of IGF-1 levels could be used to develop new prostate screening methods,' adds Dr Roddam. 'Other studies have shown that existing methods of detecting prostate cancer are not improved by also measuring IGF levels.'

The scientists looked at the data collected from blood samples of 3,700 men with prostate cancer and 5,200 men without the disease. The research found that men with higher levels of IGF-1 were more likely to go on to develop prostate cancer than those with lower levels of the protein.

'While there are established risk factors associated with prostate cancer of age, family and ethnicity, there are no clear data on modifiable risk factors,' says Dr Lesley Walker, Cancer Research UK's director of cancer information.

'Research like this is vital to further the work on prevention and treatment of the disease. The findings are also likely to be of interest to scientists who are looking at developing drugs to prevent prostate cancer.'

Due to the nature of the data collected for this collaboration, it is not possible to calculate an individual risk of prostate cancer. However, the results are important as they help in the understanding of the causes of prostate cancer.

Provided by Oxford University



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