Genetics, age and ethnicity are risk factors in PCa, say experts

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"Are there genetic risk factors for PCa? Yes, and BRCA2 and HOXB13 are useful for predicting high-risk disease," said Jack Cuzick (GB) president of the International Society for Cancer Prevention (ISCaP), referring to the two genes implicated in high-risk prostate disease. Cuzick gave a report on the Consensus Statement for Prostate Cancer Prevention at the closing plenary session of the 28 Annual EAU Congress held in Milan, Italy from March 15 to 19.

"The goal should be to integrate with other protein markers in order to develop risk-adapted screening algorithms," he explained. Cuzick's report will be further refined to create a consensus statement for prostate cancer prevention that will be released in the coming months by the International Conference on Prostate Cancer Prevention.

According to Cuzick, genetic factors may also provide a crucial role in determining types of cancer which require different types of treatments. Not all prostate cancer types are aggressive, and identifying lethal prostate disease from indolent ones is important to avoid over diagnosis and treatment.

Co-sponsored by ISCaP, the EAU, National Institutes of Health (USA), Cancer Research UK, Prostate Cancer UK and the AICR, the group, composed of 28 panel members, met during the EAU Congress in Milan. The topics they covered included the biology and history of PCa, risk-reduction biomarkers, issues in early detection and PSA screening, prognosis and management of low-grade disease, review of

chemoprevention trials and new chemoprevention agents.

"Other risk factors are age, family history, exposure to radiation , and the area of ancestral geographic origin and ethnicity (as shown, for example, in the higher incidence in Sweden compared to Italy)," Cuzick said.

However, the evidence for obesity, smoking, use of statins, diabetes and UTIs, among others, is less convincing, making them "uncertain risks," the panel members said. They added that with the evidence for lack of exercise, obesity and poor diet still unconfirmed, these factors may not be a priority for research "due to complications in evaluation."

Vitamin E and multi-vitamin supplements also took a hit during the meeting, "Vitamin E supplement is detrimental (particularly when taken at the threshold dosage of 400mg)," Cuzick said, and added that there is no proven effect in selenium, a vitamin popularly marketed as reducing the risks for prostate disease.

On the other hand, further research is needed on soya and phyto-oestrogens, while the research results for vitamin D and sunlight "…are not promising although definitive research is ongoing," Cuzick said.

Results for lycopene, which was favorably assessed some years ago, now proved to be less promising. Lycopene is found in red-coloured fruits and vegetables such as tomatoes, watermelons and strawberries.

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