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Liver cancer linked to male sex hormones: HK study

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Hong Kong researchers have found that men are more likely to develop liver cancer due to a type of gene which is linked to male sex hormones.

Researchers at the Chinese University of Hong Kong said a study conducted since 2008 found more than 70 percent of patients with liver cancer produced high levels of a gene called cell cycle-related kinase (CCRK).

The study said the gene, one out of more than 17,000 in the human body, is directly controlled and activated by the receptor protein of the male sex hormone, or androgen.

"This study has a potential clinical impact as it depicts the correlation between androgen receptor and liver cancer development," university vice chancellor Joseph Sung and research team leader Mok Hing-yiu said.

"It also provides an explanation on why men have a higher risk of liver cancer than women," they added in a joint statement posted on the university's website.

Researchers examined risk factors such as smoking, alcohol consumption and occupation to explain the gender disparity but none could fully explain the difference.

The study has used mouse models and found either lowering the level or

blocking the androgen-receptor-CCRK pathway could significantly reduce the tumor growth rate.

Liver cancer is the third deadliest type of cancer in the world after lung and colon cancer and there is currently no effective treatment.

Men are three times more likely to develop liver cancer than women in Hong Kong, said the study, whereas in certain areas in China and Japan men are seven times more likely to develop it.

Around 40 percent of liver cancer is diagnosed at an advanced stage, with that proportion reaching 80 percent in Asia and sub-Saharan Africa.

In the United States more than 19,000 people are diagnosed annually with liver cancer, and some 17,000 die each year of the disease.

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