

Genes behind increasingly common form of cancer identified

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Researchers at the University of Gothenburg, Sweden, have identified two genes believed to play a role in the development of endometrial cancer. These results may eventually lead to better diagnosis and treatment of this increasingly common form of cancer.

Endometrial [cancer](#), also known as uterine or womb cancer, is the most common [malignant cancer](#) of the female reproductive system in the Western World. The number of cases being detected has increased markedly, as has mortality. Around 1 300 women in Sweden are diagnosed with endometrial cancer each year, equivalent to 6 per cent of all cases of cancer in women.

Cancer is caused by genetic changes - mutations - in cells' DNA disrupting the normal regulation of growth. In her study, researcher Carola Hedberg from the Department of Cell and Molecular Biology at the University of Gothenburg has identified the genes involved in the development of endometrial cancer.

Her research focuses on [genetic analyses](#) of rats, and more specifically their chromosome 10. This chromosome is interesting because it is prone to deletion - the loss of [genetic material](#) - in connection with tumour formation. Hedberg has been able to show that one or more growth-suppressing genes are normally to be found in the middle of the chromosome where this loss of genetic material is greatest. The deletion of these genes eliminates their growth-regulating functions, and this is believed to contribute to the development of endometrial cancer.

Information about specific genetic changes in rats as a model can be transposed to the equivalent form of cancer in humans. A knowledge of the genes involved in a particular form of cancer may therefore contribute to cancer care in the longer term through better diagnostic tools and new forms of treatment and preventive care. In more in-depth studies, Hedberg and her colleagues have identified two particular [genes](#), Skip and Myo1c, which are believed to play a key role in the development of endometrial cancer.

Source: University of Gothenburg ([news](#) : [web](#))

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