

PRESS RELEASE

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DIFFERENT TYPES OF OVARIAN CANCER HAVE DIFFERENT CAUSES

The more children a woman has or whether a woman has had her fallopian tubes cut lowers the risk of different types of ovarian cancer to different levels, according to new research* presented at the 2015 National Cancer Research Institute (NCRI) Cancer Conference.

Data was collected from more than 8000 women with ovarian cancer as part of the UK Million Women Study.

Researchers then examined the risk of the four most common types of ovarian cancer – serous, mucinous, endometrioid and clear cell tumours – in women with different childbearing patterns.

For ovarian cancer overall, women with one child had about a 20 per cent reduction in risk compared to women without children, and about a 40 per cent reduction of endometrioid and clear cell tumours.

Each additional birth then offered an estimated eight per cent reduction in the overall risk of ovarian cancer.

Researchers also compared risk between those women who had surgery to cut their fallopian tubes with those who had not. This procedure – known as tubal ligation – is a surgical procedure for permanent contraception.

Women with a tubal ligation had a 20 per cent lower overall risk of ovarian cancer. The risk was about 20 per cent lower for high-grade serous tumours – the most common type of ovarian cancer – and about halved for endometrioid and clear cell tumours.

Dr Kezia Gaitskell, Cancer Research UK funded lead researcher and pathologist based at the Cancer Epidemiology Unit, University of Oxford, said: “In the last few years, our understanding of ovarian cancer has been revolutionised by research showing that many cases may not in fact come from the ovaries. For example, many high-grade serous tumours – the most common type – seem to start in the fallopian tubes, while some endometrioid and clear cell tumours may develop from endometriosis.

“We think that this risk is likely to be related to infertility, as there are some conditions – such as endometriosis – that may make it harder for a woman to become pregnant, and which may also increase her risk of these specific types of ovarian cancer.

“It could be that tubal ligation acts as a barrier to help prevent the abnormal cells that might cause these tumours passing through the fallopian tubes to the ovaries. Our results are really interesting, because they show that the risk factors for the tumour types such as childbirth and fertility are different as well.”

Professor Charlie Swanton, Chair of the 2015 NCRI Cancer Conference, said: “We’ve known for some time that the number of children a woman has, and her use of contraception, can influence her risk of ovarian cancer, so this research provides important further detail about different types of the disease.

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“Ovarian cancer – like many other cancers – is not one disease, but different diseases that are grouped together because of where they start. It’s important to know what affects the risk of different types of ovarian cancer and what factors impact this. We now need to understand the mechanisms behind these findings to develop some way to extend this lower risk to all women, regardless of how many children they have.”

ENDS

For media enquiries contact the NCRI press office on 0151 707 4642/43/44/45/46 or, out of hours, on 07050 264 590

Notes to Editors:

*<http://abstracts.ncri.org.uk/abstract/childbearing-patterns-and-ovarian-cancer-in-the-million-women-study-variation-by-histological-subtype/>

Around 7000 women are diagnosed with ovarian cancer every year in the UK - Based on the number of cases of ovarian cancer (ICD10 C56-C57.4) diagnosed in the UK in 2012

In the UK, the lifetime risk of developing ovarian cancer is 1 in 51 for women. Lifetime risk of being diagnosed with ovarian cancer (ICD10 C56-C57). Calculated by Cancer Research UK Stats Team using the AMP method. Based on 2010 data.

Ovarian cancers are classified depending on the type of cells and where they start growing from. Epithelial ovarian cancer is the most common form of the disease, responsible for nine out of ten cases, and there are various sub-types of epithelial ovarian cancers – including serous, endometrioid, clear cell and mucinous tumours.

These results come from the Million Women Study, which is funded by Cancer Research UK and the Medical Research Council.

Results of the work on tubal ligation are in press at the International Journal of Cancer:

<http://onlinelibrary.wiley.com/doi/10.1002/ijc.29856/abstract>

About the NCRI

The National Cancer Research Institute (NCRI) was established in 2001. It is a UK-wide partnership between cancer research funders which promotes collaboration in the field. Its member organisations work together to maximise the value and benefits of cancer research for patients and the public.

NCRI members are: Biotechnology and Biological Sciences Research Council; Bloodwise (formerly Leukaemia & Lymphoma Research); Breast Cancer Now; Cancer Research UK; Children with Cancer UK, Department of Health; Economic and Social Research Council; Macmillan Cancer Support; Marie Curie; Medical Research Council; Northern Ireland Health and Social Care Public Health Agency (Research & Development Department); Prostate Cancer UK; Roy Castle Lung Cancer Foundation; Scottish Government Health Directorates (Chief Scientist Office); Tenovus Cancer Care; The Wellcome Trust; Welsh Assembly Government (Health and Care Research Wales); and Worldwide Cancer Research (formerly AICR).

For more information visit www.ncri.org.uk

About the NCRI Cancer Conference

The NCRI Cancer Conference is the UK’s major forum for showcasing the best British and international cancer research.

- The Conference offers unique opportunities for networking and sharing knowledge by bringing together world-leading experts from all cancer research disciplines.
- The NCRI Cancer Conference is taking place from 1–4 November 2015 at the BT Convention Centre in Liverpool.
- For more information visit conference.ncri.org.uk



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