

Risk factors and prevention of Womb (Endometrial) Cancer

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Womb cancer, often called uterine or endometrial cancer, is the 4th most common cancer in women in the UK. Around 9300 women in the UK are diagnosed with womb cancer every year, and the incidence rates have more than doubled over the last 30 years. Around a third of womb cancer cases are considered to be preventable.

Oestrogen is one of the female hormones made by the ovaries in premenopausal women and production of oestrogen stops after women go through the menopause. It is thought that an increased amount of oestrogen over time encourages the womb lining to grow, which increases the risk of womb cancer. There are many known risk and protective factors for womb cancer which will be discussed in this article, many of which cause changes in the amount of oestrogen. It is important that women are aware of these risk factors so that modifiable risks can be reduced and so that women with non-modifiable risk factors are aware to be vigilant about any symptoms.

Age

As with most cancers, the risk of womb cancer increases with age. It most commonly occurs in postmenopausal women in their 60s. Around 1% of cases are in women under the age of 40. Women who are very obese or who have Lynch syndrome (see below) are more likely to develop womb cancer at a younger age.

Obesity

Obesity is the strongest risk factor for womb cancer and a woman's risk of womb cancer increases with increasing Body Mass Index (BMI). Women who are obese are 3 times more likely to develop womb cancer than women with a healthy weight. Fat cells help to produce oestrogen, so in general, the more fat cells you have, the more oestrogen you produce.

Family history

Having a family history of womb cancer is associated with a 30% increased risk. The most common inherited cause is Lynch syndrome, a hereditary genetic mutation that predisposes individuals to colorectal, endometrial and ovarian cancers (for more information on Lynch syndrome and risk reduction, see the article by Dr Rosenthal entitled "What's new in cancer prevention surgery").

Reproductive Risks

Women who have never had children have a higher risk of womb cancer than women who have had children, and a woman's risk decreases the more children she has had. Women who start their periods early, or go through a late menopause are also more likely to develop womb cancer, as are women with polycystic ovary syndrome (PCOS). Conversely, the use of

some hormonal medications, such as the combined oral contraceptive pill, is thought to lower a woman's risk of womb cancer.

Previous history of cancer

Women with a previous history of cancer, particularly breast or ovarian cancer, have a higher risk of womb cancer. This may be due to the presence of similar risk factors for these different cancers, or due to genetic factors. The use of Tamoxifen, one of the medical treatments for breast cancer, is also associated with womb cancer.

Other medical conditions

Other medical conditions, such as type II diabetes and hypertension (high blood pressure), are risk factors for womb cancer development. However, metformin, one of the treatments for type II diabetes, is thought to be a protective factor, and may reduce a woman's risk.

Why is the incidence increasing?

There are several possible reasons why the incidence rate is increasing. Female life expectancy in the UK is increasing, therefore women have more time in which to develop cancer. Additionally, fewer hysterectomies are now being performed on women for benign gynaecological conditions. A hysterectomy removes the womb, therefore preventing womb cancer from developing. Furthermore, rates of obesity, type II diabetes and hypertension are all increasing and women are generally having fewer children.

It is vital that women are aware of the potential symptoms. These include bleeding after the menopause (postmenopausal bleeding) or very irregular or heavy menstrual bleeding. Most women with these symptoms will not have womb cancer but they still require investigation. When diagnosed early, womb cancer is usually treatable with surgery, and the majority of cases carry a good prognosis.

In the future, it may be that women at high risk of womb cancer are identified in primary care and offered lifestyle-modifying advice, such as weight loss and exercise, or potentially screening. However, there is currently no effective screening tool and therefore women should be made aware of the risks and potential symptoms so that they can consider lifestyle changes and can act promptly if any symptoms develop.