



Medicine for Managers

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Cervical Cancer

Cervical cancer develops in the cells of the part of the uterus called the cervix, which is located where the body of the organ connects to the vagina. It is a disease which is most common in women aged 25 to 45 and who are sexually active. The risk of the disease can be reduced by having regular screening tests and by having a vaccination which provides protection.

The uterus is a pear-shaped hollow muscular organ located within the female pelvis. It is situated in the midline behind the bladder and in front of the rectum. It consists of a body and a cervix.

The body is where a fertilised ovum implants and a pregnancy develops.

The cervix, (its full name is the **cervix uteri**, Latin for the neck of the womb) which is located at the lower part of the uterus, links the uterus to the vagina into which it bulges.

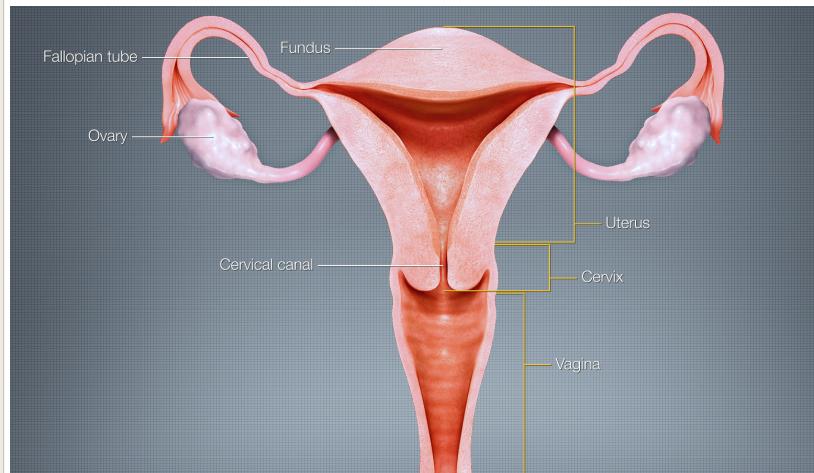
Through its central canal, sperm passes into the uterus on its journey to fertilise an egg and it has the capacity to dilate enormously to permit egress of a full-term infant.

The predominant cause of cervical cancer is the **human papillomavirus (HPV)**. It is a common virus which is transmitted through any type of sexual contact.

There are a large number of types of the virus, most of which do not cause any problems, but there are some strains of the virus which can lead to the development of cancer cells in a small percentage of people.

There are two strains, HPV-16 and HPV-18 which cause most cases of cervical cancer. Indeed 80% of people contact the infection at some time in their lives.

Most people infected with the virus never develop cancer.



Other factors must therefore also be involved.

It is an insidious disease which initially develops with no symptoms. However, as it progresses, signs and symptoms do appear which include:

- Vaginal bleeding after intercourse, or between periods or after the menopause
- Watery bloody vaginal discharge with a strong odour
- Pain during intercourse

If any of these symptoms develop, it is important to see a doctor quickly and if there are any suspicions that there might be cervical cancer, the patient will be referred to a specialist within two weeks.

There are two principal types of cervical cancer and the identification of the type determines the treatment and the prognosis.

- **Squamous cell carcinoma.** The most common, it develops in the cells lining the outer part of the cervix
- **Adenocarcinoma** develops in the glandular cells lining the cervical canal

Occasionally both types are involved in tumour development.

There are a number of factors that can increase the risk of the disease:

- Multiple sexual partners
- Early sexual activity
- Other sexually transmitted diseases such as chlamydia, gonorrhoea, syphilis or HIV increases the risk
- A weakened immune system
- Smoking

However, there are a number of actions that can be taken to reduce the risk of the disease.

Attend screening when invited.

Women aged 25-49 are invited every three years and women 50-64 are invited every five years. Invitations are arranged through the GP surgery. It is important to attend even if vaccinated against HPV because the vaccine, although effective, does not guarantee protection.

Frequency of invitation may be influenced by having had any sort of abnormal screening result.

Vaccination protects against several strains of HPV, including the two which cause the disease most commonly.

In the UK it has been available for girls aged 12-13 and they receive two doses six months apart. It is available up to age 18 and anyone over age 15 will need three doses. The vaccine does **not** guarantee resistance to the disease although it is effective at reducing the incidence.

Safer Sex.

Use of a condom reduces the risk of transmitting HPV, together with reducing the number of partners.

However, women who have had only one partner can develop the disease and the virus is transmitted, not only through penetrative sex, but by skin-to-skin sexual contact and other sexual practices.

Smoking increases the chances of acquiring cervical cancer. Those who smoke appear less able to fight off the virus.

Treatment of Cervical Cancer.

Treatment continues to improve but is more successful and less invasive if diagnosed early. Sometimes it is possible to remove the cervix, leaving the uterus in place, but it is often necessary to remove the whole uterus (***hysterectomy***).

It is also treated by the use of radiotherapy or by chemotherapy, either singly or in combination with surgery and each other.

The treatment brings with it a number of possible consequences, including:

- Early menopause, with flushes, vaginal dryness, sweats and urinary leakage, which can be treated with HRT
- Vaginal dryness, particularly after radiotherapy, resulting in dyspareunia (painful intercourse). It can be eased by the use of hormone cream
- Mood swings and depression, which may need treatment in primary care or in specialist secondary care units

There are over 3,000 new cases of cervical cancer in the UK annually. It is the fourth most common cancer in women accounting for 2% of new cases. The disease is responsible for over quarter of a million deaths annually worldwide.

However, with modern treatments, the outlook continues to improve.

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