Human Papillomavirus (HPV)

Who is the leaflet for?
This leaflet gives you information about human papillomavirus (HPV) and how it may affect you.

What are human papillomaviruses?
Human papillomaviruses (HPVs) are a family of viruses that commonly infect skin and other body linings. There are at least a couple of hundred types of HPV. Although they belong to the same family they all behave differently. The most common types cause verrucas on the hands and feet, while other types cause genital warts. A third, different group, may cause pre-cancer and cancer of the cervix and other sites (see below). The HPV types causing genital warts are not the same as the types of HPV that are associated with cancer of the cervix.

Human papillomaviruses and your cervix
There are about 40 types of HPV known to infect the cervix. Although they can be acquired early on in life, they are most commonly transferred by skin to skin contact, usually during sexual contact. HPV infection of the cervix is very common and usually temporary (transient). The vast majority of HPV infections are self-limiting and the body’s immune system will usually clear the virus within two years. Therefore, for the majority of people HPV does not cause any problems. We also know that HPV can sometimes persist for a number of years without causing harm.

‘High Risk’ (HR) and ‘Low Risk’ (LR) HPV
The HPV types that affect your cervix are described as ‘high risk’ and ‘low risk’. ‘Low risk’ types can cause an abnormal cervical sample but are not thought to be connected with cervical cancer. ‘High risk’ types are known to be a necessary cause of cervical cancer. However, most women who have ‘high risk’ HPV will never get cancer of the cervix. Cervical cancer is in fact a rare complication of HPV infection.

Co-factors
It is thought that HPV does not cause cancer on its own but needs help from something else – a co-factor. For example, it has been shown that women whose immune system is not working properly, or women who are on immunosuppressant drugs following, for example, transplantation, have greater problems clearing HPV infection and are at higher risk of developing pre-cancer and cancer of the cervix.
Smoking may also affect the immune system and smokers are twice as likely to get cervical cancer as non-smokers. However, if you stop smoking things can improve.

**If I have HPV – will I get cervical cancer?**

Very unlikely; for a start, many women catch HPV, but their own immune system deals with it - just like when you can catch a cold your body clears the virus. Even if the infection persists you are unlikely to develop cancer, but the risk is greater.

Persistent infection with HPV can cause abnormal cell changes in the cervix. These precede cervical cancer, usually by many years. Regular cervical screening allows the detection of these changes so that you can be treated well before a cancer could develop. However, cervical screening result just showing changes of HPV infection does not mean you need any treatment, unless abnormal cells develop.

**How do I know if I have HPV?**

Cervical screening samples are tested for ‘High Risk’ (HR) HPV only. If HR-HPV is detected, the sample will be checked for any abnormal cells. If abnormal cells are present in the sample, the woman will be invited to attend for colposcopy for a closer examination of the cervix (colposcopy examination information can be found on the NHSCSP website) The HR-HPV test is important as it can help to identify which women may need treatment. People with no evidence of HR-HPV infection are at particularly low risk of problems. However, HPV infection is common with mild changes on cervical samples.

The test will only tell if you had HR-HPV at the moment it was taken. It does not tell you how long you have had the infection nor whether it is likely to cause the cervical abnormality to progress further. The colposcopy assessment will help the colposcopy team decide how best to look after you in the future.

**What can I do to clear HPV or prevent catching it?**

HPV is an extremely common virus and most people will encounter it during their lifetime. There is currently no medical treatment (such as tablet or cream) for HPV infections. Vaccines are available that reduce the chance of getting HPV infection but will not help those who already have the virus. Vaccines to remove HPV infection that is already present are being developed.

If you have abnormal cells on your cervix detected by your cervical sample, or during colposcopy, you can be treated (depending on the severity of your sample result). This is quite straightforward and involves removing a small piece of tissue from your cervix under local anaesthetic.
What is HPV test of cure?

If you have had treatment for cervical abnormalities (Cervical Intraepithelial Neoplasia – CIN) you will be screened again six months afterwards. If the cervical screening sample shows that HR-HPV has not been detected you can be reassured and have a repeat screening test in three years’ time.

If your screening test result shows that you have HR-HPV you will be invited back to the colposcopy clinic again. At this visit you may be offered further treatment.

If no abnormality is seen then you will be discharged for regular screening every three years. This is very reassuring as you are at low risk of developing cervical abnormalities.

Things you could do

Most people will encounter HPV. As for many conditions it is important to maintain your general health and to avoid things that might reduce your immunity, for example smoking. Stopping smoking may help the body to reverse abnormalities caused by HPV infection.

Key facts

- There are over 40 types of HPV that can infect the skin of the genital area.
- One in 20 women will have HPV at any particular time, but virtually all sexually active women will be infected with genital HPVs at some time in their lives.
- Some types of HPV (‘low risk’) can cause benign conditions, like genital warts.
- Some types of HPV (‘high risk’) cause pre-cancer and cancer of the cervix.
- Most HPV infections will clear spontaneously. This is even true for women infected with ‘high risk’ types of HPV.
- Cervical cancer is a very rare complication of HPV infection.
- Regular cervical samples with colposcopy/ treatment when required have proved effective in reducing the risk of cervical cancer.

Contacts/ further information

Colposcopy nurse practitioners
Box 224
Addenbrooke’s Hospital
Cambridge University Hospitals NHS foundation Trust, Hills Road,
Cambridge CB2 2QQ
01223 216603
Monday to Friday 08:00 – 16:00
References/sources of evidence

NHS Cervical Screening Programme

British Society for Colposcopy and Cervical Pathology – information for women
- www.bsccp.org.uk

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