AIFA – Agenzia Italiana del Farmaco

L'OMS aggiorna per il 2016 le informazioni su HPV e tumore cervicale

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L'Organizzazione Mondiale della Sanità (OMS) ha di recente aggiornato la fact sheet sui papillomavirus umani (HPV), estremamente comuni in tutto il mondo. Per dare un'idea dei numeri di contesto rispetto al problema, nel panorama mondiale, secondo i dati presenti sul sito dell'OMS il cancro cervicale è il quarto tumore più frequente nelle donne con una stima di 530.000 nuovi casi e nel 2012 ha rappresentato il 7,5% di tutte le morti per cancro femminile. Più di 270.000 decessi si registrano ogni anno per cancro del collo dell'utero, oltre 1'85% dei quali nelle regioni meno sviluppate.

Nello specifico, il quadro globale delle infezioni da papilloma virus umano viene fornito dall'Organizzazione Mondiale della Sanità nell'aggiornamento pubblicato di recente, da cui emerge che:

- il papillomavirus umano (HPV) è un gruppo di virus estremamente comuni in tutto il mondo;
- ci sono più di 100 tipi di HPV, di cui almeno 13 sono cancerogeni;
- l'HPV si trasmette principalmente attraverso il contatto sessuale e la maggior parte delle persone sono infettate dall'HPV poco dopo l'inizio dell'attività sessuale;
- il cancro cervicale è causato da un'infezione contratta per via sessuale con alcuni tipi di HPV;
- due tipi di HPV (16 e 18) causano il 70% dei tumori del collo dell'utero e delle lesioni cervicali precancerose;
- ci sono anche evidenze che collegano l'HPV con tumori dell'ano, della vulva, della vagina e del pene;
- i vaccini contro l'HPV 16 e 18 sono in commercio in molti Paesi.

Nei Paesi sviluppati sono disponibili per le donne programmi di screening che consentono di identificare e trattare precocemente le lesioni prima che evolvano in cancro. Tale trattamento impedisce fino all'80% la formazione del tumore del collo dell'utero. Il tasso di mortalità da cancro cervicale (52%) potrebbe essere ridotto a livello globale proprio da programmi di screening efficaci e da trattamenti programmati.

L'aggiornamento dell'OMS si concentra anche a fornire gli ultimi aggiornamenti in merito alla definizione della malattia, gli elementi di scenario e le più aggiornate raccomandazioni utili per la prevenzione e il trattamento. Proprio su questo ultimo aspetto, l'Agenzia Italiana del Farmaco sostiene da tempo l'importanza di una adeguata informazione e responsabilizzazione dei cittadini italiani ed europei sulle attività di prevenzione e, in particolare, sulla vaccinazione, uno degli interventi preventivi più efficaci e sicuri, che non comporta soltanto benefici diretti alla persona sottoposta a vaccinazione, ma ha risvolti positivi anche sul resto della comunità. La vaccinazione contro il papillomavirus deve essere sempre più universale.

Per maggiori informazioni leggi la notizia sul sito dell'OMS

WHO – World Health Organization

Human papillomavirus (HPV) and cervical cancer

Key facts

- Human papillomavirus (HPV) is a group of viruses that are extremely common worldwide.
- There are more than 100 types of HPV, of which at least 13 are cancer-causing (also known as high risk type).
- HPV is mainly transmitted through sexual contact and most people are infected with HPV shortly after the onset of sexual activity.
- Cervical cancer is caused by sexually acquired infection with certain types of HPV.
- Two HPV types (16 and 18) cause 70% of cervical cancers and precancerous cervical lesions.
- There is also evidence linking HPV with cancers of the anus, vulva, vagina and penis.
- Cervical cancer is the second most common cancer in women living in less developed regions with an estimated 445 000 new cases in 2012 (84% of the new cases worldwide).
- In 2012, approximately 270 000 women died from cervical cancer; more than 85% of these deaths
 occurring in low- and middle-income countries.
- Vaccines against HPV 16 and 18 have been approved for use in many countries.

Overview

Human papillomavirus (HPV) is the most common viral infection of the reproductive tract. Most sexually active women and men will be infected at some point in their lives and some may be repeatedly infected.

The peak time for acquiring infection for both women and men is shortly after becoming sexually active. HPV is sexually transmitted, but penetrative sex is not required for transmission. Skin-to-skin genital contact is a well-recognized mode of transmission.

There are many types of HPV, and many do not cause problems. HPV infections usually clear up without any intervention within a few months after acquisition, and about 90% clear within 2 years. A small proportion of infections with certain types of HPV can persist and progress to cancer.

Cervical cancer is by far the most common HPV-related disease. Nearly all cases of cervical cancer can be attributable to HPV infection.

Though data on anogenital cancers other than cancer of the cervix are limited, there is an increasing body of evidence linking HPV with cancers of the anus, vulva, vagina, and penis. Although these cancers are less frequent than cancer of the cervix, their association with HPV make them potentially preventable using similar primary prevention strategies as those for cervical cancer.

Non-cancer causing types of HPV (especially types 6 and 11) can cause genital warts and respiratory papillomatosis (a disease in which tumours grow in the air passages leading from the nose and mouth into the lungs). Although these conditions very rarely result in death, they may cause significant occurrence of disease. Genital warts are very common and highly infectious.

Signs and symptoms

The majority of HPV infections do not cause symptoms or disease and resolve spontaneously. However, persistent infection with specific types of HPV (most frequently types 16 and 18) may lead to precancerous lesions. If untreated, these lesions may progress to cervical cancer, but this progression usually takes many years.

Symptoms of cervical cancer tend to appear only after the cancer has reached an advanced stage and may include:

- irregular, intermenstrual (between periods) or abnormal vaginal bleeding after sexual intercourse;
- back, leg or pelvic pain;
- fatigue, weight loss, loss of appetite;
- vaginal discomfort or odourous discharge; and
- a single swollen leg.

More severe symptoms may arise at advanced stages.

How HPV infection leads to cervical cancer

Although most HPV infections clear up on their own and most pre-cancerous lesions resolve spontaneously, there is a risk for all women that HPV infection may become chronic and pre-cancerous lesions progress to invasive cervical cancer.

It takes 15 to 20 years for cervical cancer to develop in women with normal immune systems. It can take only 5 to 10 years in women with weakened immune systems, such as those with untreated HIV infection.

Risk factors for HPV persistence and development of cervical cancer

- Early first sexual intercourse
- Multiple sexual partners
- Tobacco use
- Immune suppression (for example, HIV-infected individuals are at higher risk of HPV infection and are infected by a broader range of HPV types)

Scope of the problem

Worldwide, cervical cancer is the fourth most frequent cancer in women with an estimated 530 000 new cases in 2012 representing 7.5% of all female cancer deaths. Of the estimated more than 270 000 deaths from cervical cancer every year, more than 85% of these occur in less developed regions.

In developed countries, programmes are in place which enable women to get screened, making most pre-cancerous lesions identifiable at stages when they can easily be treated. Early treatment prevents up to 80% of cervical cancers in these countries.

In developing countries, limited access to effective screening means that the disease is often not identified until it is further advanced and symptoms develop. In addition, prospects for treatment of such late-stage disease may be poor, resulting in a higher rate of death from cervical cancer in these countries.

The high mortality rate from cervical cancer globally (52%) could be reduced by effective screening and treatment programmes.

Screening for cervical cancer

Cervical cancer screening is testing for pre-cancer and cancer among women who have no symptoms and may feel perfectly healthy. When screening detects pre-cancerous lesions, these can easily be treated and cancer avoided. Screening can also detect cancer at an early stage and treatment has a high potential for cure.

Because pre-cancerous lesions take many years to develop, screening is recommended for every woman from aged 30 to 49 at least once in a lifetime and ideally more frequently. Screening is only effective on cervical cancer mortality, if a high proportion of women participate.

There are 3 different types of screening tests are currently available:

- conventional (Pap) test and liquid-based cytology (LBC)
- visual inspection with Acetic Acid (VIA)
- HPV testing for high-risk HPV types.

HPV vaccination

There are currently 2 vaccines which protect against both HPV 16 and 18, which are known to cause at least 70% of cervical cancers. The vaccines may also have some cross-protection against other less common HPV types which cause cervical cancer. One of the vaccines also protects against HPV types 6 and 11 which cause anogenital warts.

Clinical trial results show that both vaccines are safe and very effective in preventing infection with HPV 16 and 18.

Both vaccines work best if administered prior to exposure to HPV. Therefore, it is preferable to administer them before first sexual activity.

The vaccines cannot treat HPV infection or HPV-associated disease such as cancer.

Some countries have started to vaccinate boys as the vaccination prevents genital cancers in males as well as females, and one of the two available vaccines also prevents genital warts in males and females. WHO recommends vaccination for girls aged 9-13 years as this is the most cost-effective public health measure against cervical cancer.

HPV vaccination does not replace cervical cancer screening. In countries where HPV vaccine is introduced, screening programmes may still need to be developed or strengthened.

Cervical cancer prevention and control: A comprehensive approach

WHO recommends a comprehensive approach to cervical cancer prevention and control. The recommended set of actions includes interventions across the life course. It should be multidisciplinary, including components from community education, social mobilization, vaccination, screening, treatment and palliative care.

Primary prevention begins with HPV vaccination of girls aged 9-13 years, before they become sexually active.

Other recommended preventive interventions for boys and girls as appropriate are:

- education about safe sexual practices, including delayed start of sexual activity;
- promotion and provision of condoms for those already engaged in sexual activity;
- warnings about tobacco use, which often starts during adolescence, and which is an important risk factor for cervical and other cancers; and
- male circumcision.

Women who are sexually active should be screened for abnormal cervical cells and pre-cancerous lesions, starting from 30 years of age.

If treatment is needed to excise abnormal cells or lesions, cryotherapy (destroying abnormal tissue on the cervix by freezing it) is recommended.

If signs of cervical cancer are present, treatment options for invasive cancer include surgery, radiotherapy and chemotherapy.

WHO response

WHO has developed guidance on how to prevent and control cervical cancer, including through vaccination and screening. The Organization works with countries and partners to develop and implement comprehensive programmes.

By mid 2016, 65 countries had introduced HPV vaccines, most in developing countries, but including an increasing number of middle- and low-income countries.

Given that the global burden still falls heavily on African and Asian countries where vaccination and screening programmes are lacking, there is still a need to for more countries to introduce the HPV vaccine.