Human papilloma virus Infections an Related Malignancies

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Abstract

HPVs are common cause of infections and diseases in human worldwide. Most infections are asymptomatic and benign. The importance of HPV infections lies in their ability to cause malignant transformation of squamous epithelia of mucosal surfaces and significant cancer morbidity and mortality. During recent years HPV vaccines made important avenue toward preventing HPV-associated neoplasia and malignancies.

HPVs are nonenveloped DNA viruses with more than 200 genotypes round the world. Viruses have high degree of specificity to infect human, tissues and cells. Are classified as cutaneous and mucosal. Some mucosal viruses have oncogenic potential that infect anogenital and oropharyngeal mucosa. HPVs are the most common cause of sexually transmitted infections in the world that infect both genders. Most infections are asymptomatic and a minority come to medical attention. Viruses are transmitted horizontally by close skin to skin contact and in some vertically. Most infections cleared uneventfully within 8-24 months.

In the US, at any time more than 20 million US population are infected. Yearly ~6.000.000 new cases occur and the same numbers cleared their infection. CDC estimated that more than 30.000 cases of HPV-related cancer occur in the US that 2/3 are female. Cervical cancer is the most common HPV-associated cancer and oropharyngeal cancer is the 2nd.

Treatment of HPV infections is offered if lesions are large, multiple, recurrent, and life-threatening. Other indications are pain, discomfort or cosmetic problems. A variety of modality for treatment are available, but they are not universally effective or permanent curable. Two main methods for preventing HPV-associated malignancies exist: Regular cytologic screening and vaccination. Regular cytologic screening beginning from 21 years of age of female remains as the essential component of cancer preventing programs focused on cervical cytology (Pap smear) and close follow-up of abnormal findings. Anal cancer prevention share many similarities with cervical cancer. In June 2006, FDA approved first HPV vaccine to prevent HPV-associated dysplasia and malignancies contain four genotypes (6, 11, 16 and 18) viruses. Vaccine stimulate CMI and humoral immunity scheduled as 3 doses 0, 2, 4 months apart beginning at age 4-11 years of age before any sexual activity. Vaccine resulted in humoral responses in more than 98% of vaccine recipients. After vaccination, the incidence of anogenital wart decreased substantially. Recently, 9-valent vaccine developed and make broader coverage of vaccines.

Keywords: Human Papilloma Virus, Vaccine, Malignancy.
چکیده

ویروس پاپیلومای انسانی از عوامل غلاف و بیماری زای شایع است. بایستی این نکته را در مورد شناخت و افرادی که به آن مبتلا هستند به توجه داشته باشیم. DNA ویروس ابتدا در یک نوبت بیش از 300 میلیون نفر نزدیک به ویروس فوند بوده است. ولی به همراه مخارج و در مورد افراد ابتکاری که مبتلا به ویروس فوند هستند، ویروس وایری مانند یک پوستی مخصوص به پیشگیری از آن مبتلا شوند. نهایتاً، ویروس پاپیلومای انسانی و سرطانات دهان و حلق و دهان را می‌تواند ایجاد کند. این ویروس می‌تواند در طول زندگی انسان، موجب روند صفر شدن و آمادگی در رو به بروز سرطان شود.

واژه‌های کلیدی: ویروس پاپیلومای انسانی، واکسیناسیون، سرطان‌زای.