HPV and Cancer

Thanks to recent pharmaceutical sponsored awareness campaigns, more people now than ever know that Human Papillomavirus (HPV) infection is the primary cause of cervical cancer in women. What they don’t know is that HPV is a risk factor for ano-genital cancer and has been associated with head and neck malignancies in the context of oral sex for the transmission of the virus (Brondani, 2010). Even less well known is that these cancers disproportionately affect LGBT people based on lifestyle factors and screening habits more than their heterosexual counterparts.

HPV in the LGBT community
Genital HPV is transmitted by skin to skin contact. Its risk is present, therefore, in all LGBT people who engage in sex. Transmission occurs more easily in the presence of irritated skin, as often occurs with penetrative sex (Stein, 1999). The most widely used test for HPV is the Pap smear, where a sample of cells is collected from the affected tissue and tested for an abnormal rate or pattern of growth, called dysplasia. Dysplasia may range from mild to severe, but because HPV infection is usually contained by the immune system, most healthy adults will never develop it. For persons with poor immune system function, however, infection HPV infection may quickly progress to severe dysplasia and cancer. For this reason, HIV-positive gay or bisexual men have higher levels of both HPV infection and HPV-related disease than heterosexual men (Stein, 1999). An estimated 61% of HIV-negative and 93% of HIV-positive gay and bisexual men have anal HPV infections, compared to 50% or less of heterosexual men. Men who have sex with men are also at increased risk for anal cancer compared to the general population (Brewer, 2010).

Anal cancer
Despite the fact that HPV is the most common cause of anal cancer in men, those who have the highest risk remain woefully unaware, with studies suggesting that only about 25% of gay and bisexual men are knowledgeable about the relationship between HPV infection and anal cancer.

Oral cancer
Although it remains difficult to prove that HPV can be transmitted through oral sex, researchers and scientists believe such transmission is likely to occur. Since the HPV virus is easily transmitted through skin/mucosal contact, oral sex is a potential vehicle for transmission from the ano-genital area to the mouth. In addition to the well-known risk factors like tobacco and alcohol, HPV seems to play an independent role in the development of almost 30% of oral carcinomas, particularly oropharyngeal malignancies. Perhaps the strongest piece of evidence in support of this is the fact that patients who have had prior HPV infection are 32 times more likely to develop oral malignancies than those who have not. In comparison, chronic alcohol consumption and tobacco smoking increase the risk of oral cancer by about 2.5 and 3 times, respectively (Brewer, 2010). In Brewer et al’s study of men’s belief about HPV-related disease, an overwhelming majority of men attributed oral cancer to smoking and smokeless tobacco use, much more so than to viral infection or sexual activity. Men also largely attributed genital warts and anal cancer, but not oral cancer, to sexual behavior.

Lesbians and cervical cancer
Compared to heterosexual women, lesbians may be at greater risk for HPV and cervical cancer due to health and lifestyle factors associated with poor overall health. Women who have sex with women can contract the virus from an infected partner in the same ways heterosexual women can, including through genital to genital contact, touching the genitals of a partner and then one’s own, or sharing sex toys without cleaning them properly first. Many lesbians have also experienced heterosexual intercourse, increasing their risk for HPV. However, lesbians are less likely to regularly visit a reproductive health specialist and are therefore less exposed to information about HPV or make use of the preventative steps developed for women.

Our recommendations: screening and vaccination for all
The simplest approach to reducing the prevalence of HPV and HPV-related cancer in LGBT communities is to duplicate what is now the established preventative course for heterosexual women and cervical cancer; regular Pap smears coupled with suggested HPV vaccination for those most at risk. Currently the medical world is already capable of providing such services to men at risk of HPV. The Food and Drug Administration has approved HPV vaccine for men, and experts recommend a screening strategy for anal cancer similar to that used for cervical cancer, using anal Pap smears to identify pre-cancerous cells and treat them prior to the development of invasive cancer (D’Souza, 2009). However, no major prevention guideline currently exists for anal cancer screening or vaccination. Current HPV vaccine campaigns target women, leading the public to believe that persistent HPV infection, its causes and possible complications, are outside the experiences of most men. Studies reporting low anal cancer screening rates in men point to the absence of expert health care providers that offer anal cancer screening services, such as the anal Pap smear. This suggests that most LGBT people must rely on their primary care physicians for information about HPV and HPV-related cancer, information that they are not receiving. Until knowledge of HPV transmission, infection, and cancer risk is effectively brought to the LGBT community and until primary care physicians can embrace and provide access to preventative services and procedures, HPV and HPV related cancer will continue to disproportionately affect the LGBT communities.

References