

Transmission of HPV

John W. Sellors and colleagues¹ have described human papillomavirus (HPV) infection in women, relating this infection to various risk factors, including number of previous sexual partners. It should be pointed out, however, that HPV is not a typical sexually transmitted infection.

As the recent paper by Winer and associates² highlighted, sexual contact is not necessary for the transmission of HPV. Although these authors showed that the cumulative incidence of HPV over the first 4 years after first sexual intercourse was about 50%, they also showed that HPV infection was acquired by virginal women at a cumulative rate of 7.9% over 2 years. According to these authors, abstaining from penetrative sex did not protect women from HPV transmission, and they proposed that skin-to-skin contact during nonpenetrative sexual contact may be a primary mode of genital HPV transmission.

Furthermore, no protective effect has been associated with condom use.³ This failure to prevent HPV may be related to the poor validity of self-reported condom use, condom breakage, slippage and incorrect use, but it may also be caused by the ability of biological material to pass through condoms.⁴

Perhaps researchers should move away from collecting data on the number of previous sexual partners a woman has had, especially given that data of this type help to stigmatize HPV as a virus affecting only promiscuous women who have unprotected penetrative sex.

Sarah Giles

Class of 2005
Dalhousie University
Halifax, NS

References

1. Sellors JW, Karwalajtys TL, Kaczorowski J, Mahony JB, Lytwyn A, Chong S, et al, for the Survey of HPV in Ontario Women (SHOW) Group. Incidence, clearance and predictors of human papillomavirus infection in women. *CMAJ* 2003;168(4):421-5.
2. Winer RL, Lee SK, Hughes JP, Adam DE,

Kiviat NB, Koutsky LA. Genital human papillomavirus infection: incidence and risk factors in a cohort of female university students. *Am J Epidemiol* 2003;157:218-26.

3. Steiner MJ, Feldblum PJ, Padian N. Invited commentary: condom effectiveness — will prostate-specific antigen shed new light on this perplexing problem? *Am J Epidemiol* 2003;157:298-300.
4. Macaluso M, Lawson ML, Duerr A, Hortin G. Macaluso et al. respond to "Condom effectiveness and prostate specific antigen." *Am J Epidemiol* 2003;157:301-2.

[Four of the authors respond:]

As Sarah Giles points out, nonpenetrative sexual activity is associated with increased risk of genital HPV infection.¹ We did not define sexual activity when we asked women to report the number of their sexual partners.² However, it is likely that at least some respondents included partners with whom sexual activity was nonpenetrative.³

We also agree with Giles that evidence for the protective effect of condoms against HPV infection is lacking.⁴

Giles raises an important issue regarding the potential stigmatization of women with genital HPV infection. Approximately 65% of women (or more) have been infected with HPV sometime in their lives, the vast majority of these infections being transient.⁵ It is reasonable to assume that the same proportion of men are infected, given that the risk factors for genital HPV infection are similar in men and women.⁶ Such infection is therefore widespread and common, especially at younger ages. To assume that any particular infected individual has had numerous sexual partners is wrong. Although an increasing number of partners does increase the risk of infection, sole contact with one infected partner can lead to acquisition of genital HPV.⁷

Nevertheless, as research has shown, a certain proportion of women and men with HPV infection have had numerous sexual partners.^{2,6,7} A MEDLINE search for the period January 1966 to March 2003, using "human papillomavirus" as a subject heading and "promiscuity" as a keyword, identified 7 articles that used the word "promiscuous" in the abstract when referring

to such a sexual history in people infected with genital HPV. We believe that terms such as this one are morally charged and judgement laden, and that they should be avoided by physicians and researchers.

Alice Lytwyn

Department of Pathology
Joseph Brant Memorial Hospital
Burlington, Ont.

Janusz Kaczorowski

Department of Family Medicine
McMaster University
Hamilton, Ont.

Attila Lorincz

Digene Corporation
Gaithersburg, Md.

John W. Sellors

Program for Appropriate Technology in Health
Seattle, Wash.

References

1. Winer RL, Lee SK, Hughes JP, Adam DE, Kiviat NB, Koutsky LA. Genital human papillomavirus infection: incidence and risk factors in a cohort of female university students. *Am J Epidemiol* 2003;157:218-26.
2. Sellors JW, Karwalajtys TL, Kaczorowski J, Mahony JB, Lytwyn A, Chong S, et al, for the Survey of HPV in Ontario Women (SHOW) Group. Incidence, clearance and predictors of human papillomavirus infection in women. *CMAJ* 2003;168(4):421-5.
3. Sanders SA, Reinisch JM. Would you say you "had sex" if....? *JAMA* 1999;281:275-7.
4. Manhart LE, Koutsky LA. Do condoms prevent genital HPV infection, external genital warts, or cervical neoplasia? A meta-analysis. *Sex Transm Dis* 2002;29:725-35.
5. Koutsky LA. Epidemiology of human papillomavirus infection. *Am J Med* 1997;102(5 Suppl 1):3-8.
6. Svare EI, Kjaer SK, Worm AM, Osterlind A, Meijer CJLM, van den Brule AJC. Risk factors for genital HPV DNA in men resemble those found in women: a study of male attendees at a Danish STD clinic. *Sex Transm Infect* 2002;78:215-8.
7. Burk RD, Ho GY, Beardsley L, Lempa M, Peters M, Bierman R. Sexual behavior and partner characteristics are the predominant risk factors for genital human papillomavirus infection in young women. *J Infect Dis* 1996;174:679-89.

ECT for Parkinson's?

Mark Guttman and associates,¹ in their review of diagnosis and management of Parkinson's disease, make no reference to electroconvulsive therapy (ECT) as an option for patients with insufficient response to pharmacotherapy.