Editors' Message

Human Papillomavirus: Every Answer Raises More Questions

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Genital human papillomavirus (HPV) is the most common sexually transmitted infection worldwide.1 Because it is so prevalent in men and women, is easily transmitted by skin-to-skin contact, and is often asymptomatic and undetectable, it is difficult to effectively prevent transmission despite our best efforts, including promotion of abstinence, condom use, and circumcision.2 This difficulty is very important because men are often silently transmitting this infection to women; the men are then at risk of developing anogenital or penile cancer, and the women are at risk for cervical cancer or its precursors. Numerous studies have been conducted over the past 3 decades that show how the sexual behavior and practices of men directly impact the health of their female partners, as highlighted in the article by Roberta Wattleworth, DO.3

As more data about the efficacy and safety of prophylactic vaccination against HPV in men becomes available, it will be critical for the medical profession to understand the impact of HPV on men and women and to be able to weigh that impact against the benefit, risk, and cost of the vaccine in the male population. The ethics behind vaccinating one specific population (ie, men) to protect another population (ie, women) is a discussion for debate. However, offering protection against anogenital condylomas to young males who will become sexually active should not be minimized. As highlighted in the article by Craig A. Dietz, DO, MPH, and Chessa R. Nyberg, PharmD, anogenital condylomas are common in men and often lead to repeated, expensive treatments.4 Meanwhile, Richard A. Ortoski, DO, and Christine S. Kell, PhD, review the epidemiology of anal cancer in men and its precursors and highlight the latest recommendations for HPV screening in this population.5 One of the biggest challenges in screening an at-risk male population for anal HPV is establishing an appropriate referral source for those patients who have abnormal anal cytology and therefore require further evaluation and treatment.

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Studies of the natural history of genital HPV in men have lagged behind those in women for a number of reasons, including unclear methods for screening men for HPV, penile dysplasia, and anal dysplasia. Also, there is a substantially lower incidence of penile cancer in men compared to cervical cancer in women. As reviewed in the article by Cathryn J. Rehmeyer, PhD, some interesting research has been recently published to answer some key questions pertaining to the incidence of genital HPV in men.6 These findings have helped experts sort out some of the controversy around circumcision: although it appears that circumcision is protective in the prevention of penile carcinoma, when the data are carefully evaluated and stratified by potential cofounders, the data do not support circumcision as being protective in the prevention of the acquisition of anogenital HPV, including condylomas.7

Despite the surge in data recently published, many questions remain about HPV transmission, immune response to natural infection, and incidence in the male population. For example, it is not known if men generate a sufficient immune response from a natural genital HPV infection to protect them from repeat infections with the same HPV type. The threshold for type-specific antibody levels at which a person is protected from future HPV infections is also not known. Vaccination against HPV types 6, 11, 16, and 18 has been demonstrated to be safe when administered to boys and generates a measurable, robust immune response similar to that in girls.

Data regarding the efficacy of this vaccine in protection against acquisition and persistence of genital HPV, including anogenital condylomas, in men are forthcoming and will provide further guidance regarding recommendations for HPV vaccination in males.
The article by Kathleen McGinley, DO, and colleagues on HPV testing in men, including a discussion on anal pap smears, is interesting and timely. Although physicians are performing this screening test in high-risk populations, the test has not become everyday practice as of yet. The authors’ review of the data is valuable and interesting.

We hope you find the articles in this supplement intellectually stimulating and that they raise questions on the issue of HPV. For every question we think we answer, more arise—it is what makes medicine so much fun to practice.

References
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A physician’s job is to make life easier and more comfortable for his or her patients. We want every one of our patients to be armed with everything we have to offer for their health. Our patients want the same thing and come to their physician encounters with similar goals. However, they have different experiences with healthcare, different knowledge bases, different expectations on how they can achieve optimal health, and different understandings of what optimal levels of health are for them.

It is often the role of the physician to advocate and educate for population-based prevention in order to protect a person’s health and that may take some educating. Vaccines, especially those that are injected, are not high on our patients’ lists of desirable interventions. While our patients are enthusiastic about the benefits of vaccination, the route of administration and the effort required to achieve the full protection from something like human papillomavirus (HPV) (eg, 3 separate visits for 3 injections) tempers that enthusiasm.

Fewer than 7% of people who would benefit from the herpes zoster vaccine have received it. The Centers for Disease Control and Prevention’s National Immunization Survey-Teen found that among adolescent girls aged 13 to 17 years, only 25.1% availed themselves of the HPV vaccine; of that group, only a quarter completed the series of 3 injections.

For patients, having a primary care physician is a key determinant in whether or not patients complete the full course of the HPV vaccine. Knowing that getting the vaccine does not stop the need for pelvic examinations and PAP smears is another issue that patients must be aware of. Men are most often seen as carriers and spreaders of HPV and can also develop genital warts and other issues.

Working with our patients is more an art than a science. We have to use the relationships we develop with our patients in a therapeutic way to bring them toward receiving the best care possible. The knowledge and the experience we develop by having many patients going through the same experience is extremely valuable to each of our individual patients, and it can be helpful in getting more people to practice prevention. We hope that you are able to gain some knowledge from this supplement and that you will think “HPV” when you see patients in your office who would be appropriate candidates for prevention—both for themselves and for the health of our whole community.

References

General Thoughts on HPV Vaccination

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