HPV: If you could prevent cancer with a vaccine, would you get it?

Human Papillomavirus (HPV) is a virus that can cause cervical, penile, anal, vaginal, and/or oropharyngeal (mouth or throat) cancers. According to the American Cancer Society, there were more than 13,000 deaths from these cancers in 2011. The rate of these cancers continues to increase even though there are vaccines available to reduce the spread of this virus. In 2006, the Advisory Committee on Immunization Practices (ACIP), a division of the Centers for Disease Control and Prevention (CDC), recommended vaccination against HPV for all girls 11 or 12 years of age. In 2011, the ACIP recommended that boys ages 11 or 12 also receive the vaccine. Since there is no cure for the virus, vaccination is the best way to prevent people from getting the illness.

HPV is a virus that can produce warts on the skin and other areas of the body, including the oral, genital, and anal area. It is the most common sexually transmitted infection in the United States; according to the CDC, about 1 in 100 sexually active adults have genital warts at any given time. Certain strains of HPV can cause the cells of the cervix, penis, anus, vagina, and oropharyngeal areas to transform to atypical cancerous cells. This occurs slowly, so women and men may be diagnosed with cancerous lesions decades after their initial infection.

The two HPV vaccines currently approved for use in the United States include Gardasil®, produced by Merck which provides protection against four HPV strains, and Cervarix®, made by GlaxoSmithKline, which protects against two HPV strains. Gardasil has been tested and approved for use in males. The Food and Drug Administration (FDA) has licensed the vaccines as safe and effective. Common, mild side effects included pain where the shot was given, fever, headache, and nausea. Anyone who is allergic to the ingredients in the vaccines, including people with severe yeast allergies, should not receive the vaccine.

ACIP has recommended Gardasil for males and females with the following vaccination schedule:

- Routine vaccination of males 11 or 12 years of age
  - It is given as three injections over a 6-month time period
  - The second and third dose should be received 2 and 6 months after the first dose
  - If the schedule has been interrupted, the series does not have to be restarted
- The vaccination series can be started as young as 9 years of age
  - Ideally, the vaccine should be given before sexual contact
  - The vaccine may still be given if sexual contact has occurred
- “Catch-up” vaccination recommended for all males and females 13 thorough 21 years of age who have not been vaccinated previously or who have not completed the three-dose series
- Males and females aged 22 through 26 may also be vaccinated
- All men with weakened immune systems (including HIV infection) and men who have sex with men through age 26 should be vaccinated if they did not get vaccinated when younger

Additional Resources
CDC – HPV vaccine information http://www.cdc.gov/vaccines/vpd-vac/hpv/vac-faqs.htm

Updated: 4/23/2014