HPV Vaccine

The beginning of the end of cervical cancer

BY ANNA WILSON
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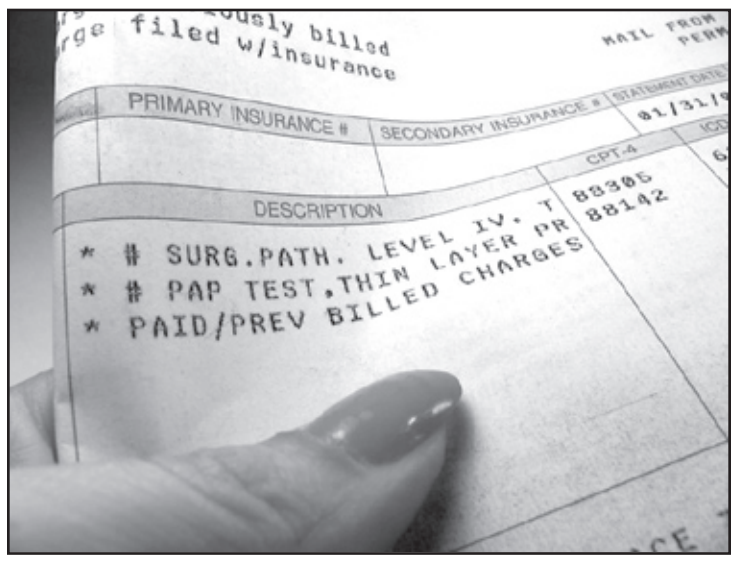

Pap Facts

In 1941, George Papanicolaou developed a technique for collecting cells from the cervix, making a "smear" of the cells onto a slide, and looking at the slide under the microscope to look for precancerous or cancerous cells. This technique has become known as the Pap smear. "Pap" is an abbreviation for Papanicolaou. "Pap smears were last century's breakthrough," said SR Evans, an obstetrician/gynecologist with Evan OB/GYN. "He found that if you took some cells and made a smear, you could see abnormal cells that can lead to cancer. They didn't know at the time that a virus causes cervical cancer, which makes it an unusual cancer."

Current general guidelines recommend that women have a Pap test at least once every three years, beginning about three years after they begin to have sexual intercourse, but no later than age 21. Experts recommend waiting about three years after the start of sexual activity to avoid over treatment for common, temporary abnormal changes. It is safe to wait three years, because cervical cancer usually develops slowly. Cervical cancer is extremely rare in women under age 25.

Women ages 65 to 70 who have had at least three normal Pap tests and no abnormal Pap tests in the last 10 years may decide, after talking with their clinician, to stop having Pap tests. Women who have had a hysterectomy do not need to have a Pap test, unless the surgery was done as a treatment for precancer or cancer.

Since the development of the Pap smear, there has been a 75 percent decrease in death from cervical cancer in the United States and other developed countries where pap smear screening is common.

Worldwide, there are 371,000 cases of cervical cancer diagnosed annually, mostly in the third world where Pap smear screening is not done. In those countries, cervical cancer is the second leading cancer related cause of death.

HPV infection is more common in younger age groups, particularly among women in their late teens and twenties. Because HPVs are spread mainly through sexual contact, risk increases with number of sexual partners. Women who become sexually active at a young age, who have multiple sexual partners, and whose sexual partners have other partners are at increased risk.

MORGANTON - A new vaccine approved by the FDA may mean an end to cervical cancer in the future.

In what many consider a key breakthrough in women's health, the FDA approved the HPV vaccine Gardisil, which should be able to prevent the viruses that cause most cervical cancers and genital warts.

"This is the most important breakthrough in women's health in my career," said SR Evans, MD, at Evans OB/GYN, a part of Blue Ridge HealthCare's Medical Group, whose office received doses of the vaccine on Friday. "Some say this is as big as the advent of birth control pills, and this vaccine may save thousands of lives a year."

Gardisil is the first vaccine designed specifically to prevent cancer. It targets the sexually transmitted human papillomavirus (HPV) that causes cervical cancer and genital warts. HPV is the most common sexually transmitted infection in the United States. For most women, the body's own defense system will kill the virus. However, some HPV types can cause abnormal cells on the lining of the cervix that years later can turn into cancer. Other HPV types can cause genital warts.

The vaccine is effective against HPV types 16 and 18, which cause approximately 70 percent of cervical cancers and against HPV types 6 and 11, which cause approximately 90 percent of genital warts.

The development of the vaccine is significant, Dr. Evans said, because HPV causes 99 percent of cervical cancers. The CDC estimates that there are 9,710 new cases of cervical cancer and 3,700 deaths attributed to it in the United States each year. Worldwide, cervical cancer is the second most common cancer in women; and is estimated to cause over 470,000 new cases and 233,000 deaths each year.

"This vaccine opens a new era in cancer prevention," said National Cancer Institute's Acting Director John E. Niederhuber, MD. "It has the potential to save women's lives, as well as to reduce health disparities in the United States and around the world."

"To be able to prevent cancer is tremendous," Dr. Evans said. "And it may save thousands of lives."

Of even more significance is the impact the vaccine could have worldwide where cervical cancer is the second most common cancer in women.

"It will be a few years before we see the full effect of this vaccine," said Dr. Evans. "Although the vaccine provides immediate protection against HPV, it will be years before we see today's vaccinated 12 year olds reaching middle age without getting cervical cancer."

'Universal vaccination of 12 year olds would prevent 200,000 HPV infections, 100,000 abnormal Pap smears, and 3,300 cervical cancer deaths each year in the U.S.'

S R EVANS, MD
EVANS OB/GYN

The FDA approved the vaccine for women ages 9 to 26, but the American College of Obstetrics and Gynecology (ACOG) and the CDC's Advisory Committee on Immunization Practices have recommended universal vaccination to all girls aged 11-26.

"Universal vaccination of 12 year olds would prevent 200,000 HPV infections, 100,000 abnormal Pap smears, and 3,300 cervical cancer deaths each year in the U.S." Dr. Evans said.

Most invasive cancers of the cervix can be prevented if women have Pap tests regularly, according to the National Cancer Institute. A Pap test, or Pap smear as it is called sometime, is a way to examine cells collected from the cervix. The cells are analyzed to find any abnormalities. A Pap test can detect abnormal cervical growth regardless of what HPV type caused it to develop. Caught early enough, these abnormalities can be treated and the treatment for cervical cancer is more successful.

"You can prevent cervical cancer 99 percent of the time if you get regular Pap smears," Dr. Evans said. "But only 60 to 65 percent of women have the Pap smear done so we still have instances of cervical cancer."

In the U.S., most cervical cancers occur in women who have never been screened with a Pap smear or who have not had one in the last five years.

Even with the vaccine, women will still need to have regular Pap smears, Dr. Evans said. "There are less common viral types that also lead to cancer," he said. "The vaccine just targets the two most common."

An important aspect of the vaccine to consider is its prevention of genital warts as well as cervical cancer. Some viral subtypes lead to skin warts and some to genital warts.

"Most people don't realize how common genital warts are," Dr. Evans said. "They are hard to treat and they come back. They are disfiguring and are emotionally upsetting."

They also don't have to be present for someone to pass along the virus. "Most HPV infections are asymptomatic and don't cause a problem until later on when abnormal Pap smears or genital warts develop," he added.

HPV is the most common STD in the United States. The Centers for Disease Control and Prevention estimates that about 6.2 million Americans become infected with genital HPV each year and that over half of all sexually active men and women become infected at some time in their lives.

In the United States, 64 percent of 16-year-olds have genital HPV present. By age 50, 80 percent of American women have been exposed to genital HPV.

Currently, the vaccine is a series of three shots taken over six months.

Merck, the manufaturer of Gardasil, believes the vaccine will be paid for by most insurance carriers.

"I expect it will be picked up under Medicaid as well, but it will just take time," Dr. Evans said.

TO SEARCH FOR INFORMATION on a variety of health topics, please visit our web site at www.blueridgehealth.org.

ANNA WILSON is a writer and graphic artist in Blue Ridge HealthCare's Marketing and Public Relations Department.

Want to learn more?

Dr. Evans will be holding a seminar at 7 p.m. Thursday, Sept. 14, at his office, Evans OB/BYN, 305 E. Parker Road. Seating is limited so call 580-4200.

Refreshments will be served.

Researchers: No Direct Link Between Anxiety, Pregnancy Outcomes

There is no direct association between anxiety and pregnancy outcomes, according to a review of the data on the subject by a team at the University of Texas Medical Branch.

The team reviewed 50 studies over 39 years and concluded that women who experience anxiety symptoms during pregnancy are not at increased risk for complications such as longer labor or a low-birth-weight baby.

The findings were presented at the recent annual meeting of the American Psychological Association in New Orleans.

"Pregnancy can be an emotional time for women and, for some, anxiety associated with the pregnancy can be compounded by pre-existing difficulties such as having an inadequate social support system," review lead author Heather Littleton said in a prepared statement.

While, overall, anxiety has no direct effect on pregnancy outcomes, Littleton and her colleagues noted that more research is needed to determine if these findings apply to women with very high levels of anxiety, such as those with an anxiety disorder.

"This review of the literature clearly shows that additional research is necessary to completely understand how to best treat an anxious pregnant woman, and such work evaluating the mental and physical health of women during pregnancy could help to increase the number of healthy babies that are born," Littleton said.

Source: Discovery Health at www.blueridgehealth.org