



Strang Cancer Prevention Institute
Dedicated to Promote Cure by Early Detection and Research to Prevent Cancer since 1933

Prevention

Cervical Cancer Awareness Month January 2018

CERVICAL CANCER SCREENING

For decades, cervical cancer screening relied on what cells scraped from the cervix look like under a microscope. This process, also called cytology, is the Pap Test, which provided the original motivation and funding for **Strang**.

In 1940 **Strang** was the first medical facility to introduce Dr. George Papanicolaou's PAP TEST.

This momentous discovery that early changes of cervical cancer could be detected made early detection and highly successful treatment possible. It was the first successful cancer screening program and produced an enormous, dramatic decrease in deaths from cervical cancer.

Strang's introduction of the PAP TEST has saved millions of women's lives worldwide.

More recently, our understanding of how cervical cancer develops has deepened. We now know that most cervical cancers result from infection with a sexually transmitted virus, human papilloma virus, or HPV. Once HPV infects a woman, it enters her cervical cells and can cause them to change.

Cancer occurs when, after long-term HPV infection, cervical cells become increasingly abnormal and, over time, become a cancer: they grow out of control and invade into adjacent cervical tissue. In more advanced cases, cancer cells can spread to other nearby organs or, even more seriously, travel elsewhere in the body through the bloodstream. HPV also causes cancer of the vulva, vagina, penis, anus, and throat. Types of HPV that may cause cancer are known as "high-risk types."

HPV is passed from person to person during sexual activity and is very common. Most people who are sexually active will get an HPV infection in their lifetime. HPV infection often causes no symptoms and most HPV infections go away on their own. For most women, short-term infections typically cause only mild ("low-grade") changes in cervical cells that go back to normal as the HPV infection clears.

In some women, particularly those infected with high-risk HPV types, the infection does not go away. If infection from a high-risk type of HPV lasts for a long time, it can cause more severe ("high-grade") precancerous changes in cervical cells that are more likely to lead to cancer.

It usually takes 3–7 years for high-grade changes in cervical cells to become cancer. Cervical cancer screening may detect these changes before they become cancer. Women with low-grade changes can be tested more frequently to see if their cells go back to normal. Women with high-grade changes can get treatment to have the cells removed.

Cervical cancer screening has traditionally consisted of the Pap test. However, more recently, testing for HPV has been added as an additional option. Both tests use cells taken from the cervix with a brush or other sampling instrument. Then they are put into a special liquid and sent to a laboratory for testing.

For a Pap test, the sample is examined to see if abnormal cells are present.

For an HPV test, the sample is tested for the presence of 13–14 of the most common high-risk HPV types.

CURRENT SCREENING RECOMMENDATION

The frequency of testing and the type of test depend on age and health history. HPV infection is so common in young women that it does not tell who is at higher risk of cancer. Therefore, we do not bother testing for HPV in women under age 30. Instead, we use the Pap to look for changes to their cervical cells. That led to the current recommended screening strategy, which allows a longer time between testing if a test for HPV is done along with the Pap test:

Women aged 21–29 years should have a Pap test alone every 3 years. HPV testing is not recommended.

Women older than age 65 years should stop getting cervical cancer screening if they were adequately screened and had no prior abnormalities. Adequate screening is either three negative Pap test results in a row or two negative co-test results in a row within the past 10 years, with the most recent test performed within the past 5 years. Abnormalities include moderate or severe abnormal cervical cells or cervical cancer.

Women who have had a hysterectomy and don't have a cervix may still need screening, since cervical cells can still remain at the end of the vagina. If there is a history of cervical cell changes or cervical cancer, screening should continue for 20 years after the time of the hysterectomy.

For some **women**, the risk is higher and lasts longer. Women who have a history of cervical cancer, are infected with human immunodeficiency virus (HIV), have a weakened immune system, or who were exposed to diethylstilbestrol (DES) before birth may require more frequent screening and should not follow these routine guidelines.

RECENT PROPOSED CHANGES TO SCREENING RECOMMENDATIONS

Since the last time the guidelines were updated, we have become more certain about the importance of high risk HPV infection and that most women are at low risk after hysterectomy. Therefore, changes have been proposed.

Women aged 30–65 years could continue to have a Pap test alone every 3 years or they could have **ONLY** an HPV test every 5 years. **Women** who have had a hysterectomy should continue screening for 20 years only if they have a history of **HIGH-GRADE** cervical cell changes or cervical cancer.

INTERPRETING SCREENING RESULTS

Many **women** have abnormal cervical cancer screening results. An abnormal result does not mean that cancer is present. Cervical cell changes often go back to normal on their own and if they do not, it often takes several years for even high-grade changes to become cancer.

As with any lab test, cervical cancer screening results are not always accurate. Sometimes, the results show abnormal cells when the cells are normal. This is called a “false-positive” result. Cervical cancer screening also may not detect abnormal cells when they are present. This is called a “false-negative” result. To help prevent false-negative or false-positive results, douching, sexual intercourse, and using vaginal medications or hygiene products for 2 days before the test should be avoided. Screening should also be avoided during a menstrual period.

HPV VACCINATION

Knowing that high risk HPV infection leads to cervical cancer has opened up another way to prevent cervical cancer deaths: vaccination. HPV infection is so common, having sex, even once, can lead to infection. Therefore, HPV vaccination is recommended for boys and girls early, starting at age 9. Successful vaccination requires 2 doses for children starting at age 9 to 14 and 3 doses starting age 15 to 26 years.

As important as vaccination can be in preventing infection and cervical cancer, women who have been vaccinated against HPV may still develop cervical cancer and still need to follow the screening recommendations for their age group.

THE STRANG SCREENING STUDY

Strang has designed and performed a randomized trial of ways to help doctors and **women** get appropriate cancer screening. We have presented preliminary results in many research meetings but are awaiting the results from the last patient enrolled in the study to publish our results. We have learned a lot about how doctors and patients talk about screening and problems they have communicating with one another. Stay tuned!

Source: American College of Gynecology and the US Preventive Services Task Force.

For further information on screening for cervical cancer visit strang.org.

Authors: Michael P. Osborne MD, MSurg, FRCS, FACS President **Strang** Cancer Prevention Institute
James A. Talcott MD, SM, Consultant **Strang** Cancer Prevention Institute

The Strang Cancer Prevention Cookbook

Roasted Eggplant Dip

Reduce Your Risk for Cancer by Eating a Healthy Diet!

8 Servings

1 medium eggplant (about 1 1/4 pounds) halved lengthwise
1 tablespoon olive oil
2 garlic cloves peeled
1 medium potato (about 6 ounces), baked or microwaved and peeled
½ cup 1% cottage cheese or 2 ounces lite silken tofu
2 tablespoons tahini (toasted sesame paste)
1 teaspoon lemon juice
1 teaspoon cayenne pepper
2 teaspoons toasted sesame oil
salt



Preheat the oven to 350 degrees F

Brush the flesh of the halved eggplant with 1 teaspoon of the olive oil. Place on a non stick baking pan, cut side down, and roast for 20 to 30 minutes. Remove from the oven and let cool. Scoop the pulp from the skin of the eggplant and place in the bowl of a food processor. Add the roasted garlic and potato and puree. Then add the cottage cheese, tahini, lemon juice, and cayenne and puree again until smooth. With the motor running, drizzle in the sesame oil and remaining 2 teaspoons olive oil. Season to taste with salt and transfer to an attractive serving bowl.

Calories 110, protein 4g, carbs 15g, fat 4g, cholesterol 1mg, dietary fiber 2g, saturated fat 1g

MAJOR SOURCES OF POTENTIAL CANCER FIGHTERS

Phytochemicals: allium compounds, plant polyphenols, (flavonoids, phenolic acids), phytic acids, plant sterols, terpenes (monoterpenes)

Recipe by Laura Pensiero, R.D. Owner Gigi Trattoria, Rhinebeck, New York



January is Cervical Cancer Awareness Month



Strang Cancer Prevention Institute
575 Madison Avenue 10th Floor
New York, NY 10022
Tel: (212) 501-2111 www.strang.org

Editor
Merle K. Barash MA AEd, MA Psya

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