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Cervical Cancer

Cervical cancer is a cancer of the lower part of the uterus or womb. This lower part is called the cervix. Cancer of the cervix is caused by certain types of human papillomavirus (HPV). Many women come into contact with this virus during their life. But most HPV infections clear up on their own, especially in women <30 years of age. The infections that don't go away can cause cervical cancer in some women.

What are the types of cervical cancer?

There are 3 types of cervical cancer. Squamous cell cervical cancers are the most common. Today, they are 2-3 times more common than the cervical adenocarcinoma type.¹ The least common type is called adenosquamous cervical cancer. It is a mixture of the other 2 types.

Screening has decreased the incidence of squamous cell cervical cancer.² But it hasn't decreased the number of cervical adenocarcinomas. This might be because this type of cervical cancer is harder to detect using the Pap test.²

Screening for cervical cancer

In the past, doctors used only a Pap test (also called cytology) for cervical cancer screening. The Pap test looks at cervical cells for changes that might lead to cancer. Today, doctors also use HPV testing when screening some patients.

Age (years)	Recommended Screening ³
<21	No screening
21 to 29	Pap test every 3 years
30 to 65	Pap test + HPV every 5 years (preferred) OR Pap test every 3 years
>65	No screening (if low cancer risk)

Women who have been vaccinated for HPV should be screened the same way as women who haven't had the vaccine. This is because the vaccine doesn't protect against all types of HPV.



Types of HPV

There are 14 types of HPV that cause cervical cancer. Types 16 and 18 are the most important types. Together, they cause 71% of all cervical cancers.⁴ But type 45 is important too. It causes 5% of squamous cell cervical cancers.⁴ It causes 12% of cervical adenocarcinomas.⁴ All together, these 3 types cause 75% of squamous cell cervical cancers.⁴ They cause 94% of cervical adenocarcinomas.⁴

HPV Type	% of Squamous Cell Cervical Cancers ⁴	% of Cervical Adenocarcinomas ⁴
16	62	50
18	8	32
45	5	12
Other	25	6

The HPV vaccine protects against type 16 and 18. It does not protect against the other high-risk types that cause cervical cancer.

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How the laboratory can help

The laboratory plays a big role in cervical cancer screening. When you go to your doctor for a Pap test, your doctor collects a specimen. Then your doctor sends it to the lab for testing. The laboratory can also do different types of HPV tests. These tests can tell you if you have one of the types of HPV that may cause cervical cancer. Cervical adenocarcinomas are hard to detect with Pap testing.² So HPV testing might prove to be especially important for screening.

Cervical cancer is much less common than it once was, but it still affects many women. By treating the changes that might lead to cancer, doctors can help prevent it. Regular screening should be part of your personal healthcare. If you are between 30 and 65, ask your doctor for both a Pap and an HPV test.

References

1. Adegoke O, Kulasingam S, Virnig B. Cervical cancer trends in the United States: a 35-year population-based analysis. *J Womens Health*. 2012;21(10):1031-1037.
2. Zappa M, Visioli CB, Ciatto S, et al. Lower protection of cytological screening for adenocarcinomas and shorter protection for younger women: the results of a case-control study in Florence. *Br J Cancer*. 2004;90(9):1784-1786.
3. Saslow D, Solomon D, Lawson HW, et al. American Cancer Society, American Society for Colposcopy and Cervical Pathology, and American Society for Clinical Pathology screening guidelines for the prevention and early detection of cervical cancer. *CA Cancer J Clin*. 2012;62(3): 147-172.
4. de Sanjose S, Quint WG, Alemany L, et al. Human papillomavirus genotype attribution in invasive cervical cancer: a retrospective cross-sectional worldwide study. *Lancet Oncol*. 2010;11(11):1048-1056.