

A Pap Test Primer

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In 1928 a doctor named Papanicolaou published a scientific paper entitled “New Cancer Diagnosis,” describing his discovery, the first observation of cancer cells in a smear taken from the cervix. While he did not immediately predict the method’s usefulness as a diagnostic tool, he did express hope the his new test would prove useful in detecting cancer in its early stages, at a time when it can more easily be treated.

Dr. Papanicolaou’s results were not appreciated at first. In fact, ten years passed before the new smear method was tested in clinical trials. The effectiveness of the Pap test was soon proven as it helped reduce the death rate from cervical cancer by 74% between the 1950s, before screening was routine, and 1992.

Today, the Pap test, often called a Pap smear, is used widely to detect cell abnormalities that may lead to invasive cancer of the cervix. Early discovery of these changes means that treatment can begin before the cancer develops or spreads. As with most cancers, early detection and treatment greatly improve the chance of success.

The actual process used for a Pap smear is quite simple and is carried out during a pelvic exam. The doctor collects a small sample of cells from the surface of the cervix, places them into a solution which is then sent to a laboratory. Here, technicians examine the cells looking for abnormal growth or patterns that would suggest cancer, or changes that could lead to cancer.

While the Pap test is primarily used for detecting cervical cancer and pre-cancerous cells, it can also detect herpes, the Human Papillomavirus (HPV) and other diseases.

A Pap smear and pelvic exam are important parts of every woman’s health care. Still, the Pap test is not intended for everyone. Current guidelines suggest that women should be tested at least every three years, beginning about three years after first having sexual intercourse — but no later than age 21. Women aged 65 – 70 who have had at least three normal Pap tests, and no abnormal ones, in the past ten years may decide to stop having the test. Women who have had a hysterectomy can also forego the test, unless the surgery was carried out as treatment for cancer or pre-cancer. In every case, though, the decision about Pap testing should be made in discussion between a woman and her doctor.

Pap testing is primarily carried out as a screening tool. This refers to testing aimed at the early detection of a disease within a population that has been grouped into risk categories. Organized screening is done on the group with the highest probability of disease. Screening tests are best used with diseases that cause mortality and high morbidity (being unhealthful or not well), have treatment available, and for which there is a reliable and cost-effective test. Cancer of the cervix fits the bill in all three cases, thus the Pap test.

The risk factors for cervical cancer include a personal history of precancerous changes of the cervix, being infected with some types of HPV, starting sexual intercourse at an early age (younger than 18 years old), and having a weakened immune system.

When Dr. Papanicolaou first presented his findings, he hoped that his new test might even detect pre-cancerous conditions. Indeed it does — talk to your doctor about it.

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Call-out: “The effectiveness of the Pap test was soon proven as it helped reduce the death rate from cervical cancer by 74% between the 1950s, before screening was routine, and 1992.”

