

SUMMIT

Naturopathic News

PAP Screening: Cervical Cancer Prevention

As women, we are told to schedule yearly visits with our health care providers in order to complete our joyous Pap exam. Why is this dreaded exam so important? What are the advantages to maintaining this annual routine?

In some developing countries where women do not have the advantage of regular Pap screening exams, cervical cancer is the #1 cause of cancer death in women.

But, what does a Pap have to do with cancer? The Pap test, named after Dr. George Papanicolaou, who invented the laboratory analysis around the early 1940's, is a screening technique used to identify early changes that may, if left unattended, develop into invasive cancer of the cervix (or, neck of the uterus). In the United States, cervical cancer is the most common gynecological cancer in women aged 15 – 34. The American Cancer Society predicts that there will be about 10,520 new cases of invasive cervical cancer in the US in 2004. About 3,900 women will die from this disease. However, the rates have declined significantly since the introduction of regular Pap screening almost fifty years ago. From 1955 to 1992, the number of US cervical cancer deaths decreased by about 74%, a success mostly attributed to regular Paps.

Over 90% of early pre-cancerous changes can be detected by regular Pap screening. When found and treated early, cervical cancer often can be cured. The point of the annual Pap exam, therefore, could be to save your life.

During the Pap exam, the medical practitioner collects a sample of cells from the surface of the cervix. These cells are then assessed microscopically for signs of viral infection, cellular changes or cancer. The goal is to detect and treat early cell changes before they develop into full-blown cancer. These early, pre-cancerous changes of the cells, termed "cervical dysplasia", represent a transition from normal, healthy surface cells to abnormal or atypical cells. Cervical dysplasia can range from mild to severe and still produce no symptoms or visible lesions. Currently, the only way to detect early cell changes is through routine Pap screening.

Human Papilloma Virus

Cervical dysplasia and cancer of the cervix are unique in that they are sexually transmitted diseases. Approximately 90% of cervical dysplasias are attributed to prior infection with a virus called Human Papilloma Virus, or HPV. HPV is spread through sexual contact, and it's estimated that 70% of sexually active women are, or have been, infected. Past exposure to HPV can lead to a dormant virus that can surface in the future. The virus may cause no symptoms, visible warts or non-visible warts with cervical dysplasia, depending on which of the approximately 60 different strains of HPV is present. Certain strains of HPV are more aggressive, and therefore more likely to lead to severe dysplasia and cervical cancer. However, an estimated 70-90% of HPV infections are harmless and resolve without treatment.

Abnormal Paps

Although the human papilloma virus is the main risk factor in the development of cervical tissue abnormalities, other factors have been shown to increase risk, including cigarette smoking, early age of first intercourse, multiple partners, unprotected sex (without condoms) and a weakened immune system. Approximately 7% of Pap results in the United States show some level of abnormality. The abnormalities range from mildly atypical cells, to dysplasia called CIN I, II and III (“cervical intraepithelial neoplasia”) or LSIL and HSIL, to non-invasive cancer, and rarely, to invasive cancer. Mild cervical dysplasia may progress to more severe dysplasia or even to cancer. However, cervical dysplasia often spontaneously regresses with no treatment. The more advanced the dysplasia, the less likely it is to heal on its own, so aggressive treatment is needed.

Treatment

The severity of the dysplasia determines what course of action should follow. In mild cases, a “watch and wait” approach may be recommended. In other words, the patient would be instructed to return for a follow-up Pap test. In most cases, the practitioner will recommend further diagnostic testing. This involves closer examination and biopsy of the cervical tissue using a binocular-like instrument called a colposcope. The results of the “colposcopy” will then help to determine the therapy. Treatment depends on the severity of the dysplasia, as well as other factors such as medical history and the strain of HPV involved. Mild cervical changes may simply be closely monitored. Standard as well as naturopathic medical treatment for moderate to severe cases of dysplasia includes a variety of in-office procedures to remove the pre-malignant, viral infected cells. The cells of the cervix regenerate rapidly, allowing healthy cells to grow back in. Treatment of abnormal cervical tissue, therefore, has a high success rate.

Prevention

Although medical procedures for abnormal cervical tissue begin only when the dysplasia is beyond mild, there are preventative measures that can help to ensure that dysplasia does not progress, or even better, keep Pap tests normal. Bearing in mind the risk factors, certain preventative measures are obvious: don’t smoke, use condoms and maintain monogamy. In addition, a healthy immune system is critical. This is where naturopathic medicine shines. Natural prevention and treatment of cervical dysplasia involves treating the whole person. Lifestyle factors, such as sufficient exercise, adequate rest and minimal stress are important in optimizing immune function. In addition to avoiding co-carcinogens, such as nicotine, dietary and nutritional supplementation provide anti-oxidants, such as vitamins A, C and E, folic acid, selenium and the carotenoids, that help protect the cells from damage. Local and systemic botanical and nutritional therapeutics can increase the strength of the body’s immune system and decrease the risk of viral infection.

General health maintenance and awareness of potential risk factors are both essential in maintaining the health of the cervix. However, when abnormalities do arise, more aggressive treatments may be necessary. The milder the cervical cell changes, the more gentle the treatment options available. Early detection is key, so regular cervical Pap screening tests are critical.

Screening recommendations

The recommendation for Pap screenings varies between individuals. Women who are over the age of 21 or who have been sexually active for three years should have a Pap test every one to three years, depending on their unique situation. Menopausal women need to continue with their regular exams until otherwise advised by their practitioner. Even some women who have had a hysterectomy should have Pap tests, depending on the type of surgery performed and the reason for the procedure. It is important that women consult their healthcare provider to determine which schedule is appropriate.