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Heart to Heart Talk

with Philip S. Chua, M.D.

Cervical Cancer

What is cervical cancer?

Cervical cancer is malignant tumor of the cervix (mouth of the womb). It is the third most common gynecologic cancer, the second being cancer of the ovary. The most common gynecologic malignancy is endometrial (inner wall of womb) cancer, which is the fourth most common cancer in women. The first being cancer of the breasts, followed by colorectal cancer and lung cancer. Cervical cancer develops in women at the men age of 50 years old, although it can occur in women as young as 20.

How prevalent is cervical cancer?

In the Philippines, there are about 5000 new cases of cervical cancer each year. However, more alarming than that is the fact that there are between 10,000 to 25,000 women walking around (not seen by physician) who have undiagnosed pre-invasive lesions in their cervix. For every four survivors of breasts cancer, there are less than 3 women who survive cervical cancer, which shows how virulent cervical cancer is.

What is a precursor lesion?

A precursor lesion is a pathology (abnormal tissue anatomy) that will transform itself into cancer, if not diagnosed and treated early. Before cancer of the cervix happens, a pre-invasive lesion develops in the cervix over a number of years, most often ten or more. If a woman with this precursor lesion is examined by a physician before malignant transformation takes place, resulting in early diagnosis and treatment, the development of cervical cancer is prevented. This deadly cancer is indeed preventable!

Is cervical cancer a sexually transmitted disease?

Yes, it is essentially so. The risk of developing cancer of the cervix is inversely related to the age at first sexual intercourse and directly related to the number of sexual partners over the lifetime of the woman. The younger the female when she had her first sexual experience, the higher the risk; the more the number

of sexual partners, the greater the risk of cervical cancer. The risk also rises for sexual partners of men whose other sexual partners had cervical cancer. And those who have HIV-AIDS virus or Human papillomavirus (HPV) infection are also more prone to develop cancer of the cervix.

What does HPV infection do?

Human papillomavirus, which causes genital warts, invades both sexual partners' system during sexual intercourse and integrates itself into the DNA of cells. The virus lives in the body permanently, even after treatment, and can lie dormant for years, only to become active when the person's immune system is low. This virus can also damage the immuno-suppressor genes in the immune system, making the individual more susceptible to cancer formation.

Is there a treatment for external genital warts?

Yes, there is. A new drug, called Imoquimod, has been introduced to the market as a breakthrough medication for HPV infection (which the patient applies herself) that will arrest the growth and spread of genital warts.

Any contributing factor in cervical cancer?

The other very significant risk factor in malignant transformation of a preinvasive lesion to a full blown cervical cancer is cigarette smoking. Smoking has been shown to dramatically increase the risk of cervical intraepithelial neoplasia (CIN) and cervical cancer, not to mention cancer of the lungs, breasts, urinary bladder, etc. The other factor observed to be associated with cervical cancer is poverty.

What are the signs and symptoms of CIN?

The precursor lesion, cervical intraepithelial neoplasia (CIN), is most often asymptomatic, discovered only because of an abnormal Pap Smear. Early-stage cervical cancer presents with irregular vaginal bleeding, most often postcoital (after sex), although intermittent bleeding may also be present. Those with larger cervical cancers or advanced stage of the illness may have foul-smelling vaginal discharge, abnormal bleeding or pain in the pelvis (lower abdomen).

How is diagnosis made?

Cytologic (tissue from the cervix) examination (known as Pap Smear) can detect more than 90% of cervical intraepithelial neoplasia (CIN) before any symptoms develop. Unfortunately, there is a 15 to 40% false negative (undetected cancer) depending on the laboratory and patient population. Statistics have shown

that about 50% of patients with cervical cancer have never had a Pap Smear for about 10 years.

If the Pap Smear is negative, then what?

If the woman is healthy and without any complaints or symptoms, and the Pap Smear is negative, she will simply need to have a regular gynecologic follow-up including another Pap Smear, annually or sooner, depending on the advise of her gynecologist. If the Pap Smear is positive, the suspicious lesion of the cervix should be biopsied directly. If no lesion is seen, a colposcopy (magnified, lighted, fiberoptic, flexible mini-telescope) can identify the areas of the cervix, localize the lesions, that need to be biopsied. A colposcopic-directed biopsy most often provides an accurate diagnosis. If this is not conclusive, then a cervical canonization biopsy has to be done, using a loop electrical excision procedure (LEEP), laser or cold knife or cryotherapy.

What are the survival rates following treatment?

The survival rate depends greatly on the stage of the cancer. Invasive squamous cell carcinoma of the cervix is usually localized or regional for a long time; distant metastases (spread) occur late. The five-year survival rate is between 80% to 90% for Stage I, 50% to 65% for Stage II, 25% to 35% for Stage III, and 0% to 15% for Stage IV. Stage 0 is carcinoma in situ, cervical epithelial neoplasia (CIN); Stage I is when the cancer is confined to the cervix only; Stage II, cancer extends beyond the cervix but not to the pelvic wall, involving the vagina but not the lower third; Stage III, cancer extending to the pelvic (lower abdominal) wall, and involving the lower third of the vagina; and Stage IV, when the cancer extend beyond the pelvis, involving the urinary bladder or rectum, with distant spread. The treatment, depending on the stage of the cervical cancer, could range from LEEP, laser, cold knife or cryotherapy, to hysterectomy, radical cancer surgery, radiation therapy, or chemotherapy for those with distant metastases. The attending gynecologist will determine the treatment protocol to follow, based on all medical information, laboratory findings and staging data obtained.

What is the best strategy?

Obviously, the best strategy is to prevent the cancer from developing. The nature of cervical cancer is in itself "helpful", in the sense that, unlike most forms of cancers, cervical cancer starts with a precursor (early warning) lesion (CIN), which, if diagnosed and treated early, can prevent the development of cervical cancer. This type of cancer is indeed preventable, if proper annual screening (Pap Smear and gynecological exam) is religiously adhered to. For those with vaginal bleeding or other suspicious symptoms, we recommend immediate consultation with your gynecologist.

Please add the usual footnotes here. Thanks.