Archives in Cancer Research©
4 (11) 2023 : 001-003 • REVIEW ARTICLE

Cervical cancer

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AUTHORS' CONTRIBUTION: (A) Study Design · **(B)** Data Collection . **(C)** Statistical Analysis · **(D)** Data Interpretation · **(E)** Manuscript Preparation · **(F)** Literature Search · **(G)** No Fund Collection

ABSTRACT

Cancer is a condition in which the body's cells proliferate unchecked. Even if it later spreads to other body areas, cancer is always designated after the area of the body where it first develops. Cervical cancer is a kind of cancer that first appears in the cervix. The vagina (birth canal) and the top portion of the uterus are joined by the cervix. When a woman is pregnant, the baby develops in the uterus (also known as the womb). Cervical cancer is a danger for anybody who has one. People over 30 are more likely to experience it. Cervical cancer is mostly brought on by persistent human papillomavirus (HPV) infection. A common virus called HPV is transmitted during intercourse from one person to another. At some time in their life, at least half of those who engage in sexual activity will have HPV, yet few women will get cervical cancer. Cervical cancer can be avoided with the use of screening tests and the HPV vaccination. Early detection of cervical cancer greatly improves treatment options, length of survival, and quality of life [1-5].

Keywords: Cervical Cancer; Human papillomavirus; HPV vaccination; Common virus

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Word count: 1954 **Tables:** 00 **Figures:** 00 **References:** 10

Received: 01.07.2023, Manuscript No. ipacr-23-13716; **Editor assigned:** 03.07.2023, PreQC No. P-13716; **Reviewed:** 17.07.2023, QC No. Q-13716; **Revised:** 22.07.2023, Manuscript No. R-13716; **Published:** 28.07.2023

INTRODUCTION

Cancer that begins in the cervix's cells is called cervical cancer. The uterus (womb)'s lower, thin end is known as the cervix. The vagina (birth canal) is joined to the uterus via the cervix. Typically, cervical cancer progresses gradually over time. The cervical tissue undergoes changes known as dysplasia, in which abnormal cells start to emerge in the tissue, before cancer develops in the cervix. If left unchecked or untreated, the abnormal cells may eventually develop into cancer cells, expand deeper into the cervix, and spread to nearby tissues.

Two primary sections make up the cervix:

- The exterior portion of the cervix that is visible during a gynecologic exam is termed the ectocervix (also known as the exocervix). Squamous cells, which are tiny, flat cells, cover the ectocervix.
- The endocervix is the portion of the cervix that is inner and creates the canal that joins the vagina and uterus. Column-shaped glandular cells that produce mucus line the endocervix.

SIGNS AND SYMPTOMS

Cervical cancer alterations seldom result in symptoms. A cervical screening test is the only method to find out whether there are abnormal cells that might turn cancerous. The following are the most typical symptoms if early cell alterations progress to cervical cancer:

- bleeding between cycles in the vagina
- longer or thicker than normal menstrual bleeding
- Pain during sexual activity
- bleeding following a sexual act
- pelvic discomfort
- a change in your vaginal discharge, such as increased discharge or discharge that is visibly or odoratically different from normal
- bleeding in the vagina after menopause.

CAUSES

The main risk factor for cervical cancer, chronic infection with certain high-risk forms of the human papillomavirus (HPV), accounts for almost all occurrences of the disease. Smoking is the other major risk factor for cervical cancer.

According to some research, women who have used the pill for five years or more are more likely to develop cervical cancer among HPV-positive individuals. The danger is negligible, and studies have indicated that using the pill lowers the risk of developing ovarian and uterine cancer.

A weaker immune system, smoking, passive smoking, and your mother's use of diethylstilbestrol (DES), a synthetic version of the oestrogen hormone during pregnancy

(between 1939 and 1971), are additional risk factors. Eight out of every ten women will get genital HPV at some point in their life. Only a few varieties of HPV cause cervical cancer, and the majority of women who carry the virus never get the disease.

DIAGNOSIS

A colposcopy reveals the location and characteristics of aberrant cervix cells. The doctor inserts a speculum into your vagina to use a colposcope, a device that magnifies the region like a pair of binoculars, to inspect the cervix and vagina. It is positioned close to your vulva but not inside of your body. Colposcopists—usually gynaecologists or, in certain clinics, nurse practitioners—perform the surgery. The colposcopist will often collect a tissue sample (biopsy) from the surface of the cervix if they notice any suspicious-looking spots so that a pathologist may examine it under a microscope.

A colposcopy is a process performed to examine the cervix, vagina, and vulva up close in order to find altered or abnormal cells and determine what they appear like. Your doctor will have you lay on your back while they use a speculum to open the vagina so they may examine your cervix, vagina, or vulva using a colposcope, a magnification device with a light that looks like a pair of binoculars on a stand. Your doctor could apply a fluid to your vagina and cervix to highlight any abnormal spots.

Typically, a colposcopy lasts 10 to 15 minutes. During the colposcopy, you can experience some little pain. A biopsy entails your doctor taking some tissue from the vagina, vulva, or cervix surface. The colposcopy may be used to do this. A pathologist will analyse the tissue sample under a microscope in a lab setting. In usual, a week passes before the colposcopy and biopsy results are made public. You can suffer cramping that feels like menstruation discomfort following a colposcopy with a biopsy. You might wish to request painkillers from your doctor. For a few hours, there can also be some little bleeding or vaginal discharge. In order to promote cervix healing and lower the chance of infection, your doctor may advise not using tampons or engaging in sexual activity for two to three days following a biopsy.

When you learn you have cervical cancer, you could experience shock, upset, anxiety, or confusion. These are typical reactions. With your doctor, loved ones, and friends, discuss your treatment choices. Find all the information you require. How involved you want to be in selecting your care is entirely up to you. Every year, about 850 Australian women are diagnosed with cervical cancer. It may happen at any age, although women over 30 are more likely to have it identified. The human papillomavirus (HPV) is mostly to blame for cervical cancer. However, since a nationwide screening programme was launched in the 1990s and a national HPV vaccination programme was introduced in 2007, the incidence of cervical cancer has considerably dropped in Australia [6-10].

Women who simply have a tumour in their cervix are typically advised to have surgery. Your choice of surgery will depend on how far the cancer has gone within the cervix. Cone biopsy, which involves removing a cone-shaped section of healthy tissue from the area surrounding the tumour, is used to treat very early cervical cancer, especially in young women who want to become mothers. The most common procedure is a hysterectomy. Under general anaesthesia, the uterus and cervix will be removed during this procedure. During surgery, it is also possible to remove lymph nodes on the lateral wall of the pelvis or other reproductive organs. A trachelectomy, which involves removing the cervix in part or in its entirety together with the upper section of the vagina, is a less frequent procedure. Young women with early-stage cancer who want to have children may utilise this.

Chemotherapy employs medications to either kill or delay the development of cancer cells. If the cancer is advanced or has returned after treatment, chemotherapy may be used. Chemoradiation is the term for the combination of chemotherapy and radiation therapy. Drugs used in chemotherapy are often administered intravenously. The type of cervical cancer you have and any additional therapies you are receiving will determine how many sessions you need. If radiation treatment is not used, you will most likely undergo six chemotherapy sessions every three to four weeks.

X-rays are used in radiation therapy (radiotherapy) to either kill or harm cancer cells. It targets places where cancer cells may have disseminated or cancerous bodily components. Radiation therapy may be used to remove any leftover cancer cells following surgery or as the primary method of treatment for cervical cancer. You will often get radiation therapy along with chemotherapy (chemoradiation) if the cancer has progressed to the tissues or lymph nodes around the cervix.

The Papanicolaou test (Pap test), which examines cervical cells, has significantly decreased the incidence and death of cervical cancer. Liquid-based cytology could decrease the quantity of subpar samples. With the right follow-up, Pap tests every three to five years can cut the risk of cervical cancer by up to 80%. An examination and potential preventative therapy, known as colposcopy, may be considered in the case that abnormal results imply the existence of precancerous alterations. Treatment for low-grade lesions may have a negative impact on future fertility and pregnancies. Women are more likely to be checked when they receive personal invites urging them to do so. The probability that women will attend for screening is increased by educational materials as well, but they are less effective than invitations.

CONCLUSION

Participants' general understanding about cervical cancer and ways to avoid it was insufficient. More than 80% of the participants don't aware that HPV is a factor in cervical cancer. This is particularly concerning since preventing HPV infection is the key to preventing cervical cancer. Additionally, just 21.4% of people are aware of cervical cancer screening procedures. Less than half of them, 47 (43.9%), agreed that a woman who appears healthy should get the test at least three times during her lifetime.

However, individuals who were aware about cervical cancer had a somewhat upbeat outlook. The main source of knowledge on cervical cancer was the media. Any issue with public health, though, cannot be resolved on its own. To raise the degree of women's general knowledge of cervical cancer and its prevention, governmental and non-governmental organisations as well as other concerned entities must cooperate. The government should also attempt to coordinate awareness-raising activities across health institutions and other industries.

REFERENCES

1. **Jayasekera J, Onukwugha E, Bikov K, et al**. The economic burden of skeletal-related events among elderly men with metastatic prostate cancer. *J Pharmacoeconomics.* 2014; 32(2): 173-191.
2. **Katagiri H, Okada R, Takagi T, et al**. New prognostic factors and scoring system for patients with skeletal metastasis. *Cancer Med*. 2014; 3(7): 1359-1367.
3. **Biermann JS, Holt GE, Lewis VO, et al**. Metastatic bone disease: diagnosis, evaluation, and treatment. *J Bone Surgery.* 2009; 91(8): 1518-1530.
4. **Dey YN, Mahor S, Kumar D, et al**. Gastrokinetic activity of Amorphophallus Paeoniifolius Tuber in rats. *J Intercult Ethnopharmacol*. 2016; 5(1): 36-42.
5. **Harrington KD, Sim F, Enis J, et al**. Methylmethacrylate as an adjunct in internal fixation of pathological fractures. Experience with three hundred and seventy-five cases. *J Bone Joint Surgery.* 1976; 58(9): 1047-1055.
6. **Weber KL, Randall RL, Grossman S, et al**. Management of lower-extremity bone metastasis. *J Bone Joint Surg Am.* 2006; 88(4): 11-19.
7. **Toma CD, Dominkus M, Nedelcu T, et al**. Metastatic bone disease: a 36-year single centre trend-analysis of patients admitted to a tertiary orthopaedic surgical department. *J Surg Oncol*. 2007; 96(5): 404-410.
8. **Oboma YI, Susan BE, Elesha SO, et al**. Breast cancer biomarkers at Niger delta University hospital: Comparisons with national and International trends and clinical significance. *J Patphy*. 2017; 903(7): 1-6.
9. **Adler RA, Gill RS**. Clinical utility of denosumab for treatment of bone loss in men and women. *Clin Interv Aging*. 2011; 6(6): 119-124.
10. **Loprinzi DP, Frith E**. Physical activity, mortality and prostate disease. *J Mol Pathophysiol*. 2016; 5(8): 81-84.