



# Cervical Cancer Diagnosis: Early Detection and Screening

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## INTRODUCTION

Cervical cancer is a significant health concern worldwide, particularly among women. It is one of the most common types of cancer that affects the cervix, the lower part of the uterus. However, with advancements in medical technology and increased awareness, the early detection and screening of cervical cancer have become crucial in improving outcomes and saving lives. This article explores the various methods of cervical cancer diagnosis and highlights the importance of regular screening.

## DESCRIPTION

The Pap smear test, also known as a Pap test, is the most widely used screening method for cervical cancer. It involves collecting a sample of cells from the cervix and examining them under a microscope to identify any abnormal changes. The test can detect precancerous or cancerous cells even before symptoms develop, enabling early intervention. Human Papilloma Virus (HPV) is a common sexually transmitted infection known to be the leading cause of cervical cancer. HPV testing can be performed alone or in conjunction with a Pap smear to identify the presence of high-risk HPV strains that are associated with cervical cancer development. Colposcopy, if abnormal cells are detected through a Pap smear or HPV test, a colposcopy may be performed. A colposcopy is a procedure in which a healthcare provider uses a specialized instrument called a colposcope to closely examine the cervix, vagina, and vulva for any signs of abnormality. During the procedure, a vinegar solution is applied to the cervix, which helps highlight any abnormal cells. The colposcope magnifies the cervix, allowing the healthcare provider to identify suspicious areas for further evaluation. If necessary, a small tissue sample (biopsy) may be taken during the colposcopy for laboratory analysis. A biopsy is the definitive diagnostic procedure for confirming the presence of cervical cancer. It involves the removal of a small sample of tissue from the cervix for microscopic examination. Punch biopsy is a small, circular tool is used to remove a sample of tissue. Cone biopsy

is a cone-shaped portion of cervical tissue is removed for analysis. This procedure may be used for both diagnosis and treatment of early-stage cervical cancer. If cancerous cells are detected, further tests, such as imaging studies, may be conducted to determine the stage and extent of the cancer. Once cervical cancer is diagnosed, it is important to determine the stage of the disease. The staging process involves assessing the size of the tumor, its spread to nearby tissues or lymph nodes, and the presence of metastasis. Treatment options for cervical cancer depend on the stage and may include surgery, radiation therapy, chemotherapy, or a combination of these approaches. Early-stage cervical cancer is often treated with surgery, such as a hysterectomy, while advanced stages may require a combination of radiation therapy and chemotherapy [1-4].

## CONCLUSION

Regular screening and early detection play a crucial role in diagnosing cervical cancer at an early stage, when treatment options are most effective. Pap smear tests, HPV testing, colposcopy, and biopsies are essential tools in the diagnosis of cervical cancer. It is vital for women to prioritize routine screenings as recommended by their healthcare providers, as early detection.

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## CONFLICT OF INTEREST

The author's declared that they have no conflict of interest.

## REFERENCES

1. Ge F, Tie W, Zhang J, Zhu Y, Fan Y (2021) Expression of the HOXA gene family and its relationship to prognosis and immune infiltrates in cervical cancer. *J Clin Lab Anal.* 35 (11): 24015
2. Hu H, Zhu W, Qin J, Chen M, Gong L, et al. (2017) Acetyl-

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- ation of PGK1 promotes liver cancer cell proliferation and tumorigenesis. *Hepatology*. 65 (2): 515-528
3. Dang CV (2012) MYC on the path to cancer. *Cell*. 149 (1): 22-35
  4. Zhang Z, Chen F, Li S, Guo H, Xi H, et al. (2020) ERG the modulates warburg effect and tumor progression in cervical cancer. *Biochem Biophys Res Commun*. 522 (1): 191-197