

sonography. In patients with EC in our study, the detection of intratumoral blood flow has shown to be helpful in distinguishing between low-grade and high-grade tumors and also in predicting myometrial invasion and priorly check-up in order to improve their morbidity rate from the development of EC.

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CERVICAL CANCER IN INDIA

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Introduction

Each year, more than half a million women are diagnosed with cervical cancer and the disease results in over 300 000 deaths worldwide [1]. High-risk subtypes of the human papilloma virus (HPV) are the cause of the disease in most cases. The disease is largely preventable. Approximately 90 % of cervical cancers occur in low-income and middle-income countries that lack organised screening and HPV vaccination programmes. In high-income countries, cervical cancer incidence and mortality have more than halved over the past 30 years since the introduction of formal screening programmes. Treatment depends on disease extent at diagnosis and locally available resources, and might involve radical hysterectomy or chemoradiation, or a combination of both [2]. Conservative, fertility-preserving surgical procedures have become standard of care for women with low-risk, early-stage disease. Advances in radiotherapy technology, such as intensity-modulated radiotherapy, have resulted in less treatment-related toxicity for women with locally-advanced disease. For women with metastatic or recurrent disease, the overall prognosis remains poor; nevertheless, the incorporation of the anti-VEGF agent bevacizumab has been able to extend overall survival beyond 12 months. Preliminary results of novel immunotherapeutic approaches, similarly to other solid tumours, have shown promising results so far [1].

Aim

To identify the etiology cervical cancer, review the evaluation of a patient with cervical cancer, summarize the treatment and management options available for cervical cancer and describe interprofessional team strategies for improving care coordination and outcomes in patients with cervical cancer.

Material and methods of the research

The literature, case reports and statistical data on recent studies were analyzed.

The results of the research and their discussion

Cervical cancer, caused by HPV, is the third leading malignancy among women in the world, after breast cancer and colorectal cancer, with an estimated 527,624 new cases and 265,653 deaths in 2021. Incidence and mortality rates have been declining in most areas of the world in the past 30 years, at a worldwide rate of about 1.6 percent per year. This decline is a result of increased access to health

services, reductions in some risk factors (such as fertility rates), improvements in treatment, and successful cytology-based screening programs. India has a population of 436.76 million women aged 15 years and older who are at risk of developing cervical cancer. Every year 122844 women are diagnosed with cervical cancer and 67477 die from the disease. In India cervical cancer is the second most common cancer among women and also the second most common cancer among women between 15 and 44 years of age. Based on Indian studies about 82.7 % of invasive cervical cancers showed the presence of HPVs 16 or 18 (Systematic reviews and meta-analyses of the literatures by ICO HPV Information Centre). Other epidemiological risk factors for cervical cancer are early age at marriage, multiple sexual partners, multiple pregnancies, poor genital hygiene, malnutrition, use of oral contraceptives, and lack of awareness. India also has the highest (age standardized) incidence rate as 22 (per 100,000 women per year) of cervical cancer in South Asia compared to 19.2 in Bangladesh, 13 in Sri Lanka, and 2.8 in Iran. [2] The incidence of cervical cancer is shown in figure 1.

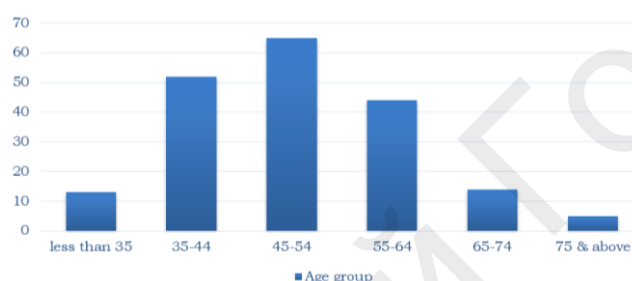


Figure 1 — Incidence of cervical cancer in India

In India, cervical cancer contributes to approximately 6–29 % of all cancers in women. The age-adjusted incidence rate of cervical cancer varies widely among registries; highest is 23.07/100,000 in Mizoram state and the lowest is 4.91/100,000 in Dibrugarh district. The pooled estimates of sensitivity and specificity of visual inspection with acetic acid (VIA), magnified VIA, visual inspection with Lugol's iodine (VILI), cytology (Pap smear), and human papillomavirus DNA were found to be 67.65% and 84.32 %, 65.36 % and 85.76 %, 78.27 % and 87.10 %, 62.11 % and 93.51 %, and 77.81 % and 91.54 %, respectively (table 1).

Table 1 — Age adjusted incidence rates and annual percentage changes for cervical cancer in Indian population

Registry	Average age adjusted rate in	Annual percentage change
Bengalore	20.68	-2.26
Barshi	22.53	-2.23
Bhopal	19.18	-1.81
Chennai	25.69	-3.48
Delhi	20.42	-2.73
Kerala	14.39	-1.99

There are several risk factors which increase the chances of developing cervical cancer. The most important risk factor for cervical cancer is infection by the human papillomavirus (HPV). HPV is mainly transmitted through sexual contact and most people are infected with HPV shortly after the onset of sexual activity. Skin-to-skin genital contact can transmit the infection; penetrative sex is not required for transmission. HPV infections usually clear up without any intervention within a few months after acquiring the infection, and about 90 % clear within 2 years. A small proportion of infections with certain types of HPV can persist and progress to can-

cer. The time period between the oncogenic (cancer causing) HPV infection and occurrence of the invasive cervical cancer is 15–20 years. Risk factors that may lead HPV infection to persist and progress to cancer: Early first sexual intercourse, multiple sexual partners, high parity, long-term use of hormonal contraceptives, tobacco use, immune suppression (for example, HIV-infected individuals are at higher risk of HPV infection and are infected by a broader range of HPV types), low socioeconomic status, poor hygiene and diet low in antioxidants, co-infection with *Chlamydia trachomatis* and Herpes simplex virus type-2.

Conclusion

In today's era, in spite of the availability of HPV vaccines and affordable and effective methods for early detection and treatment of cervical cancer precursor lesions, cervical cancer still continues to be a public health problem in India. The age-adjusted incidence rates of cancer cervix reported by majority of Indian cancer registries are much higher than the world age-adjusted incidence rate of 7.9/100,000 population but is lower or similar to cervical cancer incidence rates of 19.2/100,000 population seen in the South-East Asian region. Thus studies provide sufficient evidence that cervical cancer screening through simple test like VIA/VILI is affordable, feasible, and an accurate tool for implementation in all health-care settings. In addition, VIA/VILI also provides an opportunity to adopt «see and treat» approach, which is very useful in resource-poor countries where follow-up is poor. These tests can also be easily taught to grass root health workers, who can help in conducting the screening program in remote areas. However, for any cervical screening program to be successful in addition to the use of a reliable and accurate screening test, high rates of coverage and the ability to effectively provide treatment to test positive women are very important. Hence, the development of health services and generation of community involvement are keys to the initiative in reducing the burden of cervical cancer. Our study highlights the success of visual screening tool in early detection and mortality reduction of cervical cancer in a resource-poor setting and thus, provides a unique opportunity for developing countries to integrate screening of cervical neoplasia in primary health-care settings.

LITERATURE

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STATISTICAL ANALYSIS OF THE FREQUENCY OF ECTOPIC PREGNANCY IN INDIA AND COMPARISON OF THE CAUSES OF THE DISEASE BETWEEN INDIA AND BELARUS

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Introduction

Ectopic Pregnancy (EP) is a life-threatening emergency commonly encountered by medical practitioners where diagnosis can often be missed [1]. Any woman in the reproductive age group, presenting with lower abdominal pain or vaginal bleeding must raise the suspicion of an ectopic pregnancy to prevent mortality and morbidity