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RECENT TRENDS OF CERVICAL CANCER IN PATIENTS ATTENDING TO RIMS, RANCHI (JHARKHAND)

Pathology

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KEYWORDS

Squamous cell carcinoma(SCC), Pap smear, High grade intraepithelial neoplasia(HSIL), Low grade intraepithelial neoplasia(LSIL), Atypical squamous cell of undetermined significance(ASCUS), Vaginal intraepithelial neoplasia(VAIN).

INTRODUCTION: Invasive squamous cell carcinoma of the cervix is still the most common malignant tumor of the female genital tract in most countries[1,2]. Cancer of the uterine cervix is the second most common cancer among women world-wide. In India this is the commonest cancer among women and this country has the largest burden of cervical cancer patients in the world.

METHOD: The retrospective study of all cases who underwent screening by pap smear over a period from January 2015 to December 2017 in the department of pathology, RIMS, Ranchi.

MATERIALS AND METHOD: The purpose of the study is to create awareness and increasing compliance of patients to go for screening. Screening aims to detect the disease at the precancerous stage in patients attending to RIMS, Ranchi. Pap smear based cervical screening has reduced the Cervical Cancer incidence and mortality in different parts of the world. Pap tests are cytological preparations of exfoliated cells from the transformation zone and are stained with the Papnicolaou method. Using spatula or brush, the transformation zone is circumferentially scraped and the cells are smeared or spun down onto a slide.

RESULTS AND ANALYSIS: It is found that out of total of 106 cases, 50 cases were reported as LSIL , 28 were of HSIL, 11 were of SCC, 9 were of ASCUS, and 8 were of VAIN.

AGE-WISE DISEASE DISTRIBUTION

Age group in years	ASCUS	LSIL	HSIL	SCC	VAIN
21- 30	02	09	03	0	0
31-40	03	14	02	01	01
41-50	02	14	11	01	04
51-60	01	05	08	03	01
>60	01	08	04	06	02

DISCUSSION: Cervical cancer is most common cancer in Indian women though breast is the leading cancer site globally. The disproportionately high burden of cervical cancer in developing countries and elsewhere in medically underserved populations is largely due to a lack of screening that allows detection of precancerous and early stage cervical cancer[3,4]. Persistent infection of Human Papilloma Virus (HPV), a sexually transmitted double stranded DNA virus is considered the most significant and 'necessary' causal agent for the development of cancer of uterine cervix.

Approximately 30 HPVs that infect the ano–genital tract, of these 15 HPV types classified as 'high-risk' types (HPV types 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 68, 73 and 82) are associated with high grade cervical cancer precursor lesions and invasive cervical cancers. Among these, HPV6 and HPV11 cause approximately 90% of genital warts. In addition to HPV infection, co-factors such as parity, early age of marriage, genital hygiene, promiscuity, use of oral contraceptives, smoking, immune suppression (eg HIV), infection with other sexually transmitted agents and poor nutrition have been associated with the development of cervical cancer[5,6]. The national guideline for cervical cancer screening in India advocates screening of women between 30 years to 59 years of age. Cervical intraepithelial neoplasia (CIN) is a premalignant lesion that may exist at any one of three stages: CIN1, CIN2, or CIN3. If left untreated, CIN2 or CIN3 (collectively referred to as CIN2+) can progress to cervical cancer.

CONCLUSION: In India, the incidence of cervical cancer significantly rises around the age of 45 years and peaks at 55 years of age. In my study, older age groups (>50 years) were detected of carcinoma of cervix. A total of 106 cases were reported.

Cervical cancer remains a significant cause of morbidity and mortality among women globally, even though it is the cancer with the greatest potential for secondary prevention. This disease is highly preventable and curable. The disproportionately high burden of cervical cancer in developing countries and elsewhere in medically underserved populations is largely due to a lack of screening that allows detection of precancerous and early stage cervical cancer[6]. The recommendations include strategies based on three screening tests: HPV (cut-off level ≥1.0 pg/ml), Cytology (cut-off level ASCUS+, atypical squamous cells of undetermined significance). This is because once menopause occurs, the transformation zone, where most precancerous lesions occur, frequently recedes into the endocervical canal and prevents it from being fully visible.

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