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Study Of Cervical Pap Smears In A Tertiary Care Hospital NSC Govt. Medical College Khadwa (MP)

[1]Dr. Harish Chandra Yadav, [2] Dr. Purti A Saini, [3] Dr.Sonu Rawat [4]Dr. Rakesh Singh Hazari

[1]Junior Resident Department of pathology NSCGMC Khandwa, [2] Associate Professor Department of pathology NSCGMC Khandwa,[3] Demonstrator Department of pathology NSCGMC Khandwa [4] Professor & HoD Department of pathology NSCGMC Khandwa

Abstract

Background: Cervical cancer is the fourth leading cause of death in females worldwide. In India and other developing countries cervical cancer is the leading cause of morbidity and mortality. Repetitive cytological screening with Pap smear help to diagnose cervical cancer in pervasive stage.

Aims and Objectives: To evaluate the use of Pap smear screening method for detection of precancerous lesions of cervix. To increase awareness about screening program among women.

Materials and Methods: Study is carrying out by taking 165 Pap smear from patients attending gynecology OPD at NSC Govt. Medical College Khandwa (MP) from Sep 2022 to Aug 2024. Smears were reported as per the 2014 Bethesda system.

Conclusion: Pap smear test is a very simple, safe, noninvasive, economical OPD based procedure to detect pervasive cervical epithelial lesions. Every women should undergo Pap test at least once in her life before the age of 45 years. Timely screening of pervasive lesion allows presentation from invasive cervical smear.

Index Terms - Cervical cancer, Pap smear.

I. INTRODUCTION

Cancer of the cervix is a global health problem and it is a leading cause of mortality and morbidity among women worldwide. Every year in India, 142,844 women are diagnosed with cervical cancer and 77,477 die from the disease.1Cervical cancer is the second mostcommon cancer in women aged 15-44 years. India also has the highest age standardized incidence of cervical cancer in South Asia Bangladesh, Iran.1Cancer of cervix is readily preventable, by early detection and appropriate timely treatment of its precursor lesions by simple Pap screening test. But, women usually present to the clinic only when they have symptoms, such as pain, discharge, and/or abnormal bleeding.2Cervical epithelial cell abnormalities in the Pap smear represents a spectrum of intraepithelial lesions that lie along the pathway, from mild-to-severe dysplasia to invasive cancer.3Though Pap smear is a routine screening test, the overall sensitivity in detection of high grade squamous intraepithelial lesion (HSIL) is 70 -80%.4The Bethesda System (TBS) for reporting the results of cervical cytology was developed as a uniform system of terminology that could provide clear guidance for clinical management.

The present study is intended to evaluate the pattern of cervical Pap smear cytology at Tatertiary hospital and to correlate it with clinical findings..

II. METHOD

The Retrospective study was carried out at NSC Government Medical College Khandwa (MP) India during Sep 2022 to Aug 2024, total 165 patients were screened. The patients were in the age range of 19-70 years, having complaints like vaginal discharge, bleeding per vagina or something coming out per vagina, post-coital bleeding, intermenstrual bleeding, and pain in lower abdomen. History and symptoms along with parity were recorded. Smears were taken by trained technician using modified Ayres wooden spatula which was inserted and rotated 360 over cervix. Both ectocervix and endocervix were sampled. The cellular material obtained on the spatula and cyto brush was quickly smeared on a clean glass slide, labeled, fixed in 95% ethyl alcohol immediately and subsequently stained by Pap stain. After staining, slides were mounted with DPX (Distrene dibutyl phthalate xylene), screened and reported by two cytopathologist under light microscope according to the 2014 Bethesda system.

III. RESULT

Total 165 cervico-vaginal smears studied during Aug 2022 to Sep 2024 on patients, ranging from 19 to 70 years. Cytological findings broadly classified into unsatisfactory smears, normal and abnormal smears. In our study Cytological findings in table 1.

.Table 1: Cytological findings

Diagnosis	No. of cases	Percentage
Normal	35	21.19%
NILM	85	51.57%
I. Inflammatory	06	3.71%
• Candida	02	0.77%
• Trichomonas	04	26.80%
II.Reactive	25	15.71%
III.Metaplasia	02	1.33%
Atrophy	01	0.14%
Radiation	01	0.77%
ASCUS	01	0.35%
ASC-H	01	0.35%
HSIL	01	0.14%
SCC	01	0.28%

IV.DISCUSSION

Cancers of uterine cervix and breast are the leading malignancies seen in females of India. There should be an effective mass screening program aimed at specific age group for detecting precancerous condition before they progress to invasive cancers.5,6 Cervical cytology is currently widely used as the most effective cancer screening modality. Objective data from hospital-based studies are required in order to detect the efficiency of the screening test. This study contributes to assessing current levels of cervical screening in the tertiary teaching hospital in Khandwa (MP), India.In our study, the mean age of patients with abnormal smears was 43.7 years. Similar finding was detected by other studies. Most common age to develop carcinoma cervix is between 40 and 50 years and the precursor lesions occur 5 -10 years prior to developing invasive cancer. Various screening test for cervical cancer like Pap smear, liquid Pap cytology, automated cervical screening techniques, visual inspection of cervix after Lugol's Iodine and acetic acid application, speculoscopy, cervicography should be started for early detection of premalignant lesions.

IV. CONCLUSION

This study emphasized the importance of Pap smears screening for early detection of premalignant and malignant lesions of cervix. Larger studies are required to estimate the pattern of cervical cytological abnormalities along with detection of common HPV strains in cervical cancer in Indian population. Pap smear examination should begin at 30 years. By proper implementation of Pap screening program, incidence of invasive cervical malignancy can be prevented due to early detection of cervical premalignant lesions.

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