

TO STUDY THE PATTERN OF VARIOUS CERVICAL LESION

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Abstract

Background: Cancer of the cervix is an increasing health problem and an important cause of mortality in women worldwide. The incidence of cervical cancer arises worldwide.

Methods: A retrospective study was conducted in the Department of Pathology, JLN Medical College & Hospital Ajmer.

Results: A total of 100 smears were analyzed. Out of which 96.00% smears were satisfactory for evaluation. Out of 96.00% satisfactory smears, 30.00% shows normal smear and 52.00% shows benign cellular changes and 4.00% shows epithelial cells abnormality. 5.00% smears shows Bacterial vaginosis. 45.00% were inflammatory smears.

Conclusion: We concluded that cervical cytology by Pap smear is a simple, safe and effective test to detect premalignant and malignant lesions of cervix at an early stage, and thus help the clinicians in early and more efficient management of the patients.

Keywords: Pap smear, Cervix, Cytology.

Introduction

Cancer of the cervix is an increasing health problem and an important cause of mortality in women worldwide. The incidence of cervical cancer arises worldwide. The difference in incidence between developing and developed countries, where cervical cancer cases have been significantly reduced, is large. In developing countries like India, the burden of cervical cancer is still high. According to the World Cancer statistics, >80% of all the cervical cancer cases are found in developing and low-resource countries, because of a lack of awareness and difficulty in running cytology-based screening programs.¹ More than one-fifth of all cervical cancer deaths occur in India. Every year, 122,844 women in India are diagnosed with cervical cancer, and 67,477 women die from the disease.²

Unlike most other malignancies, cancer of cervix is readily preventable when effective programmes are conducted to detect and treat its precursor lesions. Since the introduction of Pap test, a dramatic reduction has been observed in the incidence and mortality of invasive cervical cancer worldwide.³

Materials and methods

A retrospective study was carried out in the department of pathology, JLN Medical College, AJmer

Selection Criterion:

Inclusion criteria:

1. Cervical cytology samples from all the females of age 21 years and above attending the obstetrics and

gynaecology out patient Department with presenting complaints of white discharge per vagina, bleeding per vagina, post-coital bleeding, irregular menstruation and for routine cervical cancer screening.

Exclusion criteria-

1. Non co-operative patients.
2. Patients who do not give consent.
3. Patients with massive bleeding per vagina.
4. Treated cervical carcinoma patients.
5. Pregnant women.

The cases were examined in detail and findings recorded on the standard proforma. First a careful history of the patient taken, complaints noted in the order of importance and duration. A detailed obstetric, menstrual, contraceptive history noted.

Methodology

- After obtaining approval and clearance from the institutional review board, only those patients meeting the inclusion and exclusion criteria enrolled for the study.
- Informed consent obtained from each participant.
- After obtaining proper consent, proforma was given to each patient and detailed history was obtained. After that, physical examination was done and the patient was put in lithotomy position for specimen collection.

Data analysis

Data was recorded as per Performa. The data analysis was computer based; SPSS-22 was used for analysis. For

categoric variables chi-square test was used. For continuous variables independent samples's *t*-test was used. *p*-value

<0.05 was considered as significant.

Results

Table 1: Analysis of pap smear

| Pap Smear | Total No. | % |
|--|-----------|-------|
| Total Smears | 100 | 100 |
| I. Adequacy of smears | 96 | 96.00 |
| Satisfactory for evaluation | 4 | 4.00 |
| Unsatisfactory for evaluation | | |
| II. General categorization | 30 | 30.00 |
| <i>Normal smears</i> | | |
| <i>Benign cellular changes</i> | 52 | 52.00 |
| <i>i. Specific Infections</i> | | |
| Bacterial vaginosis | 5 | 5.00 |
| ii. Reactive Changes | | |
| Inflammatory smears | 45 | 45.00 |
| Atrophic smears | 1 | 1.00 |
| C. Epithelial cells abnormality | | |
| i. Atypical epithelial cells | | |
| -Atypical squamous cells of undetermined significance (ASCUS). | 2 | 2.00 |
| -Atypical squamous cells cannot exclude HSIL (ASC-H) | 1 | 1.00 |
| -Atypical glandular cells of Undetermined Significance (AGUS). | 1 | 1.00 |
| ii. Low grade squamous intraepithelial lesion (LSIL) | 7 | 7.00 |
| iii. High grade squamous intraepithelial lesion (HSIL) | 2 | 2.00 |
| iv. Malignancy- Squamous cell carcinoma | 1 | 1.00 |

A total of 100 smears were analyzed. Out of which 96.00% smears were satisfactory for evaluation. Out of 96.00% satisfactory smears, 30.00% shows normal smear and 52.00% shows benign cellular changes and 4.00% shows epithelial cells abnormality. 5.00% smears shows Bacterial vaginosis. 45.00% were inflammatory smears.

Discussion

Cancer cervix is a leading cause of mortality and morbidity in developing countries like India most probably due to lack of proper screening facilities in the rural and suburban areas or due to the lack of awareness amongst the women of developing countries. Cervical cancer is the fourth most common cancer in the world. Developing countries accounted to about 80% of the global burden. Cervical cancer is the second most common cancer in women in India.⁴

So detection of its premalignant lesions is of utmost importance, which can be easily done by screening methods. The mainstay of cervical cancer screening is Papnicolaou (Pap) smear. Morbidity and mortality from cervical cancers have been shown to decrease substantially by the proper implementation of screening methods.

A Pap smear is a useful and an important method for cervical cancer screening. Worldwide, there have been efforts to prevent cervical cancer by screening women using PAP smears and thereby detecting and treating the precancerous lesions. Cervical cancer incidence can be reduced by as much as 90% in a population undergoing regular screening and having high quality and coverage.⁶⁵ However, in developing countries, due to lack of education and awareness, many women have never had a Pap smear. Thereby, proper implementation of screening program is the need of the hour.

A total of 100 smears were analyzed. Out of which 96.00% smears were satisfactory for evaluation. Out of 96.00% satisfactory smears, 30.00% shows normal smear and 52.00% shows benign cellular changes and 4.00% shows epithelial cells abnormality. 5.00% smears shows Bacterial vaginosis. 45.00% were inflammatory smears.

Khattak *et al.*⁵ and Sherwani *et al.*,⁶ found LSIL and HSIL on cytology to be more prevalent in patients who started sexual activity before 20 years of age.

Present study emphasized the significance of vaginal discharge and its association with neoplastic changes in the cervix. The results correspond with many previous studies.⁷

Conclusion

We concluded that cervical cytology by Pap smear is a simple, safe and effective test to detect premalignant and malignant lesions of cervix at an early stage, and thus help the clinicians in early and more efficient management of the patients.

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