

**Retrospective Analysis of Papsmear Screening for Detection of Cervical Carcinoma.**

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Correspondence Author: Dr.S.V.Nachiketha, Department of OBG, KIMS Hubli, Karnataka , INDIA.**Type of Publication:** Original Research Paper**Conflicts of Interest:** Nil**Abstract**

Objectives: To study the outcome PAP smears of women attending the Gynaecology OPD for detection of Carcinoma Cervix

Methodology: The retrospective study was conducted at gynec OPD in KIMS Hubli from Jan 2014- March 2014[3 months] by using records of OPD patients attending Institute for screening of cervical smears(N=100) noted. Detailed general, obstetrical, medical history noted. The outcome of cytopathological examination, as per “The Bethesda System” provided by pathology department was studied. The smears were classified as normal, negative for intraepithelial lesion and epithelial cell abnormalities.

Results: Total 100 patients were sent for cytopathological examination for screening of cervical cancer (N=100). The most common age group of patients was 31-40 Years. Most of them were Hindu (90%), belonged to lower socioeconomic status (70%) and multipara (92%). The commonest complain recorded was WDPV (31%). The outcome of cervical smear examination showed Inflammation (46%), normal smear (16%), and other findings. The cytopathological findings suggestive of Carcinoma cervix was seen in 2 patients.

Conclusions: Occurrence of Carcinoma cervix can be prevented as it has a long pre-invasive period. In India, most of these cases come to the attention at an advanced stage when hardly any curable management is possible.

Hence, screening programmes plays a major role in prevention of cervical cancer

Keywords: Carcinoma cervix, PAP smear, cytopathological examination

Introduction

Cervical carcinoma is one of the leading cause of death amongst women. Every year about 14 million new cancer cases are detected and about 8.1 million people die of cancer¹. Approximately 80% of which occur in the developing world.² India alone accounts for one-quarter of the worldwide burden of cervical cancers.³ In India, every year there are about 90 000 new cases.⁴ In India, the three most common fatal cancers reported in women at 30–69 years of age were cervical, stomach, and breast⁵. The age-standardized incidence rate and age-standardized mortality rate of cervical cancers are 27.0 and 15.2 , resp. among Indian women ⁶. Infection with Human Papilloma Virus is one of the major cause of cervical carcinoma. Persistent infection with high-risk types of HPV is the necessary for cervical cancer.⁷ Around 70% of cervical cancers are caused by infection with HPV16 or HPV18. More than 100 types of HPV have been identified, of which 40 infect the genital tract ⁸. Over the last two decades, the urbanization and modernization of India has contributed to an increased risk profile for chronic diseases such as cancer.⁹

Cancer cervix is preventable as it has a long pre-invasive state and with availability of screening programs and treatment facilities, the mortality due to cervical

carcinoma may reduce in future. In India, most of these cases come to the attention of doctors at an advanced stage when hardly any curative Treatment is possible. Hence, the role of screening programs in prevention of cervical cancer is substantial. Although, in developing countries due to lack of trained manpower, mass screening program for cervical cancer is still not possible and feasible.

Material and Methods

Retrospective Observational study of 100 women attending OPD services of department of OBG KIMS Hubli Karnataka were selected for the study in the year 2014. Patients presented with varied symptoms were selected. Detailed complaints, obstetric, menstrual, medical history, were noted. Smears obtained on routine basis also. Cervical smears were collected from two sites. squamocolumnar junction of cervix and the endocervical canal. The sampling was performed on days 10 to 16 of menstrual cycle. The smears were then immediately fixed with spray fixative and sent for further processing. Papincolaou stain was used to stain the cervical smears. Cytopathological examination was done according to “The Besthesda System” with following features: (a) adequacy of the specimen and, (b) General categorization of the smears as Normal, Negative for intraepithelial lesion (Inflammatory, reparative, atrophy and infection) and epithelial cell abnormalities (ASCUS, LSIL, HSIL, AGUS, and carcinoma cervix)

Results

Table no 1

| AGE[YRS] | NO | % |
|-----------|----|----|
| < 20 | 2 | 2 |
| 21-30 | 21 | 21 |
| 31-40 | 34 | 34 |
| 41-50 | 27 | 27 |

| | | |
|-----------------------|----|----|
| 51-60 | 12 | 12 |
| >60 | 4 | 4 |
| RELIGION | NO | % |
| HINDU | 90 | 90 |
| MUSLIM | 7 | 7 |
| CHRISTIAN | 3 | 3 |
| MARITAL STATUS | NO | % |
| Married | 98 | 98 |
| Unmarried | 2 | 2 |
| SE STATUS | NO | % |
| Lower | 71 | 71 |
| Upper, Middle | 29 | 29 |

In the present study, the most common age group was 31 to 40 years (34%), followed by 41 to 50 years (27%). Most of the women were Hindu (90%), married (98%) and belonged to lower socioeconomic status (71%)

Table 2;

| | | |
|-------------------------|----|----|
| CHIEF COMPLAINTS | NO | % |
| WDPV | 41 | 41 |
| PAIN ABDOMEN | 16 | 16 |
| ROUTINE | 23 | 23 |
| MISC | 20 | 20 |

The chief complaint for attending the OPD services was WDPV (41%). Routine screening in (23%). Pain was another important symptom, seen in 16% of total women.

Table 3

| | | |
|-------------------|----|----|
| PAP report | NO | % |
| Inflammatory | 46 | 46 |
| Normal | 17 | 17 |
| Atrophic | 10 | 10 |
| Candidiasis | 5 | 5 |
| LSIL | 3 | 3 |

| | | |
|------------|-----|-----|
| BV | 3 | 3 |
| ASCUS | 3 | 3 |
| TV | 2 | 2 |
| HSIL | 1 | 1 |
| AGUS | 1 | 1 |
| CA CX | 1 | 1 |
| Inadequate | 6 | 6 |
| Reparative | 2 | 2 |
| TOTAL | 100 | 100 |
| | | |

Analysis of cervical smear screening showed Inflammatory (46%) was the commonest finding, followed by Normal, Reparative and Atrophic, etc. Cytopathological finding suggestive of Cancer cervix was seen in 1 patient.

Discussion

Cancer of the cervix is a major cause of morbidity and mortality in women living in developing countries. The data from the National Cancer Registry Program (NCRP) in India indicates that the most common sites of cancer among women are the breasts and the cervix.¹¹ The aim of cervical cancer screening method is to diagnose the disease in its earliest stage i.e. premalignant stage, and to reduce mortality due to invasive cancer. Pap smear screening for cervical cancer and precancerous conditions has been proved to be very effective in cervical cancer prevention and in reducing mortality¹². The present study was undertaken to find out the spectrum of various lesions of the cervix, in tertiary care hospital

In the present study, Total 100 cervical smears were studied to determine the cytopathological findings. In the present study, the most common age group was 31 to 40 years (34%), followed by 41 to 50 years (27%). Most of the women were Hindus (90%), married (98%) and belonged to lower socioeconomic status (71%). Other studies reported that higher education and socioeconomic

status¹⁴ are associated with lower cervical cancer rates in India¹³. The role of elder age at marriage, fewer partners and pregnancies over time and through higher uptake of screening services was also documented¹⁴. Few studies highlighted the role of targeted cervical cancer screening and treatment interventions in rural areas to have a greater impact among women who are married, more highly educated and nulliparous.¹⁵ Early age at first marriage, longer duration of married life, increased and early parity, low educational status and poor genital hygiene were found to have played significant role in the subsequent development of carcinoma cervix. ¹⁶

In the present study, analysis of cervical smear screening showed Inflammatory smear (46%) was the commonest finding, followed by Normal, Repairative and Atrophic, etc. 1 case showed frank carcinoma cervix.

Similarly, a study done in Jordan¹⁷ showed that the smears collected from 1176 women aged 18-70 years, 79.9% showed non-specific inflammation, 4.5% were classified as inadequate, 7.7% were normal. Reactive cellular changes of inflammation or nonspecific inflammation were reported in 55-60% smear samples by other ¹⁸ authors also.

A study done in India¹⁹ on patients complaining of leucorrhoea reported, 348 (69.6 %) cases showed reactive cellular changes associated with repair (Inflammatory smear), 56 (11.2%) cases were due to various infectious agents, atypical squamous cells of undetermined significance (ASCUS) 4 cases (0.8%), Atypical glandular hyperplasia 4 cases (0.8%), Suspicious of malignancy 9 cases (1.8%)

Conclusion

Carcinoma cervix can be prevented as it has a long pre-invasive state. In India, most of these cases come to the attention of doctors at an advanced stage when hardly any curative management is possible. Hence, screening

programmes plays a major role in prevention .Hence more and more screening camps to be conducted at rural and urban areas in india.Awareness should be created in this direction.

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