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ANALYSIS OF PAP SMEAR FINDING FOR SCREENING OF CERVICAL CANCER IN WOMEN ATTENDING GYNAECOLOGY OUTPATIENT DEPARTMENT OF A TERTIARY CARE CENTRE

Obstetrics & Gynaecology

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ABSTRACT

Introduction- Cervical cancer is the most common genital cancer in women in India. It affects relatively younger age group with incidence rate of 20 to 35 per one Lakh women between 35 to 65 years of age (shaw"s Textbook of Gynaecology 16th edition).The universal application of Pap smear in the western world has led to drastic decline of cases of cervical cancer.

Aims & Objectives- The aim of study is to diagnose any precancerous lesion of Cervix in an early stage before developing invasive Cancer of Cervix by screening method, PAP Smear and to make the women aware regarding prevention and screening of cervical cancer. The ultimate aim is to decrease the incidence of cervical cancer.

Material & Method- The study was conducted in patients attending GOPD in the Department of Obstetrics and Gynaecology, Nalanda Medical College and Hospital, Patna, over a period of ten months , from June 2019 to March 2020. Women were screened by Pap smear for Cancer cervix,

Observation & Result- A large no of women came to our institution as frank Ca cervix cases in advanced stage and were never screened in their lifetime. Pap smear test is simple, non-invasive, highly sensitive and specific method for diagnosing precancerous lesions of cervix. Screening by Pap smear relieves the fear and anxiety of Ca cervix among women and helps in appropriate treatment accordingly.

Conclusion- Cervical cancer Screening Programme is very poor in our country due to lack of awareness, illiteracy & lack of screening facilities at community level. Pap smear is simple and non-invasive method for cervical cancer screening thereby detecting the disease in precancerous stage and decreasing the incidence of cervical cancer

KEYWORDS

cancer cervix (Ca cervix), Gynae out Patient department (GOPD)

INTRODUCTION -

Cervical cancer continues to be a major public health problem for women in India. Cervical cancer is the most widely screened cancer in developed countries. Population based cervical cytology screening Programme offering Papanicolaou testing every 3–4 years have reduced cervical cancer incidence and mortality by up to 80% in developed countries in last 5 decades.

As it affects the most active and productive period of life, children lose their mother in childhood and family suffers a lot. Government of India is doing very good effort towards lowering Maternal mortality in our country by J.S.Y.(Janani Suraksha Yojna) but effort for screening of Cervical cancer is not good in spite of the fact that Ca Cervix follows a precancerous phage of long duration (08 years on an average).

MATERIAL & METHOD-

The study was conducted in patients attending GOPD in the Department of Obstetrics and Gynaecology, Nalanda Medical College and Hospital, Patna, over a period of ten months , from June 2019 to March 2020. Women were screened by Pap smear for Cancer cervix. Total 400 women were included in the study. After proper history, clinical examination was done and Pap smear was taken. Per vaginal examination was done only after Pap smear was collected.

- Attention given that whole of the transformation zone should be covered while taking pap smear. Cytobrush is must for sampling endocervical cells in addition to Ayre's spatula. This increases sensitivity of the test.

Inclusion Criteria-

- Age between 21 to 65 years
-Women with vaginal discharge,
-post coital bleeding,
-Intermenstrual bleeding,
-post-menopausal bleeding,
-lesion that bleeds on touch,
- women without any symptoms were also screened.

Exclusion Criteria-

-Women not willing to participate in the study
-Known case of cancer cervix
-Treated cases of cancer cervix
- Pregnant women were excluded from study

Method of collecting PAP Smear-

Pap smears were made with the conventional method. The participants were prepared in lithotomy position. A sterile bivalve speculum of appropriate size was inserted into the vagina and was positioned that allowed complete visualization of the cervical os and ectocervix.

- First the sample from ectocervix was taken using a wooden spatula (Ayre's). The long arm of Ayre's spatula is applied in the cervical os and the notched end of the spatula that corresponds to the contour of the cervix was rotated to 360° around the circumference of the cervical os and was immediately smeared over labelled glass slide in rotatory manner and was fixed within 30 s before drying in 95% ethyl alcohol in Coplin jar.
- For endocervical cytology, endocervical brush was inserted into the endocervix until the junctions of the bristles of the brush with the end of handle were in approximation with external os. Then brush was rotated 180° (one half turn) in endocervical canal, then rolled on glass slide and fixed immediately in 95% ethyl alcohol and was sent to Department of Pathology for cytological examination.

OBSERVATION & RESULT-

- Majority of women included in the study were in age group of 31–40 years.
- In my study most of the women (90%) had Pap test for the first time in their lifetime. Many women came to our institution as frank Ca cervix cases and were never screened in their lifetime. Majority of them (80%) were advanced stage II-B onwards.

Table-1 Socio-demographic Characteristics

characteristics		number	Percent(%)
Age group	21-30 Years	50	12.5
	31-40 Years	224	56
	41-65 Years	126	36.5
Parity	Nullipara	06	1.5
	Primipara	36	09
	Multipara	358	89.5
Marital status	Married	400	100
	Unmarried	00	00
Socio-economic status	Low SE status	216	54
	Middle SE status	158	39.5
	Upper SE status	26	6.5

The above table -1, shows that majority of women were from low socio- economic group and were multipara.

As the below table -2,shows abnormal vaginal discharge was the most

common finding followed by cervical erosion and chronic cervicitis. Few patients had more than one clinical finding,

Table- 2 Clinical Finding On Per Speculum Examination

Clinical finding on P/S	Number	Percentage(%)
Vaginal discharge	260	65
Cervical erosion	60	15
Chronic cervicitis	40	10
Normal looking cervix	30	7.5
Bleeds on touch	08	2
Cervical ectripion	12	3

Table- 3 Cytological Report of Pap smear

Pap Smear	Number	Percentage (%)
Unsatisfactory	02	0.5
inflammatory	224	56
NILM	130	32.50
ASCUS	04	01
LSIL	22	5.5
HSIL	10	2.5
Malignant cells	02	0.5
Other non- specific finding	06	1.5

As shown in table-3, high grade squamous intra-epithelial lesion(HSIL) was found in 2.5% cases and low grade squamous intra-epithelial lesion (LSIL) was found in 5.5% cases and malignant cells was found in 0.5% cases.

DISCUSSION

Cervical cancer continues to be a major public health problem for women in India. Mortality due to cervical cancer is also an indicator of health inequalities, as 86% of all deaths due to cervical cancer are in developing countries, (Epidemiology of cervical cancer with special focus on India. Int J Women's Health 2015;7:405–14).

More than three-fourths of these patients are diagnosed at advanced stages leading to poor prospects of long-term survival and cure. About 5.70 Lakh new cases of cervical carcinoma were reported annually world over with incidence mortality ratio of 52% (Park"s Textbook of Preventive & Social Medicine 25th edition). Majority of women included in the study were in age group of 31–40 years.

India has a national programme for cancer since 1975, when the emphasis was on equipping premier cancer institutions. In 2010, cancer control became a part of National Programme for Prevention and Control of Cancer.

Specific types of oncogenic HPV-16, 18 have been identified in patients with cervical cancer. Other epidemiological risk factors are- early age at marriage, multiple sexual partners, multiparity, poor hygiene, malnutrition, use of oral contraceptives for long time.

Screening of cervical cancer is useful due to-

-easy accessibility of cervix
-Pap smear is simple & non-invasive
-Long latent period of 10-15 years between CIN and invasive cancer.
-High sensitivity & specificity of Pap smear test

- The universal application of Pap smear in the western world has led to drastic decline of cases of invasive cancer cervix and a higher detection of disease in precancerous stage which is totally curable after treatment.
- As HPV DNA testing is costly and not done in our institution so HPV DNA is not included in my study.
- Screening for cancer cervix with Pap smear is an important part of preventive health care of women. It was reported as inflammatory smear in 56% (224 women) & NILM in 32.5% (130 women) in my study. LSIL was found in 5.5% cases and HSIL was found in 2.5% cases, ASCUS was found in 1% cases and malignant cells were detected in 0.5% cases.
- According to ICMR report the incidence of dysplasia in the screened women was 15/1000(1.5%) & severe dysplasia was 5/1000 (0.5%).
- Kulkarni et al found a high rate of inflammatory smear in 73.7% cases and Lawley observed a lower rate of 14.3% as inflammatory smears. These authors observed that persistent inflammation is associated with CIN in 14.3% to 16.7% women.
- The difference in the prevalence of inflammatory changes and cervical dysplasia in different studies could have been the result of social and cultural differences, age, incidence of related infections etc. Screening by Pap smear relives fear and anxiety of Ca cervix among women & also helps in deciding appropriate treatment.
- In women with HSIL, persistent LSIL, ASCUS and malignant cells in Pap smear, cervical biopsy done and treated accordingly. All cases of abnormal Pap smear were treated accordingly and were kept on regular follow up.

CONCLUSION

Cervical cancer Screening Programme is very poor in our country due to lack of awareness, illiteracy & lack of screening facilities at community level. Pap smear test is simple, non-invasive, highly sensitive and specific method for diagnosing precancerous lesions of cervix, thereby decreasing the burden of cancer cervix. Screening by Pap smear relieves anxiety among women who are living in fear of cancer cervix and help them to be treated appropriately.

Organized screening programme with community participation, to reach common and under previledged population is necessary for successful screening of cervical cancer and to decrease the incidence of this disease.

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