

Pap Smear In Antenatal Women - Routine Screening In Low Resource Settings

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Abstract

Background: Carcinoma cervix has major impact on the lives of women worldwide, particularly in developing countries where screening programs are not well established. Carcinoma cervix is now preventable by cytological screening and curable if detected at an early stage by pap smear.

Aim: To screen for cervical neoplasia and pre-malignant diseases in pregnant women during 1st antenatal visit who do not have access to routine health care.

Methods: This study was done in 200 pregnant women during their 1st registration and pap smears were collected as per conventional method.

Results: In the present study, 89.5% of antenatal women had inflammatory smear and 0.5% LSIL.

Conclusion: The cervical cytology and related education were highly recommended in antenatal women to increase the cervical cancer screening coverage.

Keywords: Pap smear, inflammatory smear, LSIL, HSIL, Papanicolaou stain, modified Bethesda classification.

I. Introduction

Carcinoma cervix is the most common genital tract cancer encountered in developing countries accounting for 80% of world cases, 18% are from India. Cervical cancer is the 5th most deadly carcinoma worldwide. WHO estimated that each year over 1.3 lakh women are diagnosed with cervical cancer, and over 74,000 die of cervical cancer in India.

Cervical cancer is the most common malignancy diagnosed during pregnancy comprising about 70%. Most cervical abnormalities in pregnancy are discovered as a result of routine screening at the initiation of prenatal care.

In India, 1st visit to the gynaecologist for most women is during pregnancy and it may be the only visit. Hence pregnancy provides an opportunity to screen for premalignant and malignant cervical disease, especially in women who do not seek routine health care.

Pap test detects 60-70% of cancer cervix and 70% of endometrial cancer. The accuracy of pap smear in pregnancy is almost similar to that of non-pregnant women. Pap smear in pregnancy is useful to screen more number of women in reproductive age group.

II. Materials And Methods

This is a cross sectional study done in pregnant women attending antenatal OPD at GGH, Vijayawada from June 2010 to October 2011 and total of 200 pregnant women were screened. Pap smears were collected as per conventional method.

The woman was placed in lithotomic position. After exposing the cervix, endocervix is sampled using cytobrush and ectocervix by using Ayer's spatula, rotating 360 degrees and smearing on glass slide, immediately fixed with isopropyl alcohol, stained with Papanicolaou stain. The cytological abnormalities are reported as per modified Bethesda classification and reporting was given as normal inflammatory ascus, LSIL, HSIL, and AGC.

Inclusion Criteria

Pregnant women who came for 1st antenatal checkup.

Exclusion Criteria

- 1) Patients with vaginal infection.
- 2) History of sexual intercourse in the past 48 hours.
- 3) History of vaginal douching in the past 48 hours.
- 4) History of vaginal medication in the past 48 hours.
- 5) Threatened abortion.

III. Results

Age group

Results were analysed in tabular forms.

16-18 yrs	18-20 yrs	21-23 yrs	24-26 yrs	27-29 yrs	30-32 yrs	33-35 yrs
2	92	62	32	8	3	1
1%	46%	31%	14%	4%	1.5%	0.5%

Most of the women were in the age group 18-20 years.

Distribution in relation to parity

Primigravida	2 nd gravida	3 rd gravid	4 th gravida
90	85	20	5
45%	42.5%	10%	2.5%

Most of them were primigravidae.

Perspeculum examination

Appearance of cervix	Number of cases	Percentage
Healthy	181	90.5%
Erosion	18	9%
Growth	1	0.5%

Most of them had healthy cervix. 9% had erosion and 0.5% had growth.

Cytology report

Normal	Inflammatory	Ascus	LSIL	HSIL
20	179	0	1	0
10%	89.5%	0%	0.5%	0%

89.5% showed inflammatory cytology and 0.5% had LSIL.

Risk factors for cervical cancers

Early age at marriage	Multiple sexual partners	Smoking	History of exposure in spouses	HIV	Warts
130	2	Nil	2	2	1

IV. Discussion

The main aim of screening for cancer cervix is to diagnose pre-invasive lesions and to detect cervical cancer before symptoms appear.

In spite of low rates of preinvasive and invasive lesions in pregnant women, it may be beneficial for those who never had been examined before pregnancy, especially in India. Hence we took the opportunity to screen pregnant women who attended antenatal OPD at GGH, Vijayawada for 1st antenatal checkup.

Among 200 pregnant women in the study group, 46% were in the age group 18-20 years. 0.5% were 30-35 years, and 2% were in the teenage group 16-18 years.

Analysis Of Risk Factors

130 women got married in the early age group. 2 patients had multiple sexual partners. 2 gave history of exposure of spouse to extramarital relation. 2 were HIV positive and 1 had genital warts.

In the present study, 89.5% showed inflammatory smear and 0.5% LSIL on cytological evaluation.

The results of present study were similar to study done by Njaojaruwong et al in which prevalence of abnormal cytology is 0.4%.

V. Conclusion

Cytology based cervical screening emerged as the gold standard for cervical cancer screening.

The way of integrating cervical cancer screening and treatment services into the existing women's health care system is critical in the environments with limited resources. Appropriate counseling regarding screening programs and assisting them in deciding further action is essential.

The prevalence of abnormal cytology in pregnant women attending the antenatal OPD at GGH, Vijayawada was 0.5%. Cytological screening methods were highly recommended in antenatal clinics to increase coverage among reproductive age group.

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