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Research Paper

Comparative Study of Pap Smear Between Pregnant And Non Pregnant Women

Medical Science

KEYWORDS : Cervical cancer, PAP smear, screening for Cancer cervix, PAP smear in pregnancy

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ABSTRACT

One of the most common gynaecological cancers worldwide that results in cancer deaths among females is cervical cancer. This is a prospective cohort study which compares PAP smear report between pregnant and non pregnant women. The study was conducted in B.K.L Walawalkar Rural Medical College and Hospital, Dervan, Ratnagiri, Maharashtra, India which comprised of 50 pregnant and 50 non pregnant women from July 2015 to December 2015. The average age of marriage for pregnant patients was 21 and that of non pregnant patients was 21. None of the studied patients had heard about PAP smear in past. Twenty eight percent of pregnant patients knew about cervical cancer as against 32 % of non pregnant patients. In this study 44 pregnant patients reported normal smear, and 41 non pregnant patients had normal smear. Inflammatory smear was noted in 4 pregnant females and 5 non pregnant females. ASCUS was reported in 1 pregnant and 2 non pregnant female. One pregnant patient and 2 non pregnant patients reported LSIL. Our study proves that there is no significant difference in PAP smear report between pregnant and non pregnant females. In our country, under RCH programme, minimum three antenatal visits are made mandatory. If PAP smear is made a part of routine antenatal tests then the follow up of patients become easy as they come for their advised antenatal checkups without failure hence improving the efficacy of the test.

INTRODUCTION:

Cervical cancer ranks among the fourth most common cancers among females worldwide with 528,000 cases every year and 266,000 die from cervical cancer, worldwide. The majority of these cases (70%) are experienced in developing countries. (1).

One in every five women in the world suffering from cervical cancer belongs to India which has the largest burden of cervical cancer patients in the world. (2)

There have been decrease in cervical cancer incidences, and its mortality due to cervical cancer screening programmes conducted in many developed countries.

However there have not been major changes in the incidences in developing countries due to improper implication of screening programmes.

Every year in India 122,844 women are diagnosed with cervical cancer and 67,477 die from the disease, (3) India has a population of 432.2 million women aged 15 years and older who are at risk of developing cancer. It is the second most common cancer in women aged 15-44 years. (3)

Screening for cervical cancer precursors using exfoliative cervico vaginal cytology, the PAP test was successful in reducing the incidence of cervical cancer and the mortality since 1950.

According to ACOG (American College of Obstetrician and Gynaecologists) and ACS (American Cancer Society) cervical cancer screening should be done at age 21 or 3 years after vaginal sex at an interval every 2-3 years after age 30 with 3 consecutive intervals.

It has been worked out in the Indian situation that 'once in a lifetime 'screening would result in reduction of 20-30% in the lifetime risk of cervical cancer, (5)

MATERIALS AND METHODS:

The study was conducted in B.K.L Walawalkar Medical College Rural Hospital, Dervan, Ratnagiri, Maharashtra (India).

The study group comprised of 50 pregnant and 50 non-pregnant patients who enrolled in the hospital during July 2015 to December 2015.

Pregnant patients in third trimester and with previous history of pain abdomen, unexplained vaginal bleeding, and vaginal leaking or in established labour were excluded from the study.

All patients with diagnosed preinvasive lesions of the cervix or carcinoma cervix were excluded from the study.

A questionnaire was provided to each lady participating in the study, which comprised of questions regarding the age at which they got married, their education, occupation, their gynaecological and obstetrical history, their knowledge regarding PAP smear tests and cervical cancer. After taking informed consent from the patient regarding PAP smear test, the smear was taken using Ayre's wooden spatula. All smears were immediately fixed and sent to pathology laboratory.

PAP smear grading was done according to Bethesda classification 2001. (6)

Statistical evaluation was done using T Test .P value less than 0.05 was regarded as significant.

RESULTS:

In this study the average age of pregnant women was 26 and the average age of those not pregnant was 37 years. Seventy percent of pregnant women were in first trimester, 30 % were in second trimester and none were in third trimester. All pregnant females and 88% of non pregnant females were primary/ secondary graduates. Twelve percent of non pregnant were illiterates.

Seventy six percent of pregnant females were housewives and 24% were working. Seventy percent of non pregnant females were housewives and 28 % were working females. The average

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age of marriage for pregnant patients was 21 and that of non pregnant patients was 21.

None of the studied patients had heard about PAP smear in past. Twenty eight percent of pregnant patients knew about cervical cancer as against 32 % of non pregnant patients.

In this study 44 pregnant patients reported normal smear, and 41 non pregnant patients had normal smear. Inflammatory smear was noted in 4 pregnant females and 5 non pregnant females. ASCUS was reported in 1 pregnant and 2 non pregnant female. One pregnant patient and 2 non pregnant patients reported LSIL.

DISCUSSION:

We found in our study that none of the patients had neither previously heard of PAP smear test nor underwent the smear test in the past. This indicates that there is poor awareness among females regarding the test and its benefits.

In our study there is no significant difference regarding PAP smear reports in both the groups proving that the test is as reliable irrespective of the pregnancy of the patient.

Therefore if PAP smear tests are made a routine during pregnancy the efficacy of the screening methods will improve drastically since the possibility of patients coming for follow up during pregnancy is more than non pregnant state.

A similar study conducted in Turkey showed 18.2% of pregnant cases had an infection ,54.5%had reactive cellular change, and 0.9%had atypical squamous cells of undetermined significance(ASCUS).16.3%of non pregnant cases had an infection,58.1%had reactive cellular change,3.5%had atypical squamous cells of undetermined significance(ASCUS),and 1.2% had low-grade squamous intraepithelial lesions(LSIL).(8)

In their study conducted on 11,906 pregnant women Fan et al(2010)identified 9.52% of cases with ASCUS,0.94%of cases with AGUS, 1.92% of cases with LSIL, and 0.62%of cases with HSIL.(7)

Our study proves that there is no significant difference between PAP smear report between pregnant and non pregnant females. In our country, under RCH programme, minimum three antenatal visits are made mandatory. If PAP smear is made a part of routine antenatal tests then the follow up of patients become easy as they will come for their advised antenatal checkups without failure hence improving the efficacy of the test.

As our study results show that none of the females in the study group knew about the test so the inclusion of PAP test among antenatal tests will also create awareness among women as large number of females will be covered under the screening programme.

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