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SHORT COMMUNICATION

RELATIONSHIP BETWEEN CERVICAL CANCERS AND TOBACCO SMOKING

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ABSTRACT:

To evaluate the relationship between smoking and cervical cancer, a hospital based study was done to screen sexually active women for cervical cancer at the outpatient dept of KMDC & ASH. They were screened by standard screening test Pap test and their history were recoded regarding tobacco use. Out of 144 women, 87 (60.41%) were inflammatory, 6 (4.16%) have findings of dysplasia, 44(30.55%) were normal and 7 (4.86%) were inadequate. 3 out of 6 (50%) cases of dysplasia were addicted to tobacco and 3 out of 87 (3.5%) in case of inflammation.

Results show an association between tobacco use and the later development of cervical dysplasia.

INTRODUCTION

Cervical cancer is an important women's health problem in the developing countries, killing some 200,000 women each year. 1w2001 an estimated 12,900 cases of invasive cervical cancer are expected to occur with about 4,400 women dying from this disease (Greenlee *et al*., 2000). In Pakistan cervical cancer is the commonest malignancy of genital tract in female with the relative frequency of 8.8% (Jaffery and Zaidi, 1987).

Strong risk factors for cervical cancer and its precursors have been identified and include early age at first intercourse (16 years or younger), a history of multiple sexual partner, a history of genital human papilloma virus (HPV) infection or other sexually transmitted disease, the presence of other genital tract neoplasm and prior squamous intraepithelial lesion (SIL) (Binton, 1992; Jonathen, 1996 and David 2001). Additional risk factors include active or passive smoking, a current or past sexual partner with risk factor for sexually transmitted disease, immunodeficiency or HIV positively and poor nutrition (Kjaer *et al*., 1991).

Cigarette smoking by women increases the relative risk for squamous cell carcinoma (Kjellharg *et al*., 2000 and Ho *et al*., 1998). This risk increase with longer duration and intensity of smoking and is present with exposure to environment tobacco smoke as well, being as high as 3 times that of women who are non-smokers and are not exposed to environmental smoking (Buniton, 1992).

The facilities for cervical cancer screening are not widely available to women in Pakistan as in other developing countries. Population awareness regarding the importance of screening does not exist. As a result, they present at an advance stage of disease.

MATERIAL AND METHODS

Present study has been conducted in the department of obs/gyne, Karachi Medical and Dental Collage & Abassi Shaheed Hospital (ASH).

The aim of this study was to screen the sexually active women attending the OPD of ASH for cervical cancer by Pap smear and to find out the relationship of tobacco use either

in the form of smoking cigarettes, *biri, huqqa* or environmental exposure.

This is a hospital based cross sectional study including women attending the OPD of ASH during the period of 1St June 99 till December 2000. The women were screened for carcinoma of cervix by Pap test. A total of 152 smears were included in this study. The women were selected by random sample collection. The inclusion criteria were that they should by sexually active. The patients who were excluded included pregnant women greater than 24 week gestation, suspected vaginal infections, vaginal bleeding, after hysterectomy (unless it is done for pre-cancerous or cancerous condition).

A verbal informed consent was taken and information was recorded relating to user of tobacco on a Performa.

RESULTS AND DISCUSSION

A total of 152 smears were analyzed during this study, 8 patients were excluded because of incomplete data so 144 smears were taken into account. Out of 144 smears, 44 (30.5 5%) were normal and 87 (60.41) of the smears showed results of inflammatory changes, 6 (4.16%) smears had dysptasia findings and 7 (4.86%) smears were inadequate because of the absence of endocervical cells (Table 1).

Out of 87 cases of inflammation, 2 women use biri and 1 huqqa as a form of tobacco addiction (3.5%). The results showed 2 of them with finding of dysplasia were addicted to huqqa for more than 10 years and 1 was addicted to biri (50%). Regarding the women who have normal smears no one is exposed to tobacco.

Analysis of theses results confirm that tobacco use either in the form of bin or huqqa leads to more changes of having dysplasia (chi square is significant) (Table 2).

Cigarette smoking is not as much common in our women as compared to west. However as association has been found in our study between tobacco use like biri and huqqa and the later development of cervical dysplasia.

Table-1
Results of Cytological findings of PAP Smear Analysis Total No. of PTS 144

S. No.	Groups	Number of PTS	Percentage
1.	Inflammatory	87	60.4 1%
2.	Normal	44	30.55%
3.	Dysplasia	6	4.16%
4.	Inadequate	7	4.86%

Table-2
Relationship o Tobacco Smoking with Results Of PAP SMEAR

S. No.	Tobacco	Inflammatory	Dysplasia	Normal	Absence of Endocervical ells
1.	Biri	2	1	-	-
2.	Huqqa	1	2	-	-
3.	No use of tobacco	81	3	48	6

The finding of a recent study shows smoking to be a significant risk factor, which increase the risk in a dose dependent fashion (Kjelberg *et al*., 2000).

Carcinoma of cervix is an important issue for women health in Pakistan. It is still one of the leading cause of death in Pakistani women.

A long history of precancerous stage of cervix make it an ideal disease for screening and treating it an earlier stage. It is recommended that an effective cervical cancer screening programme should be introduced at national level.

As the study shows a preponderance of cervical cancer in certain high risk group it is advised that awareness among women should be developed by the health professional regarding smoking.

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