

# POSTCOITAL BLEEDING IN WOMEN ATTENDING A TERTIARY CARE HOSPITAL

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## ABSTRACT

**Objective:** To document the frequency of different pathologies in women with postcoital bleeding. To determine the frequency whether abnormal bleeding with positive cervical smear increases the risk of serious pathology.

**Design:** Descriptive study.

**Place and Duration of Study:** Military Hospital Rawalpindi from 1st June 2000 to 30th June 2002.

**Patients and Methods:** A descriptive study was carried out in Military Hospital Rawalpindi from 1st June 2000 to 30 June 2002. A total of 157 Women were included in the study. The inclusion criteria were women with postcoital bleeding and having positive cervical smear along with abnormal bleeding. Evaluation was done by a detailed history followed by cervical smear, followed by colposcopic examination as well as cervical and endometrial biopsies and in some cases vaginal biopsies. The main outcome measure was histopathological diagnosis.

**Results:** Eight women (5.1%) had invasive cancer. Five were cervical, one vaginal cancer and two endometrial cancer. Five of the 6 cervical or vaginal cancers were clinically apparent. One woman of the 6 had a normal smear before being further investigated for Postcoital bleeding. Cervical intraepithelial neoplasia was found in 15 women (9.6%) and 7 women (4.4%) had cervical polyp. No explanation for the postcoital bleeding was found in 89 women (56.7%)

**Conclusion:** Invasive cancer is rare in women with postcoital bleeding. Postcoital bleeding should be regarded as an indication of high risk so all women must undergo colposcopic examination.

**Keywords:** Postcoital bleed, cervical cancer, vaginal cancer, cervical smear

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## INTRODUCTION

Postcoital bleeding is regarded as one of the cardinal symptoms of cervical cancer, which is one of the leading malignancies in the developing countries [1,2]. In two case series from United State [3,4] postcoital bleeding occurred as a presenting symptom in 6 % and 10 % of 81 and 231 women with cervical cancer, respectively, while in a small

case series from United Kingdom [5], all women with cervical cancer under the age of 65 who presented with symptom had postcoital bleeding. However, postcoital bleeding is a common gynaecological symptom with many cases and very few women with postcoital bleeding have invasive cervical cancer. Only one study has investigated the frequency of pathological changes in the cervix in association with the postcoital bleeding. This study was conducted

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in India where the incidence of cervical cancer is very higher as compared to European countries. The objective of the study was to determine the prevalence of pathological changes in the cervix in women who presented with postcoital bleeding in gynaecological outdoor of Military Hospital Rawalpindi, and whether postcoital bleeding increases the risk of serious pathological changes in the cervix in women with an abnormal smear.

## PATIENTS AND METHODS

A descriptive study was carried out in Military Hospital Rawalpindi from 1st June 2000 to June 2002. A total of 157 women with Postcoital bleeding and other women with bleeding abnormalities and positive cervical smear were included in the study presenting in gynaecological outdoor of Military Hospital Rawalpindi, Women with bleeding abnormalities included especially those who presented with history of Postcoital bleeding, postmenopausal bleeding and intermenstrual bleeding. Evaluation was based on detailed history including the duration of bleeding, severity of bleeding, any history of hormonal intake, or any associated pain with bleeding. Examination included per speculum and per vaginal examination. Cervical smear were performed in almost all women. In some women colposcopic as well as cervical and endometrial biopsies were performed but not all women were referred for colposcopic examination. Some women with obvious cervical and vaginal cancer did not require a colposcopic examination but went straight for biopsies. Some women with minor bleeding and normal cervical smear were also referred for colposcopy. It was convenient method of sampling. The subject was discussed with ethical committee of Military Hospital Rawalpindi. About one year of follow up was ensured.

## RESULTS

In all 157 women with postcoital bleeding the mean age was 34 years with (SD 8.5)

**Table-1: The main indication that women were evaluated for postcoital bleeding.**

Main Complaints	n	% age
Postcoital bleeding	95	60.5
Intermenstrual bleeding	37	23.6
Menorrhagia	21	13.4
Postmenopausal bleeding	2	1.3
Other	2	1.3
<b>Total</b>	<b>157</b>	<b>100</b>

**Table-2: Diagnosis in women with postcoital bleeding.**

Diagnosis	n	% age
Cervical cancer	5	3.2
Vaginal cancer	1	0.6
Endometrial cancer	2	1.3
CIN	15	9.6
Inflammatory changes	33	21
Cervical polyp	7	4.4
Dysfunctional uterine bleeding	5	3.2
No abnormality	89	56.7
<b>Total</b>	<b>157</b>	<b>100</b>

range 18-64, the different indication with which they presented and were evaluated as shown in (table-1) most women presented with more than one complaint.

A cervical smear was taken from all except those 6 who had obvious clinical lesion. 23 women presenting with various menstrual abnormalities and postmenopausal bleeding under went uterine curettage out of these 23 women 2 were found to have endometrial carcinoma. One patient became pregnant. Symptom disappeared in remaining 15 women and 6 were lost for follow up. In all III women were examined colposcopically. Forty-two women with postcoital bleeding had a normal smear as were seen in gynaecology outdoor, seven had cervical polyp. Diagnostic biopsies were taken from 80 women, 55 were punch biopsies, 23 were endometrial biopsies and 2 were cone biopsies. Five cancer of the cervix, one of the vaginal and two-endometrial cancers were diagnosed (table-2).

Both of the endometrial cancer was diagnosed by curettage but smears from both showed abnormal glandular cells. Two of these women complained of postmenopausal bleeding. Neither the severity nor the

duration of the postcoital bleeding is a reliable indication of the invasive cancer.

## DISCUSSION

In this study, invasive cancer was found in 5 % of the women who complained of postcoital bleeding, who reported in gynaecological outdoor of Military Hospital Rawalpindi. Women with invasive cervical cancer who have symptoms at the time they presented had more advanced diseases [6], so it was not surprising that all but one of the 6 invasive cervical or vaginal cancer in this series were clinically apparent. Because as these were the cases reported in tertiary hospital known to have cervical cancer, 5 % may be an over estimate of the true percentage of women with postcoital bleeding.

One of the 6 women with invasive cervical or vaginal cancer had a normal smear at the time they reported, and so gynaecologists should be aware that a normal smear must not be regarded as reassuring in a woman with postcoital bleeding, more over visual inspection of cervix has shown to be more sensitive and having higher accuracy has compared to pap smear cytology [7]. We therefore concur with recommendation of a working group of the Royal Australian Collage of General Practice and of Obstetrics and Gynaecology and legal profession [8] which recommended that general practitioner refer women for colposcopy if they have: -

- Persistent postcoital bleeding.
- Postcoital bleeding associated with single smear suggestive of cervical intraepithelial neoplasia.
- Postcoital bleeding associated with repeated smears with minor atypia.

In a survey [9] 89 % of general practitioners and 86 % of family planning doctors said they would repeat the cervical smear in a woman with postcoital. It is

suggestive that doctors in primary care recognize that postcoital bleeding is a potentially serious symptom.

Cervical polyp have long been associated with postcoital bleeding but cervical intraepithelial neoplasia, metaplasia and non specific inflammation have not cervical intraepithelial neoplasia is usually considered as an asymptomatic condition, cervical intraepithelial neoplasia and metaplastic epithelium are both thin and friable and readily become detached from the cervix. Different population based studies of women with postmenopausal bleeding found that upto 5.5% had cervical intraepithelial neoplasia [10,11], and in another study 5% of women with cervical ectropion reported postcoital bleeding [12].

This data shows that women with postcoital bleeding appear to have a much greater risk of invasive cancer and cervical intraepithelial neoplasia then the general population, perhaps because the fragile cervical epithelium becomes detached during intercourse. Postcoital bleeding is still regarded as an indication of high risk for invasive cervical cancer and for cervical intraepithelial neoplasia [13]. Prompt referral to colposcopic examination is indicated and in these cases colposcopically directed biopsy is more effective in detecting invasive lesion than plain cytology [14], but women must be reassured that colposcopy is performed only as a precaution, as in majority there will be no major problem.

## CONCLUSION

Invasive cancer is rare in women with postcoital bleeding. Postcoital bleeding should be regarded as an indication of high risk so all women must have colposcopic examination.

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