

# The Importance of Post Coital Bleeding in Countries with Low Level Cervical Cancer Screening

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## ABSTRACT

**Background & Objective:** This study aimed to examine the extent to which postcoital bleeding (PCB) can be a predictive factor for cervical cancer.

**Materials & Methods:** In this observational study we selected and evaluated 280 females with PCB referred to Kowsar Hospital of Qazvin, Iran from 2017 to 2019.

**Results:** Among the 189 patients diagnosed as normal in their Pap smear results, one patient had cancer in her biopsy results. A closer look at the biopsy results of the patients showed 45 patients as normal, 64 patients with cervical infection, 31 patients with polyp cervix, 45 patients with cervical intraepithelial neoplasia 1 (CIN 1), and one patients with squamous cell carcinoma (SCC). Among 63 patients diagnosed with atypical squamous cells of undetermined significance (ASCUS), three showed CIN 2 and CIN 3 in their biopsies. Furthermore, out of 21 patients with low-grade squamous intraepithelial lesion (LSIL), three patients had CIN 2 and CIN 3, one patient had carcinoma, and one had SCC. In addition, all of the patients with high-grade squamous intraepithelial lesion (HGSIL) were diagnosed with CIN 2, CIN 3, and SCC.

**Conclusion:** Because of the higher rate of cervical cancer in women with PCB and inconsistent screening programs in developing countries, it is essential to carefully consider the symptoms of PCB despite having a normal Pap smear.

**Keywords:** Biopsy, Cervical cancer, Pap smear, Postcoital bleeding



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## Introduction

Postcoital bleeding (PCB) consists of spotting or bleeding after sexual intercourse that is not related to a person's menstrual cycle (1). The prevalence of this problem among females in the fertility age is from one to nine percent (1). The most common causes of PCB are cervical pathology, cervicitis, as well as cervical polyps (2). Cervical cancer, which is the third most common type of cancer in women in developed countries and most common type in developing countries (3), and premalignant cervical lesions are also possible causes of PCB (1, 3). However, PCB cases have been significantly decreased in the developed countries because of the regular screening tests in women. Since the dysplasia, that leads to the cervical cancer, is a slow-growing malignancy, screening tests are essential to decrease the rate of cervical cancer (4). It is important to know that cervical

cancer can be prevented by regular Pap smear tests and planned gynecological examinations (5). Therefore, all sexually active women over 21 years old must do Pap smear examinations once in every three years (5, 6). In addition, further examinations including human papilloma virus (HPV) test, colposcopy, and if necessary, biopsy are needed after abnormal screening test results (6).

Colposcopy is a specialized, expensive, and invasive medical procedure for directing the biopsy site, used as second line of screening to identify the cervical intraepithelial neoplasia (CIN). Colposcopy directed biopsy, currently is a gold standard procedure in CIN lesions diagnosis, which helps to evaluate the cases of abnormal Pap smear (7). The accuracy of Colposcopy directed biopsy is very high and can detect up to 70%