

Preinvasive and invasive neoplasm of the cervix among the women with uterine prolapse

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Abstract

Objective: Few studies have been reported on the preinvasive and invasive carcinoma of the cervix with prolapse uterus. Uterovaginal prolapse is common gynaecological condition but no studies have been reported from this part of the world on cervical malignancy in prolapsed uterus. The aim of this study was to determine the incidence of preinvasive and invasive carcinoma of the cervix among the women with pelvic organ prolapse in rural parts of Nepal.

Methods: This was a prospective descriptive study conducted on women with suspicious cervix among the pelvic organ prolapse. These women underwent cervical evaluation by Papsmear and colposcopy guided biopsy. Finding recorded and analyzed.

Result: Among 10046 women with pelvic organ prolapse 3426 had suspicious cervix. Five percent acetic acid was applied on all the suspicious cervixes. Out of 3426 women with suspicious cervix 1204 had acetowhite area after application of acetic acid. Among these women with acetowhite area only 981 could undergo cytological and histopathological evaluation. Out of them 601 had some type of preinvasive and invasive pathology of cervix was found including CIN I 318, CIN II 198, CIN III 58, atypical glandular cells 12, Ca in situ 6, Invasive carcinoma 9 cases.

Conclusion: among the women with uterovaginal prolapse with ulceration, gross erosion preinvasive or invasive cervical neoplasm is not a rare pathology.

Key words: uterovaginal prolapse, preinvasive and invasive neoplasm, cervix.

Introduction

Uterovaginal prolapse is common gynaecological pathology among the Nepalese women [1, 2] There are approximately 600,000 women with uterine prolapse 200,000 requiring immediate surgery (till 2006) [3]. Many governmental and nongovernmental organizations have been performing prolapse surgeries in the rural part of the country since long time. Association of uterovaginal prolapse with cervical malignancy is very rare. Cytology and histopathology facility is not available in hysterectomy camps of the remote parts of Nepal. Many women in these camps have ulcerated and unhealthy suspicious cervix. But they need surgical treatment as they are very poor and cannot go to the

hospitals where there is facility for operation. Many of these women with unhealthy cervix cannot go to the centers where the facility of cytology and histopathology is available for cancer screening. To avoid inappropriate management at least acetic acid application should be used in such camps.

Methodology

It was a prospective, descriptive study conducted in vaginal hysterectomy camps in different 34 districts of Nepal on 3426 women with suspicious looking cervixes among the 10046 uterovaginal prolapse cases screened for surgery. The duration of study was 12 years from December 1998 – November 2011.

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Vaginal hysterectomy camps were organized by different governmental and nongovernmental organizations in 34 districts of Nepal for uterovaginal prolapse. 10046 women were screened for prolapse surgery. Among these 10046 women with uterine prolapse 3426 women had suspicious cervix including decubitus ulcer, gross cervical erosion or unhealthy looking cervix. 5% acetic acid was applied on these suspicious cervixes. If the aceto-white area appears these patients were counseled about the cervical cancer screening and about the study. Those who agreed were invited to Kathmandu for further screening of cervical cancer by Pap smear and histopathology evaluation. Pap smear Colposcopy was done free of cost in Hospital for advance Medicine and Surgery and Vinayak Hospital. As all

these women were with aceto-white changes Pap smear and colposcopy guided biopsy was done on all the patients. Abnormal findings of Pap smear and /or histopathology were considered as abnormal findings. Patients with cervical lesion but without prolapse were not included in the study. Findings were recorded and analyzed.

Result

Among the 10046 women with uterovaginal prolapse screened for surgery, 3426 women had suspicious cervix which included decubatus ulcer, gross cervical erosion, and unhealthy looking cervix. All of these women never had Pap smear done in the past. Five percent acetic acid was applied on these suspicious cervixes. (Table 1)

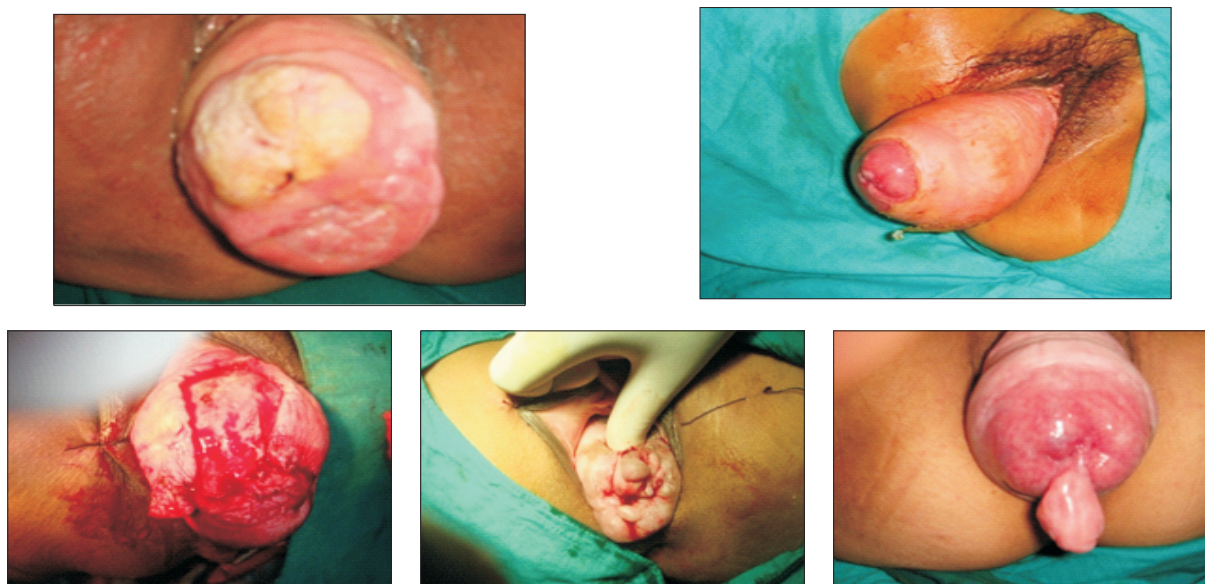


Figure 1. Photos of some suspicious cervixes which had abnormal cytology /histopathology

These are the Photos of some suspicious cervixes which had abnormal cytology /histopathology. Similar other cases were considered as suspicious cases (Figure 1).

Out of 3426 suspicious cervixes after application of the acetic acid 1204 women had aceto-white areas on

the cervix. All these women with aceto-white areas on the cervix were advised further screening for preinvasive and invasive lesion of the cervix but 223 women refused cytological and histopathological evaluation due to economical and other reason.

Table 1. Percentage of women with various histopathological changes

Women with	No of women	Percentage
Total uterovaginal prolapse	10046	100
With suspicious cervix	3426	34.1
Aceto-white area on suspicious cervixes	1204	35.14 (of 3426)
Underwent cytology/histopathological evaluation	981	28.63 (of 3426)
Abnormal cytology/histopathology findings	601	17.54 (of 3426)

Table 2. Age distribution of the women with abnormal cytology/histopathology

N=601		
Age in years	Number of patients	Percentage
30-34	22	3.66
35-39	58	9.65
40-44	69	11.48
45-49	95	15.8
50-54	99	16.48
55-59	82	13.6
60-64	69	11.48
65-69	68	11.31
70-74	27	4.49
75-79	8	1.53
80-84	3	0.49
85-89	1	0.16

Age of the women with abnormal cytology/histopathology ranged from 34-87 years. However the women over 75 years of age did not have invasive carcinoma (Table 2)

Table 3. Parity of the women with abnormal cytology / histopathology

Parity	Number of women	Percentage
1	4	0.6
2	38	6.32
3	63	10.48
4	96	15.97
5	102	16.97
6	99	16.47
7	73	12.15
8	51	8.48
9	38	6.32
10	14	2.32
11	15	2.49
12	3	0.49
13	5	0.83

Highest parity was 13, maximum patient belonged to para 5 and average parity was 5.69. (Table 3)

Table 4. Distribution of abnormal cytology/histology

Lesion	Number of women	Percentage
CIN I	318	52.91
CIN II	197	32.78
CIN III	58	9.65
Atypical glandular cells	12	1.99
Carcinoma in situ	6	0.998
Invasive carcinoma of the cervix	9	1.5

Among the women with abnormal cytology/histopathology findings maximum patients had CIN I (52.91 percent) while least number with carcinoma in situ 6 cases (0.998 percent). Invasive carcinoma in all the patients was in stage II A. Different other lesions were as listed in table above (Table 4).

Majority of the women belonged to low socioeconomic group. Out of the 601 women with abnormal cytological/histopathological findings 534 patients (88.85 percent) were chronic smoker but the duration of smoking was not recorded.

Discussion

Uterovaginal prolapse is very common gynaecological condition among the Nepalese women more over in the rural part of the country. These women are poor and cannot go to the facility where the surgery can be done safely. None of the patient had knowledge about the screening of cervical cancer. None of the 10046 women with uterine prolapse had screening for cervical cancer though they had high parity, majority of them were chronic smoker.

In vaginal hysterectomy camps there is no provision of screening for cervical cancer. Ideally the women with decubatus ulcer, unhealthy cervix should not undergo vaginal hysterectomy without at least cytological evaluation but in these camps this facility is not available. As these patients are most needy, poor women they are being operated without ruling out cervical malignancy. In this study 223 women refused cytological evaluation despite of offering them free of cost cytology. They refused cytology evaluation only because they had to go to the center where this facility is available.

According to a study done in Pakistan by Razia Mahboob showed normal histopathology of cervix in 25 percent cases squamous hyperplasia 10.2 percent, microglandular hyperplasia in 6 percent, squamous metaplasia in 18.3 percent and occult squamous cell carcinoma in 1.02 cases. According to Bonner et al 26 percent of vaginal hysterectomy specimen had unsuspected pathological findings.[4] This study was conducted on uterine prolapse cases who underwent vaginal hysterectomy but these all the women had cervical cytology negative for malignancy before operation. In present study only women with suspicious cervix were screened for cervical cancer, women with normal looking cervix underwent vaginal hysterectomy. In these vaginal hysterectomy camps as there is no facility of histopathology after hysterectomy uterus is disposed without histopathology examination. So the prevalence of

carcinoma or preinvasive carcinoma is not known. If all the women with uterine prolapse would be screened there might be abnormal cytology/histopathology even in women with normal looking cervixes. Similar findings 1.36 percent cases of invasive cervical carcinoma and 88.28 percent cases of chronic cervicitis were found in a retrospective study done by Nirmala Duhan et al on 367 women who underwent vaginal hysterectomy for pelvic organ prolapse [5].

Conclusion

Among the women with uterovaginal prolapse with ulceration, gross erosion preinvasive or invasive cervical neoplasm should be ruled out before proceeding to surgery.

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