ejpmr, 2020,7(6), 216-220

SJIF Impact Factor 6.222

EUROPEAN JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.ejpmr.com

Research Article

ISSN 2394-3211

EJPMR

CORRELATION OF CIN CASES BETWEEN COLPOSCOPY AND COLPOSCOPY DIRECTED BIOPSY FINDINGS

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Article Received on 21/05/2020 **Article Revised on 11/06/2020** **Article Accepted on 01/06/2020**

ABSTRACT

Background: Cervical cancer is both preventable and curable at an extent as the different screening, diagnostic and therapeutic procedure are effective. It has a long natural history with a prolonged premalignant lesion that is detectable and treatable. Colposcopy in the triage in screening. Assessment of unhealthy cervix, colposcopic evaluation has a great role in early detection of premalignant lesion of there by prevention of invasive carcinoma cervix. **Objective:** In this study our main goal is to evaluate the co-relation of CIN cases between colposcopy and colposcopy directed biopsy findings. **Method:** this prospective, clinical study was done at CMH, Department of Obstetrics and Gynecology, Chattogram from June 2015 to June 2017. A total 300 patients having clinically unhealthy cervix included in the study, where a detailed history was taken and a thorough clinical examination was done in all patients. **Results:** Most of the patients belongs to 31-40 years age group, 48.67%, followed by 5% patients in >50 age group, 35.67% patients in 41-50 age group and 10.67% patients in 20-30 years age group. Among 300 patients 24.67% had erosion, 10.67% were healthy, 15% had excessive per vaginal (P/V) discharge, 6.67% had polyps. CIN I cases was found in 20(6.67%) in the patients according to colposcopy findings whereas in colposcopy directed biopsy CIN I cases was found in 26(8.67%) in the patients. Followed by CIN II and CIN III was found 6(2%), 5(1.67%) from colposcopy findings. On the other hand, CIN II and CIN III was found 8(2.67%),3(1%) also early invasive carcinoma 2(.67%) from colposcopy directed biopsy findings. **Conclusion:** from our result we can conclude that, we are able to assess the prevalence of CIN (Pre-malignant lesion) among clinically Unhealthy cervix and also able to get a good correlation between colposcopy and colposcopy directed biopsy.

KEYWORDS: Unhealthy cervix, colposcopy, visual inspection of cervix e acetic acid, cervical intraepithelial neoplasia (CIN).

INTRODUCTION

Cervical cancer is the second most common cancer among women in developing and underdeveloped countries, amounting to 80% of the global burden of this disease.[1] India bears over a tenth of the global burden of cancers. As per latest data of India from GLOBOCAN 2012, top three cancers in female are breast, cervix uteri and colo-rectum.[2]

Cervical cancer is a deadly disease once it reaches the invasive stages but out of all the female genital tract cancers, it is the only preventable cancer if detected in its early stages. It is possible to prevent deaths due to cervical cancer through various strategies that target women >30 years for screening and treatment.[3] In a developing country like Bangladesh, cytology based screening programmes are difficult to organize because of absence of trained manpower, infrastructure, logistics; costs involved and has other limitations like low sensitivity and high false negative rates.[4] Colposcopy is a worldwide accepted method for detection of early carcinoma cervix, as it gives faster result and guides the site of biopsy which can be done in a single visit proving itself as a better screening modality for premalignant lesion.[5]

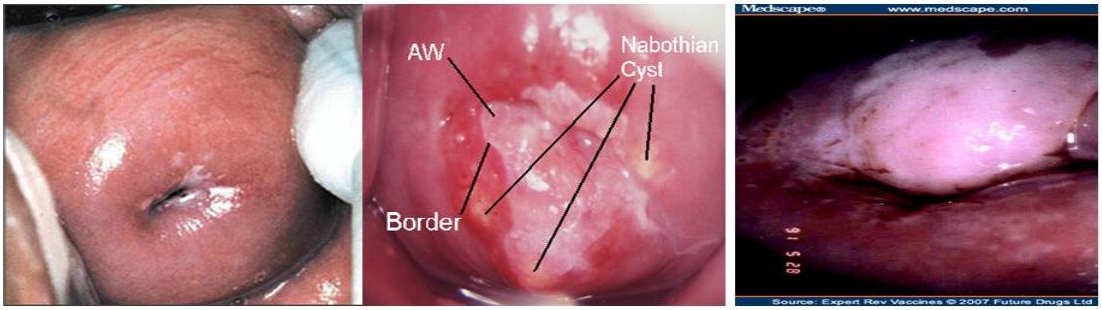

Figure 1: Colposcopic pictures of unhealthy cervix CIN cases.[6]

In this study our main goal is to evaluate the co-relation of CIN cases between colposcopy and colposcopy directed biopsy findings.

Objectives

General objective

To evaluate the co-relation of CIN cases between colposcopy and colposcopy directed biopsy findings.

Specific objective

- To identity the lesions.
- To obtain the biopsies from the selected areas of lesion.
- To detect of premalignant lesion of cervix for early management.

METHODOLOGY

Type of study	**Prospective clinical study**
Place of study	CMH, Department of Obstetrics and Gynecology, Chattogram.
Study period	June 2015 to June 2017
Study population	Total 300 patients having clinically unhealthy cervix included in the study.
Sampling technique	Purposive

Method

Data were collected from the patients who fulfilled the inclusion and exclusion criteria. A face-to-face Interview was carried out with help of the pre-tested semi structed interview schedule. A detailed history was taken and a thorough clinical examination was done in all patients.

Statistical analysis

After compilation of data, obtained data were checked, verified, edited and quoted and data were entering in the personal computer using the program "SPSS- PC". Entered data were then be cleaned, edited and appropriate statistical tests were done depending on the distribution of data.

RESULTS

In figure-1 shows age distribution of the patients where most of the patients belongs to 31-40 years age group, 48.67%, followed by 5% patients in >50 age group, 35.67% patients in 41-50 age group and 10.67% patients in 20-30 years age group. The following figure is given below in detail:

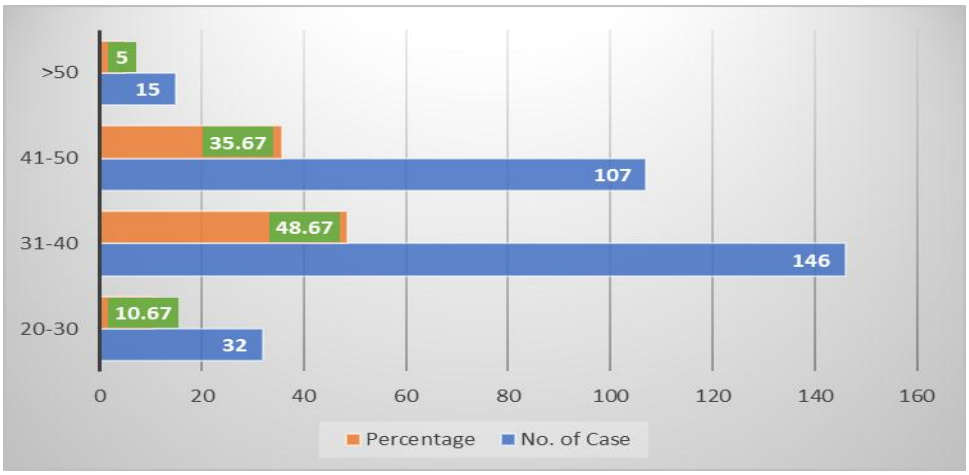

Figure-1: Age distribution of the patients

In table-1 shows symptoms of the patient where 53% patients had vaginal discharge, 17.33% had Post coital bleedings and 10% had no symptoms. The following table is given below in detail:

Table 1: Symptoms of the patient.

Complains	No. of cases,300	Percentage
No symptoms	30	10
Irregular per vaginal (P/V) bleeding	28	9.33
Post coital bleeding	52	17.33
Vaginal discharge	159	53
Dyspareunia	23	7.67
Post coital bleeding	8	2.67

In table-2 shows speculum examination of cervixes where among 300 patients 24.67% had erosion, 10.67% were healthy, 15% had excessive per vaginal (P/V) discharge, 6.67% had polyps. The following table is given below in detail:

Findings	No. of cases,300	Percentage
Apparently healthy	32	10.67
Erosion	74	24.67
Congestion	49	16.33
Excessive per vaginal (P/V) discharge	45	15
Hypertrophy	36	12
Polyps	20	6.67
Bleeds on touch	38	12.67
Atrophy	8	2.67

In table-3 shows colposcopic findings of cervix where 33.67% had erosion, 10.33% had aceto white areas, 18.67% had Inflammatory lesion. The following table is given below in detail:

Appearance	No. of cases,300	Percentage
Normal	42	14
Erosion	101	33.67
Inflammatory lesion	56	18.67
Polyps	12	4
Aceto white areas	31	10.33
Un satisfactory	96	32

In table-4 shows VIA findings of the patients where 73.67% didn't have any aceto white area. The following table is given below in detail:

Table 4: VIA findings of the patients.

Aceto white area e in transitional zone	No. of cases,300	Percentage
No aceto white area	221	73.67
Flat with sharp margin area	55	18.33
Dense opaque sharp margin aceto white area with abnormal vascular pattern	24	8

In figure-2 shows distribution of the CIN case according to colposcopy and colposcopy directed biopsy where CIN I cases was found in 20(6.67%) in the patients according to colposcopy findings whereas in colposcopy directed biopsy CIN I cases was found in 26(8.67%) in the patients. Followed by CIN II and CIN III was found 6(2%), 5(1.67%) from colposcopy findings. On the other hand, CIN II and CIN III was found 8(2.67%), 3(1%) also early invasive carcinoma 2(.67%) from colposcopy directed biopsy findings. The following table is given below in detail:

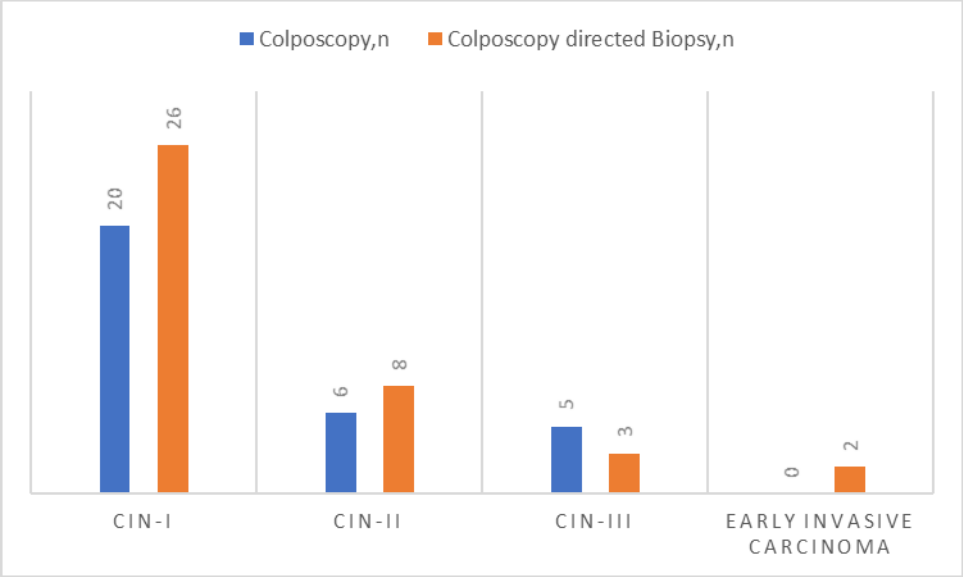

Figure-2: Distribution of the CIN case according to colposcopy and colposcopy directed biopsy.

DISCUSSION

In our study, most of the patients belongs to 31-40 years age group, 48.67%, followed by 5% patients in >50 age group, 35.67% patients in 41-50 age group and 10.67% patients in 20-30 years age group. Which was supported by other study where out of the total of 110 women in the study population highest (43.6%) was from 31 to 40 years of age group, followed by 20-30 years of age group (36.4%).[7]

We noticed in our study that, 53% patients had vaginal discharge, 17.33% had post coital bleedings and 10% had no symptoms and from colposcopic findings of cervix 33.67% had erosion, 10.33% had aceto white areas, 18.67% had Inflammatory lesion. Where as in other study said that, about 50 (45.5%) women with unhealthy cervix had no suspected cervical lesion on colposcopic examination. Only 60 (54.5%) were found to have changes in their cervical epithelium.[8]

In one study reported that, 68% for CIN I, 73.3% for CIN II, 81.4% for CIN III and 88.9% for invasive carcinoma found from colposcopic detection findings. They also mentioned that, sensitivity and specificity of the colposcopically directed biopsy detection rates was acceptably high: 58% for CIN I, 73.3% for CIN II, 81.4% for CIN III, 89% invasive carcinoma.[9] Another report obtained an accuracy rate of 94% for colposcopy. The colposcopic findings rates were: 10% for CIN I, 34% for CIN II, 34% for CIN III and 12% for invasive carcinoma and colposcopy directed biopsy were: 10% were CIN I, 20% were CIN II, 60% were CIN III and 10% were micro-invasive carcinoma.[10]

In one article which compared correlation of colposcopic impression with colposcopically directed biopsy results. They found the prevalence of cervical disease in the studies ranged from 40 to 89%. Colposcopic accuracy was 89%, which agreed exactly with histology in 61% of cases.[11] During the study from distribution of the CIN cases according to colposcopy and colposcopy directed biopsy shown that colposcopy and colposcopy directed biopsy shares quite similarity between them. CIN I cases was found in 20(6.67%) in the patients according to colposcopy findings whereas in colposcopy directed biopsy CIN I cases was found in 26(8.67%) in the patients, which was 2% higher than colposcopy findings. Followed by CIN II and CIN III was found 6(2%), 5(1.67%) from colposcopy findings. On the other hand, CIN II and CIN III was found 8(2.67%),3(1%) also early invasive carcinoma 2(.67%) from colposcopy directed biopsy findings.

CONCLUSION

In conclusion we can say that, this study demonstrated high accuracy and correlation between colposcopy and histology, comparable with results from similar studies in the literature. Colposcopy can be used as an excellent tool for evaluation of cervical lesion if colposcopies are properly trained and having keen eye. Therefore, colposcopy and colposcopy directed biopsy can be used to avoid over treatment of low-grade lesion, and under treatment of high-grade lesion and also possible to conserve the fertility in young women.

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