

Colposcopic evaluation of unhealthy cervix

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Introduction

Unhealthy cervix is a common finding in our country and is one of the known indications for colposcopy. Random biopsy from such a cervix may miss the representative area or cytology may be false negative. The present study was conducted to find out the role of colposcopy to pick up preinvasive and early invasive lesions in healthy cervix. An attempt was also made to correlate cytology, colposcopic findings and histopathological examination.

Material & Methods

All the women in the gynaecological OPD of Jawaharlal Nehru Institute of Postgraduate Medical Education & Research (JIPMER), Pondicherry with unhealthy cervix were the subjects of study. Pap Smear was taken with Ayre spatula followed by examination under magnified view with colposcope OCS-3. The smears were classified by Bethesda system. The colposcopic findings were recorded in the standardized colposcopy form and the directed biopsy was sent for histopathology and results were analysed and presented.

Results

The number of women with unhealthy cervix was 268 during a 6 months duration from October 97 to March 98 out of total number of 500 (53.6%). The mean age was 34.3 years and mean age at first coitus was 18.7 years. The presenting symptom was white discharge per vaginum in 50% of patients and abnormal bleeding in 9% of patients. As regards the cytology results, 44 were normal (nonmalignant cells), 5 ascous, 194 (75%) inflammatory smear and abnormal cytology was reported in 14 (5.4%).

Colposcopic findings were normal in 119 patients whereas abnormal colposcopic findings were seen in 139 women (Table I) Colposcopic directed biopsy was sent for H/P examination in all the patients. Correlation with cytology and histopathology has been shown in Table II. Combined finding of coarse

punctations and mosaic had the best correlation with histopathologic reports (80%). Different preinvasive and invasive lesions confirmed by H/P examination are shown in Table III. Four cases of invasive carcinoma, 2 of microinvasive and 17 of high grade lesions were confirmed by colposcopic directed H/P reports. OF these, 2 cases each of invasive and microinvasive and 11 cases of high grade lesions were missed on cytology alone as shown in Table IV.

Table I showing abnormal colposcopic findings.

Findings	(No)	%
Fine punctuation	25	17.8%
Coarse punctuation	8	5.7%
Fine punctuation and Mosaic	5	3.5%
Acetowhite area	42	30%
HPV	13	9.2%
Dilated vessels	18	12.8%
Ulceration	2	1.4%

Table — II showing correlation with cytology

Colposcopic findings	Positive Cytology	Correlation
Fine punctuation (25)*	3	8 (32%)
Coarse punctuation (8)	0	2 (25%)
Punctuation & mosaic (5)	1	4 (80%)
Mosaicism (22)	6	12 (54.5%)
HPV (13)	0	9 (69%)
Acetowhite area (42)	3	5 (11.8%)
Dilated vessels (18)	0	2 (11.8%)
Unsatisfactory (4)	2	0
Ulceration	0	2 (11%)
Total	15	44 (31.6%)

* No. of patients in parenthesis

Table III showing correlation with Histopathology

Colposcopic findings	HPV	LSIL	HSIL	Microinvasive	Invasive
Fine punctuation	2	1	5	0	0
Coarse punctuation	1	0	2	0	0
Punctuation + Mosaic	1	1	0	0	2
Mosaic	4	0	7	1	1
Acetowhite Area	1	0	3	0	1
HPV	8	0	0	1	0
Dilated vessels	1	1	0	0	0
Unsatisfactory	0	0	0	0	0
Total	18	3	17	2	4

Table IV showing lesions missed by cytology

Smear	HPV	LSIL	HSIL	Microinvasive	Invasive
Normal	3	-	1	-	-
Inflammatory	10	1	10	-	2
Ascous	0	1	-	2	-

Discussion

Unhealthy cervix is a very common finding in our country due to poor genital hygiene, malnutrition and multiparity. As the routine Pap smear screening is not a reality in future and even if it is done as opportunistic screening for the patients attending institutions with the facility of PAP smears, inflammatory smear is very frequent as seen in our series. The women may not be in a position to come for repeat Pap smear after treatment of infection. This is a very obvious advantage to examine these patients in colposcopy clinic before sending them away as we have picked up additional 30 cases of preinvasive and invasive lesions. These included 4 cases of microinvasive and invasive carcinoma and 11 cases of high grade lesions. Ambiyee et al (1989) and Handa & Dhall (1991) have also picked up 32 and 18 additional cases respectively by the combined use of colposcopy and cytology in cervical erosion. Peedicayil et al (1994) in South India have reported 5% cases of CIN picked up by colposcopic evaluation of women with cervical erosion.

Considering that the cervical Pap smear may have a false negative rate as high as 20%, it has been hypothesized that adjunctive investigations may uncover some of these deficiencies (Lawley et al, 1990). Slawson et al (1993) also felt that the most accepted mode of management is continuing the follow up when the result of a Pap smear is inflammatory atypia and have emphasized the fact that repeat Pap smear may fail to detect any abnormality and CIN may be detected in lot of women by colposcopic biopsy. Fifty one out of 238 women

(22.7%) with persistent inflammatory smear as studied by Seckin et al (1997) had HPV, dysplasia and insitu carcinoma by colposcopic directed biopsy. This definitely makes a case for one population who had a very high incidence of inflammatory smears (75%) in spite of the fact that limited number of experienced personnel and crowded out patient department in most of the institutions with colposcopic facility.

Conclusion

Unhealthy cervix is a common condition. CIN lesions and early invasive carcinoma were confirmed in 31.6% by colposcopy as against only 5.4% by cytology alone. Colposcopy should be used as a routine diagnostic modality along with cytology.

References

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