EVALUATION OF CERVIX WITH COLPOSCOPIC ACETO-WHITE-PATCHES IN CYTOLOGICALLY SCREENED WOMEN

(A report of two thousand cases of High-Risk-Women in Bihar)

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SUMMARY

A total of 2000 high risk women were screened cytologically and colposcopically to detect the pre-invasive and early invasive cervical lesions.

Cytological screening of the smears from the squamocolumnar junction of the uterine-cervix revealed 159 cases (7.95%) of Dyskaryosis - 80 cases (4%) mild Dyskaryosis 42 cases (2.10%) of moderate and 23 cases (1.15%) of severe dyskaryosis. Early invasive cancers were suspected and confirmed by histology in 14 cases (0.70%). Colposcopic aceto-white-patches revealed atypical transformation zone in 188 cases (9.40%) Abnormal findings in both the disciplines were found in 155 cases (7.75%).

Colposcopic directed biopsy was done in these 192 cases 188 + 4 (where colposcopy was normal but cytology was abnormal). This confirmed the findings of dysplasia in 101 (5.02%) and microinvasions in 14 cases (0.7%) of cases.

Conditions other than malignancy were also looked in women who showed abnormal morphological pattern. This led to the findings of tubercular lesion in 6 cases (0.34) and non-condylomatous wart virus infection in 7 cases (0.35%).

A definite increase was noted in the average age of women with increasing grades of CIN.

Cervical malignancies continue to pose a challenge to gynaecologists all over the world. The problem is more distressing in developing countries where the incidence of carcinomacervix accounts for 20% to 25% of all reported female malignancies. The high incidence with us is due partly to ignorance and poverty of our women but mostly to non-availability of

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modern diagnostic gdgetry for our general masses.

Countries where these modalities of diagnosis are freely used, have reported a steadily increasing incidence of cervical intra-epithelial neoplasia with dramatic reduction in invasive lesions of cancer-cervix.

The present study was undertaken on two thousand cases of high-risk-women picked up from those attending the gynaecological Out-Patients Department and post-natal clinics at the Patna Medical College Hospital.

The purpose was to detect cervical lesions early enough with modern modalities of diagnosis. These were:-

i) to cytologically screen these high-risk-women
ii) to evaluate colposcopically women showing abnormal cytological smears;
iii) to scrutinise aceto-white patches seen on colposcopy, and
iv) to carry out the histo-pathological study of aceto-white patches on colposcopy and to ascertain their nature neoplastic, or non-neoplastic.

The criteria for high risk women were:-

a) Early marriage before the age of 18 years;
b) Early child-bearing before the age of 20 years;
c) Poor personal and genital hygiene;
d) Women with history suggestive of sexually transmitted diseases;
e) Promiscuity, and
f) Multiparity, i.e. 5 or more children (abortions included).

Most of these women belonged to lower middle classes and to below poverty line group. Only a few (16.5%) women were from upper middle class.

They were in the varying age-group from 18 to 60 years. The majority of them (85.5%) were, however, in the age group of 21 to 45 years. Interestingly there were six girls under 20 years of age.

Paritywise analysis was as follows:-

Parity	Total No.	Percentage
Nulliparous	190	9.50
1 - 2	755	37.75
3 - 4	695	34.75
5 and more	360	10.00
Total	2,000	100.00

The presenting symptoms of these women were:

Symptoms	No. of Cases
i) No relevant symptoms	405
ii) Vaginal discharge	1355
iii) Backache and lower abdominal pain	850
iv) Menorrhagia	850
v) Inter-menstrual bleeding	265
vi) Post-coital bleeding	220
vii) Pruritus-valvae and vagina	110

More than one symptom was present in most of them.

The cytological findings were as follows:-

Cytological findings		No. of cases	Percentage
1.	Negative finding	1,138	56.90
2.	Inflammatory	703	33.15
i)	Non-specific 220		
ii)	Trichomonas 215		
iii)	Candida 240		
iv)	Atypical 28		
3.	Dyskaryosis	159	7.95
i)	Mild 80		
ii)	Moderate 42		
iii)	Severe 23		
iv)	Invasive Carcinoma	14	

159 (7.75%) cases showed varying degrees of dyskaryosis, out of which 14 (0.70%) were suspicious of frank malignancy.

These 159 cases were analysed age and paritywise, as follows:-

AGE ANALYSIS

Age in years	Mild	Moderate	Severe	Invasive
< - 20	4	Nil	Nil	Nil
21 - 25	13	Nil	Nil	Nil
26 - 30	32	14	3	Nil
31 - 35	19	20	6	1
36 - 40	10	7	9	3
41 - 45	2	1	3	5
46 - 50	Nil	Nil	2	3
51 - 55	Nil	Nil	Nil	2
56 & more	NIl	Nil	Nil	Nil
Total	80	42	23	14

The majority of cases of Dyskaryosis belonged to 26-40 years of age group.

In our cases

The average age for CIN I (30 years)
CIN II (33 years)
CIN III (39 years)
Invasive Cancer ... (43 years)

An increase in average age of the women was noted with increasing grades of dyskaryosis.

Colposcopic Study

Colposcopy was introduced in 1925 by Hinselman (1972). The diagnostic potentiality has been improved by application of 2 to 5% acetic-acid to the cervix before visualising it by a colposcope. An Oldhams-Colposcope with magnification of 40 to 50 times had been used.

The analysis of abnormal cases revealed that 155 cases showed abnormal findings, both in cytology and on colposcopy. 33 cases where colposcopy showed abnormal features, had normal or inflammatory findings on cytological examination. Four cases of dyskaryosis (3 mild and 1 moderate) did not show abnormal colposcopic pictures.

PARITYWISE ANALYSIS

Parity	Mild CIN I	Moderate CIN II	Severe CIN III	Invasive Cancer
Nulliparous	10	NIl	Nil	Nil
1 - 2	28	8	Nil	2
3 - 4	22	16	15	6
5 - more	20	18	8	6
Total	80	42	23	14

COLPOSCOPIC FINDINGS OF 2,000 CASES STUDIED

Sl. No.	Colposcopic findings		Total No. of cases	Percentage
I.	NORMAL COLPOSCOPIC FINDINGS		1,476	73.80%
	a) Normal squamous epithelium			
	b) Normal columnar epithelium			
	c) Typical transformation zone			
II.	ABNORMAL COLPOSCOPY		188	9.40%
	i) Atypical transformation zone	188		
	ii) Aceto white patch	188		
	iii) Mosaicism	150		
	iv) Punctation	108		
	v) Atypical Bl.vessels	130		
	vi) Keratosis	420		
III.	UNSATISFACTORY			
	Squamo-columnar junction not visible		88	4.40
IV.	MISCELLANEOUS		248	12.40
	(i) Inflammatory	160		
	(ii) Atropic	45		
	(iii) Erosion	43		

A total of 192 cases with abnormal cytology and colposcopy were subjected to histopathological examination of colposcopic directed biopsy. The findings were, as follows:-

	Histological Finding		No. of Cases	Percentage
1.	Chronic cervicitis		64	33.33
2.	Dysplasia		101	52.60
	a) Mild CIN I	43		
	b) Moderate CIN II	37		
	c) Severe CIN III	21		
3.	Invasive Cancer		14	7.30
4.	Non-condylomatous wart virus infection	7	3.65	
5.	Tubercular cervicitis		6	3.15
	Total		192 cases	

One-third or 33.33% of cases of histological examination showed chronic cervicitis. In 115 cases the abnormal findings of cytology and colposcopy were confirmed histologically. In this small series, we found 6 cases of tubercular cervicitis and 7 cases of non-condylomatous wart virus infection both rather abnormal findings.

Discussion

In this screening study of 2,000 cases of high-risk-women of all ages, parity and social status, 192 cases showed abnormal findings. Of these, 155 cases were detected cytologically and colposcopically, 33 cases only on colposcopy and 4 cases only on cytology.

The histopathology of colposcopic

directed biopsy confirmed 115 cases (60%) 101 of dysplasia and 14 of frank invasive carcinoma cervix. The incidence of CIN in our series was 5.75% and of frank invasive lesion was 0.7%. Our incidence is slightly higher than that reported by Usha Saraiya (1986) where the incidence of abnormal smears was 3.9%. On the other hand, Upadhyay & Jha (1974) reported an incidence of 7.2% and Singh et al (1983) 7.75% of abnormal smears in their series.

Different criteria for selection of cases, difference in technique, interpretation of the findings, and the difference in the type and number of cases studied-all these can be responsible for varying figures reported in the literature.

We feel that such screening programmes are necessary to create an awareness of this disease amongst the masses. The message of late marriage, small family-norm, better personal hygiene and better standard of living has to reach them, to have some control of this condition. The need for more screening clinics cannot be overemphasised if this condition has to be brought under control.

Nowhere in the world of medicine are the fruits of early diagnosis as rewarding as in the case of cervical malignancy.

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