

# A CLINICO—CYTOLOGICAL STUDY OF BENIGN CERVICAL LESIONS

by

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The importance of cytology in the early detection of cervical carcinoma is very well known (Boyes *et al*, 1962, Garrett, 1964, Frost, 1966). However, its role is less well understood as far as the inflammatory lesions of the cervix are concerned. Although vulva, vagina and exocervix are easily accessible to the naked eye examination, the lesions of the endocervix can be overlooked by a cursory examination. Since lesions of the cervix e.g. chronic cervicitis, erosions, unhealthy cervix and lacerations are predisposing conditions for malignancy of the cervix, it is of paramount importance to detect these lesions early enough and treat them adequately if cancer of the cervix is to be warded off (Lerch *et al*, 1963, Kaufman *et al*, 1967, Wahi *et al*, 1969).

## Material and Methods

The present study was carried out on patients attending the gynaecological outpatient department of Irwin Hospital, New Delhi. Clinically diagnosed cancer cervix cases were excluded. A total of 754 women, all above the age of 20, and seeking advice for various gynaecological conditions in the form of leucorrhoea, dysmenorrhoea, dysfunctional uterine

bleeding, postmenopausal bleeding or genital prolapse, etc., were examined during a six month period ending in April 1972. Each woman was interviewed as to her medical history and was examined clinically. Cervical scrape smear was taken with Ayre's spatula from each patient, spread on a clean dry slide and fixed immediately in a jar containing equal parts of ether and absolute alcohol. The smears were stained by the standard EA-50 Papanicolaou's technique.

## Results

A total of 754 smears were examined, but 10 were found to be unsatisfactory for assessment and have been excluded from the cytological analysis. Smears were interpreted under the following classification:

(i) Normal (ii) Inflammatory (iii) Inflammatory with dysplasia and (iv) Positive for malignant cells as seen in Table 1. The criteria for classification have already been communicated by Chandra (1970).

In the 244 normal smears, hormonal assessment was also made indicating ovulatory or anovulatory type smear. This assessment has not been included in the present communication.

Vaginal cytological studies carried out in 248 patients with clinically normal pelvic findings revealed evidence of inflammatory changes in 91 cases (37.3%).

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TABLE I  
Showing Clinical Diagnosis and Cytological Findings

S. No.	Clinical Diagnosis	No. of cases	Normal smear	Inflam- matory	Inflammatory with dysplasia			Positive for malignant cells
					Mild	Moderate	Severe	
1	Normal vaginal findings	248	157	86	3	2	—	
2	Cervical erosion	228	29	161	31	5	1	
3	Cervicitis	221	39	145	28	9	—	
4	Cervical Polyp	11	2	9	—	—	—	
5	Genital prolapse	36	17	19	—	—	—	
	Total	744	244	420	62	16	1	
							79	

There were endocervical cells seen in these along with squamous cells in the majority of inflammatory smears.

In cases of clinically diagnosed benign cervical lesions, majority of the patients showed inflammatory type smear consistent with the clinical diagnosis. Along with the inflammatory pattern, dysplastic changes were seen in 74 cases, 59 being mild, 14 showing moderate dysplasia and one case showed severe dysplastic changes. Of these, in 43 cases trichomonas vaginalis infestation was found. In cases with moderate and severe dysplasia, cervical biopsy was done.

One case of cervical erosion was positive for malignant cells and this was confirmed by biopsy.

In 36 cases of genital prolapse, there were anucleated squames seen and evidence of keratinisation was also seen in some of these cells. A diagnosis of genital prolapse was thus made on cytological findings alone. Inflammatory changes were seen in almost 50% of this group.

#### Discussion

The present study deals mainly with cytological diagnosis of inflammatory lesions of the cervix, where on clinical examination, there were normal pelvic findings. Approximately one third (91 cases) of the 248 cases with normal pelvic findings manifested evidence of inflammation, showing mainly endocervical cells. We could account for this endocervical pathology as being not within access to speculum examination, so as to be detected clinically. Thus cytology was of diagnostic aid for hidden endocervicitis. Of these 91 cases, there was evidence of mild dysplastic changes in 3 cases and moderate dysplasia in 2 cases.

In 70 cases of clinically diagnosed inflammatory lesions of the cervix, there

was no cytological evidence of inflammation and the normal smear pattern was encountered. It is thought that since the clinical lesions were too small in this group in the form of mild circumoral congestion or a tiny erosion, these might not have exfoliated significant number of parabasal or endocervical cells. In routine clinical examination, these cases had been passed off as normal, but because of our increased awareness, we clinically detected these minor lesions. In this group cytology is of use in excluding malignancy and in selecting cases where biopsy studies are indicated. It has the advantage of rendering a quick service to the clinician and follow-up can be done as frequently as desired without causing any inconvenience to the patient or trauma or alteration in the tissue under study.

#### Summary

A total of 744 cervical scrape smears were studied in cases with normal pelvic findings (248) or benign lesions of the cervix (496).

One third of these with normal pelvic findings showed evidence of inflamma-

tory changes, on cytological studies. Seventy-nine cases with clinically benign lesions of the cervix, showed evidence of dysplastic change. Of these, 16 showed moderate dysplastic changes and one showed severe dysplasia. One case of carcinoma cervix was diagnosed without clinical evidence of malignancy.

It is concluded, that exfoliative cytology is of definite help in detecting hidden lesions of the endocervix.

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