

CYTOLOGICAL EVALUATION OF CERVICAL LESIONS

(Study of 650 Cases)

By

C. SWARNAKUMARI

SUMMARY

Analysis of 650 cases taken from the Gynaecological outdoor is reported. The analysis is done with reference to religion, age and clinical appearance of cervix. The pick up rate of abnormal smear is 21.5 per thousand as compared to the figures all over India. Out of this 16 cases showed mild to moderate dysplasia, 2 cases of in situ cancer and one case of invasive cancer. All patients are from middle and high socio-economic group of population. A similar study is under progress in the rural areas and in low socio-economic group of population under the Apollo Hospitals research programme at Tambaram, Madras to compare the pick up rate of abnormal smears among high and low socio-economic groups.

Introduction

The use of Papinicolau technique of screening for cervical cancer and, appropriate interventions should be in theory capable of completely abolishing the incidence of invasive cervical cancer in a completely screened population. Fortunately, a health care system exists in Sweden which allows total population monitoring to test the axiom. This in combination with a free 4 yearly cervical smear screening programme has resulted in the first time assessment of potential efficacy of this primary health care procedure. Over a ten year period, 71% of Swedish women had at least one cervical smear. No women were lost to follow up. There was a 75% decrease in the

incidence of invasive cervical cancer, in women who had at least one smear during 10 year period when compared to the remaining unscreened population. A regular screening programme is thus capable of reducing the incidence of invasive cervical cancer from 32 to between 1-5 cases per 100,000 women year in a completely screened population.

Though cytological services are available in India for the past 10 years, but grossly inadequate for the size of the population compared to the other countries in the world. Hence, that all physicians are involved in the primary care of the female patient must fully utilise the best weapon in the armamentarium against gynaecological cancer, namely early diagnosis. Patients must be educated to report early symptoms and to have examinations and pap smears. The

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physician must be taught the importance of pelvic examination and how to identify the high and low risk patient groups, according to age, sexual activity, hormone therapy and socio-economic status.

Material and Methods

Cytological evaluation of cervical lesions—study of 650 cases from the Department of Obstet. and Gynec., Apollo Hospitals, Madras from January '86 to December '86. Aim of this paper is to review our experience with the routine use of the pap smear in nonpregnant patients, attending Gynaec. OPD and to evaluate the pick-up rate of abnormal smear. Smears are obtained from the portio vaginalis of the cervix at the first visit itself, before doing the Gynaec check up by using the wooden spatula. Smears were fixed immediately in the fixative (80% absolute alcohol) and stained by PapiniColau method. The study was done at random without any selected criteria.

Religion, Age and Parity

All patients studied are married and above the age of 20 years and more than 70% of them are between 20 to 40 years, 25% of them are 40 to 60 years and 5% are above the age of 70 years. Parity is high upto IV being 75% and above IX para are only 5%. Hindus formed the major groups and the rest are muslims and christians (Table I).

Nature of the Cervix

The cases are correlated with clinical appearance of the Cx. Cervical erosions formed about 43%; cervical polyps—about 0.4% (6 cases). Cervix was unhealthy in

TABLE I
Religion, Age and Parity

Religion	%	Age	%
Hindus	70	20-40 years	75
Muslims	25	40-60 years	25
Christians	5	above 70 years	10
Parity			
I-IV	65		
V-VII	20		
IX and above	5		

9.9% of cases (unhealthy cervix is categorized when the cervix appeared hypertrophied, with erosion and the presence of multiple Nabothian follicles, or when it starts bleeding on touch). Chronic cervicitis is found in 12.7% of cases (when cervix appears congested with profuse vaginal discharge without erosion). Healthy cervix was found in nearly 35% of the cases (Table II).

TABLE II
Nature of Cervical Lesions (650 Cases)

Healthy Cervix	34.0%
Cervical Erosions	43.0%
Cervical Polyps	0.4%
Unhealthy Cervix	9.9%
Chronic Cervicitis	12.7%

Results

To facilitate and simplify the reports on cytological specimens, Papinicolau suggested a classification of all smears into 5 grades. Grade I and II as negative smears, Grade IV and V as positive smears and Grade III as suspicious smears. This created confusion in assessing Grade III smears. The current trend in cytopathology is to issue cytological implications rather than assigning a sample to numerical classification, instead they usually provide a cytomorphologic com-

ment as a diagnostic report, as accepted by the international academy of cytologists.

Among our cases, about 31% are normal, 66% are inflammatory forming the bulk, and abnormal smears are 2.9%. The incidence of abnormal smears reviewed from all over India, from Kashmir to Kerala, Kurnool, Calcutta and Bombay ranged between 25 to 35 per thousand. High incidence is from Bombay consisting of 31 to 32 per 1000. In our series it is 21.5 per 1000. Probably, this can be explained by the socio-economic status of the people on whom the study was done.

TABLE III
Type of Smears: (650 Cases)

Normal	31.0%
Inflammatory	66.1%
Abnormal	2.9%

TABLE IV

21.5% per 1000 Apollo Hospitals, Madras
31.9% per 1000 Bombay
25-35 per 1000 All over India

TABLE V
Abnormal Smears (19 Cases)

Mild to moderate dysplasia	13-184/1000
Severe	2-46/1000
In situ	2-3/1000
Invasive carcinoma	1-1.5/1000

TABLE VI

Mild to moderate dysplasia	28.5 years
Severe	30 years
In situ	33 years
Invasive	44.2 years

False Negative Reports

Varies from 10 to 20%. Even in repeated smears 10% false negative rate is reported. The reason is with established cancer, the actively growing cells are deeply situated and those which are exfoliated from the growth are necrotic and

obscured by inflammatory cells, therefore all such cases biopsy should be done. In our series, there were no false negative reports.

Discussion

Today the foremost field of application of vaginal cytology is in screening for cancer since the site of origin of one of the most common malignant diseases in the female. Cervical carcinoma is readily accessible to smear examination. In serial screening programme the initial examination can be expected to uncover carcinoma in situ or invasive carcinoma in 1.6% to 0.7% of sexually mature women.

Mass screening will definitely show fall in mortality rates, though not a fall in incidence rates by shifting the diagnosis from late to early stages. Patients seek medical advice when the disease has become too advanced for treatment. Most doctors are helpless as they have nothing to offer to their patients by way of early diagnosis. Preventable but not prevented—that is true today.

Today, it is generally recommended that smears be taken at yearly intervals beginning usually at the age of 25. If this practice is universally accepted, more of the women being examined is unlikely to fall victim to cervical carcinoma in future, unless she already has an advanced carcinoma at the time of first examination itself. In our series of 650 cases the incidence of mild to moderate dysplasia is about 18 per 1000 and severe type 4.6 per 1000 and there was one case of invasive cancer and 2 were in situ cancer.

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