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EARLY DIAGNOSIS OF INVASIVE CARCINOMA OF CERVIX

Vs.

DIAGNOSIS OF PRE-INVASIVE CARCINOMA OF CERVIX

(A demographic view-point)

by

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Diagnosis of early invasive carcinoma of cervix and pre-invasive carcinoma is one of the commonly discussed subjects in gynaecological practice. The method of choice would be routine gynaecological examination of all women in cancer age group along with exfoliative vaginal cytology and/or cervical biopsy. Such facilities are not to be expected in the present state of our resources. Therefore, our immediate concern should be early diagnosis of this disease of women. The burden of this work can be judged

when we note that 38,937,000 women in our country fall in the age group 35 to 55 years (Government of India Publication—India 1965).

A study of 5,055 cases of cervical cancer, who attended the Cancer Clinic at the Hospital for Women, Patna, during the period 1955 to 1965, showed the percentages of the different stages (League of Nations Classification 1950) of this disease as given in Table I.

This appalling situation is pronounced when one finds that 61.7 per cent of 5,055 cases of cervical cancer were seen at stage III for the first time, having passed through stages I and II undetected. The percentages of stage III in a series of 965 reported by Naidu (1961) and 2,046 reported by Subhadradevi and Prabhavati (1961), were 44.1 and 52 respective-

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TABLE I

Author	Naidu (1961)	Subhadradevi & Prabhavati (1961)	Sinha & Mukherji (1966)
Period	1956-1959	July, 1955-Dec., 1960	1955-65
Total Number	965	2,046	5,055
Stage—I	6%	16%	4.9%
Stage—II	27.7%	26%	23.2%
Stage—III	44.1%	52%	61.7%
Stage—IV	21.6%	6%	10.2%

ly. It is clear from the above analysis that excluding pre-invasive lesions of cervix, cases in stages I and II remained elusive when they consulted their physician or surgeon for the symptoms of leucorrhoea and/or vaginal bleeding. Thus the problem to-day in our part of the country is the diagnosis of early invasive carcinoma of the cervix.

In order to assess the position of pre-invasive carcinoma of cervix among the patients, all the cervical biopsies done in Unit II of the Hospital For Women, Patna, during the same period 1955-1965, for unhealthy cervixes were analysed. The results are given in Table II.

biopsies, in 58 or 15.3 per cent invasive carcinoma was revealed on histological examination. These cases were in such an early stage that a clinical diagnosis was not possible. It can be termed as early detection of invasive cancer of cervix. In contrast to the above, pre-invasive carcinoma was found in 4.6 per cent, which is a small portion of the problem of cervical malignancy. For an affirmative comparison one may quote Naidu (1961) reporting 27 stage 'O' and Subhadradevi and Prabhavati (1961), 4 such cases in their series. Therefore, in the face of a mammoth task of treatment and care of cancer of cervix in our country and until the

TABLE 2

Histological diagnosis	Number of cases	Per cent.
Chronic cervicitis	253	67.1
Carcinoma cervix	58	15.3
Pre-invasive carcinoma cervix	18	4.6
Tubercular cervicitis	8	2.0
Report not available	40	10.6

Table II indicates that a good number of cases of cervical carcinoma would have passed undetected without biopsy examination. Out of 377

resources have improved, our efforts are to be limited to the early diagnosis of invasive carcinoma of cervix by conventional methods in general.

Another method of gauging the problem of cervical malignancy in our women population could be by finding out the mortality rate due to this disease which could be anybody's guess in the present state of our vital statistics. In ten years, from 1950 to 1959, 1.1 per cent of all deaths in England and Wales were due to carcinoma of cervix (Registrar General's Review 1945). Subodh Mitra (1961) reported annual death rate in Calcutta Municipal Corporation area due to this disease as 2.2 per cent in 1942 and 3.8 per cent in 1943. That means 2 to 3 times more women were dying from this disease in a small area of this big sub-continent than in England and Wales.

The subject of early diagnosis of carcinoma of cervix versus diagnosis of pre-invasive carcinoma of cervix in general, may also be viewed from a different angle by finding out their relative position among total gynaecological admissions. For this purpose also cases admitted to Unit II of the Hospital For Women, Patna, from 1955 to 1965, were studied. The observations are given in Table III. Total admissions for the said period were 4,247.

vasive carcinoma constituted 58.5 per cent and pre-invasive carcinoma 1.9 per cent of the total genital malignancy, which compares with the incidence reported by Subhadradevi and Prabhavati (1961) for the former.

In the fight against carcinoma cervix the first step is early diagnosis. Mass screening of women in cancer age group in any population by modern methods like exfoliative cytology, colposcopy, colpomicroscopy with routine gynaecological examination, becomes impracticable. Bourne and Williams (1963) observe that over 1,000 technicians working whole time would be required to screen twice annually the greater London female population in the cancer age. Kaiser *et al.* (1960) found carcinoma in situ in 2.45 per thousand population while examining 608,200 women in Tennessee Experiment. Boyes *et al.* (1962) screened 146,833 smears in British Columbia and detected 87 carcinoma in situ and 828 invasive cancer during 1949-1960. Similarly Macgregor and Dougald Baird (1963) examined 2,683 smears which revealed 18 unsuspected cases. Such public health measures are beyond

TABLE 3

Diagnosis	Number	Per cent of total admissions
Genital malignancy	335	0.08
Carcinoma of cervix	197	0.05
Pre-invasive carcinoma of cervix	5	0.10

In this group of 335 patients of genital malignancy, 197 were invasive carcinoma of cervix and 5 pre-invasive carcinoma of cervix; that is, in-

our approach. Instead if the medical profession and public are made cancer conscious alike and opportunity for gynaecological examination

of our female population in the cancer age group is provided within the existing medical organisations in our country, early diagnosis of carcinoma of cervix would become possible in a much greater number of women. Diagnosis and treatment of pre-invasive carcinoma of cervix, comparatively a minor problem at this stage, will continue to be the responsibility of specialised institutions, which are few in number when compared with the female population of our country.

Conclusion

A demographic study of 4,247 gynaecological cases, 5,055 cancer cervix cases, and 377 cervical biopsies has been made; and analysed to emphasise the view-point that at the

present moment our problem is to diagnose carcinoma cervix in its early stages (I and II) by better organisation of our gynaecological work in all the hospitals and dispensaries—general and exclusive.

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TABLE 1

Year	Number of Cases	Percentage
1957	4247	100.0
1958	5055	119.0
1959	377	8.9
Total	9679	227.9

In this group of 9679 patients of gynaecological cases, 4247 were in the age group of 15-45 years, 5055 were in the age group of 46-75 years and 377 were in the age group of 76-90 years. The distribution of cases is given in Table II.