



EXPERT COMMITTEE ON EARLY
DETECTION OF CANCER

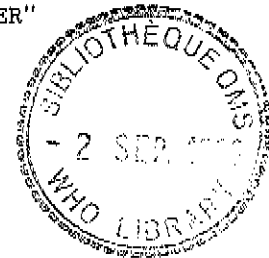
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A NOTE ON THE PROBLEM OF "EARLY DETECTION OF CANCER"
IN SOUTH INDIA

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General

It is now, I think, generally agreed amongst all oncologists that, pending the day when our chemists discover the omnipotent remedy, the key to successful cancer control lies at present in the recognition of pre-cancerous and early cancerous lesions. This would immediately require the precise definition and appreciation of such lesions.

In South India, fortunately, the commonest types of cancers are the squamous cell cancers of the mouth and the cervix. 12 073 apparently healthy adults over the age of 20 years were screened for cancers and pre-cancers in a representative area of Madras State. Fifty-seven new cancers were detected. Of these, 50.5 per cent. were in the cervix and 32 per cent. in the oral cavity. Studies at the Cancer Institute, Madras, reveal that 35 per cent. of all cancers seen are oral cancers and that 22 per cent. are cervical ones. The Tamil population is, therefore, at high risk for oral and cervical cancers. These are sites where pre-cancers and cancers can be relatively easily identified both clinically and cyto-histologically.

Despite these facts 86 per cent. of our oral cancers and 78.6 per cent. of our cervical cancers come in the "late" stages of the disease, in whom the five-year survival has been only 19 per cent. and 24 per cent. respectively. In the early cancers the corresponding figures have been 78 per cent. and 92 per cent.

These facts dramatically emphasize the urgency of "early detection" in our area, especially in view of the favourable sites affected, both from the diagnostic and therapeutic aspects.

The size of the problem

"Early detection" of cancer is a very complex problem. There is no reliable standard universal test for cancer as yet. The tests vary from site to site, and even for a specific site very few tests are absolutely dependable.

Obviously for cancer to be detected, either the subject must go to the detecting agency or the agency must reach out to the subject. In the first case the subject is likely to go to the doctor only when he notes at least one alarming symptom. Cancer is, however, in most instances an insidious disease in its very early stages, with no specific or alarming symptoms or signs. It would need, therefore, a very intelligent patient with a high degree of health consciousness to "suspect" early cancer. Sixty per cent. of our people are illiterate

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and another 25 per cent. can just sign their names. In the 10 per cent. educated population the level of health consciousness is low and not worth mentioning. The few that are health conscious are hypochondriacs. In the circumstances, to plan a cancer detection programme on the basis of the patient going to the physician for a health check in our area is worse than futile.

The logical corollary to the above would be "Health Education". It has taken us 20 years to improve our literacy rate by 20 per cent.; it would take at least 50 years for us to make everyone literate, leave alone health conscious. The obvious suggestion would be to ignore the older generation and start with the youth in the schools. For this the first step would be to health-educate the "teachers". This is a practicable first step in our area, but would take at least 20 years to achieve in our democratic set-up.

The other alternative is for the detecting agency to reach out to the people. This can be done in two ways:

- (i) population screening, or
- (ii) compulsory health check of every individual attending any hospital or clinic in the State.

(a) Mass screening. This is an impractical proposition for at least the next two decades. The population is ignorant, suspicious, and superstitious, with no health consciousness but full of wrong notions regarding their political rights. Matters are made worse by the encouragement given by the Government to obsolete indigenous methods of treatment in the name of patriotism.

The population of Madras State alone is near 40 millions. Two-thirds of these are over the age of 20 years. It is a physical and financial impossibility to mass screen this stupendous number.

It is, of course, possible that only the population at risk for cancer of the cervix and cancer of the mouth be screened. This might reduce the immensity of the problem, but is as yet not a practical proposition in our area because of poverty.

The Government also is deeply engrossed in the overwhelming problems of food deficiency and national disunity. It has neither the energy, the time nor the money for such health refinements as mass screening. It is worthwhile mentioning here that the Government has not been able to provide even a protected water-supply in the greater part of the country, even after 20 years of freedom.

The private sector does not have the financial capacity to support such a programme.

(b) Health check of patients in out-patient clinics of hospitals. This is the only compromise that is likely to succeed. All patients attending a clinic should be screened. We have carried out this programme with nearly 100 per cent. success in the Taluk hospitals of Chingleput district.

If we are to cover the clinics in Madras State we would need, of course, better organization and more money.

The main difficulty in organizing this form of screening will be the lack of trained medical and paramedical personnel. There are no special training facilities in oncology in Madras State. All the branches of this training will have to be organized. But the most important field in which urgent training facilities are needed is exfoliative cytology. Apart from two institutions in Madras State (Cancer Institute, Madras and the Christian Medical College and Hospital, Vellore), no cytopathological work is done in any other hospital, teaching

or otherwise. There are no cyto-technicians. Cytological training programmes will be a vital prerequisite to any "clinic screening" programmes.

The money and the equipment for such screening should not be difficult to procure with the support of international and national agencies.

Screening methodology

Only patients attending hospital clinics can be screened at the present time with any hope of success.

The screening programme will have to be confined to the mouth and the cervix, and possibly the penis. Other forms of screening such as radiography are not feasible because of lack of facilities, personnel and time. Hence other sites such as the gastro-intestinal tract etc. cannot be included in the screening programme.

Physical examination and exfoliative cytology are the only practical methods that can be employed, supplemented by biopsy. Colposcopic examination is not feasible. Even cytological examination will need, in the first instance, the establishment of oncological training programmes.

Conclusion

Early cancer detection in India is fraught with great difficulties. Only a limited programme is practicable under present conditions, but it is worthwhile making a start.