

## Editorial

### "EARLY DETECTION OF CANCER"

Early detection of cancer is based upon three fundamental assumptions, firstly that the treatment of benign and precancerous lesions reduces the incidence of cancer, secondly, that the treatment of in situ cancers is conducive to total cure and thirdly that early diagnosis and management of invasive cancer ensures better survival. When patient seeks medical advice for vague symptoms, which could however be due to a possible malignant tumour at a particular site, the alert clinician should investigate the patient immediately to exclude cancer. At this stage cancer is usually not significantly advanced.

Currently the U. I. C. C. (International Union for Cancer Control) is studying the epidemiology of cancers in various countries. The importance of this is two folds: Firstly by focussing attention on a section of population vulnerable to a particular cancer an early detection is facilitated. Secondly by changing the causative factors responsible to a particular cancer, the incidence of that cancer can be reduced e. g. reduction in lung cancer following campaigns against cigarette smoking and reduction in breast cancer after campaigns for advocating breast feeding of infants, lowering fat consumption and encouraging self palpation of breast regularly.

Indeed early diagnosis of cancer implies diagnosis of cancer in almost a symptomatic stage. It involves motivation of the population towards acquisition of knowledge, attitude and practice.. Epidemiologists and clinicians should be able to recognise high risk cases exposed to particular neoplasia and knowledge of alarming symptoms should be propagated for wide publicity through common available media and means. Probable cases should have regular clinical examination periodically and relevant investigations including radiological, imaging techniques and Bio-Chemical examination should be undertaken as and when desired. Suspicious lesions should be investigated by specific tests including smear cytology, aspiration cytology, tru-Cut needle biopsy and incisional or excisional biopsy to exclude or confirm the diagnosis. A vigilant clinician thus may diagnose cancer at early stage.

Oral cancer patients who are at high risk due to a predisposing condition like betel Chewing-habit and chronic irritation due to sharp teeth should be frequently examined and any suspicious ulcer or change in oral mucosa should certainly be subjected to biopsy.



In cancer of cervix, poor hygiene, early marriage and multiple pregnancies are possible predisposing factors. In western countries the use of yearly papanicolaou smear, the Schiller's iodine test and where indicated cone biopsy of the cervix, over the age of 30 years has considerably increased the diagnosis of stage 'O' and stage I cancer cervix at which stage total cure is possible. The Indian Academy of cytology is making efforts to have the 'Pap' test included in the gynaecological examination for women who report to primary health centres for advice on family planning.

In breast cancer, mammography, thermography coupled with clinical examination, aspiration cytology and immediate biopsy of suspicious lump are being employed for early detection. Self examination is in-expensive and women should be educated to adopt this simple screening measure. Use of mammography for masses is deemed restricted due to possible radiation hazards, expenses involved and scarcely available facility. Low dose, units for mammography have now come for use to cut short the radiation hazards of conventional mammography. Xero-radiography is being increasingly used in different countries. The use of ultrasonics, trans illumination and radio active isotopes are still in the experimental stage.

Lung cancer is thirty times commoner in heavy smokers. So all chronic smokers above the age of forty years, who complain of productive chronic cough for more than two weeks should be considered at risk and subjected to repeated sputum cytology and chest-x-ray examination, bronchoscopy and biopsy and scalene node biopsy. An X-ray of the chest every six months is a must in all heavy smokers over 45 years.

In cancers of anorectal region, 75% are within the reach of examination finger and proctoscopy, facilitating an early detection. Any patient aged 40 years and above, complaining of passage of blood in the stools or altered bowel habits should undergo rectal examination, Procto-sigmoidoscopy Barium enema studies & colonoscopy. Similarly, patients with familial or other types of polyposis or ulcerative colitis should be identified as being at high risk and need repeated examination for early detection. Fibreoptic flexible endoscopy is assuming great importance in this area. Fibre-optic oesophago-gastroscope and the use of gastric camera and gastric cytology now a days are excellent aids for early detection of oesophageal and gastric cancer. Energetic efforts by Japanese in the early detection of gastric carcinoma have led to 90% 5 years survivals. This must be considered the most outstanding achievement in the field of cancer control during the past decade due to early detection of cancer.

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