one considers the small number of cases involved, the problems arising should not be unsurmountable.

References


Early Diagnosis of Cancer

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This paper was read at a symposium held at the Royal University of Malta on the 21st March 1974 organised by the Association of Surgeons and Physicians of Malta.

This occasion provides me with the opportunity to give you some data on the incidence of the various forms of malignancies in the Maltese Islands. The figures are derived from the records of the Malta Cancer Registry which is supported by a grant from the British Cancer Research Campaign and cover the four year period 1969-1972. Statistics are an essential basis for the planning of cancer-control and of early-detection programmes.

It is only when one sits down and analysis one’s figures that one appreciates how erroneous one’s impressions can sometimes be.

Incidence

The overall Cancer Incidence in Malta is much lower than that of Northern European Countries; our rate of 177 per 100,000 population contrasts with an incidence of 350 per 100,000 in Denmark, 348 in the U.K., 306 in Sweden and 247 in Norway. Our rate is nearer to that of Yugoslavia which is 206 per 100,000 and it is almost identical with that of Israeli Jews which is 171 per 100,000. There must be many reasons for the low incidence.

(1) The first that comes to mind is the limitation of postmortem examinations. Our cancer incidence rate would almost certainly rise with an increase in the number of autopsies.

(2) Our age distribution is somewhat younger than that found in Northern European countries. For
example, the over 65 year olds constitute 9% of the Maltese population as against 16% in the U.K., 14% in Sweden and 13% in Norway.

(3) Genetic factors may be involved.

(4) There is, in Malta, less industrialization, a cleaner atmosphere and therefore, less carcinogens.

**Distribution**

The distribution of the various forms of Cancer does not differ to any appreciable extent from that of other European countries:

In Males, Skin and Lip cancers account for 26% of all malignancies which is a rather high percentage. Gastrointestinal tract cancers and Lung cancers each account for 17%, Genitourinary cancers for 11%, E.N.T. cancers for 10% and all other cancers for 19%. (Bone, Lymphomas, Leukaemias, etc.)

In Females the greater number of cancers arise in the Breast (29%) and in the genital organs (23%). G.I.T. cancers account for 12%. The incidence of Lung cancer in females, so far, is very low, at 2%, whereas Skin at 10% is comparatively high.

**Survival rates**

During the four year period 1969-1972 there were 224 new cases of lung cancer. By December 1973, 214 of these 224 were dead (95%). In order to have a somewhat longer follow-up period, if we take only the 1969 and 1970 patients — a total of 98, we find that by the end of December 1973 only 1 patient was alive. Much thought must be given to improving this high death rate. Mass miniature radiography has been suggested but this is expensive and of doubtful efficiency. An annual chest X-ray of patients at risk might lead to a slightly better salvage rate. But as far as lung cancer is concerned we should concentrate mostly on cancer education rather than early detection. Educating the young not to smoke and preventing them from becoming hopeless addicts would soon cause a drop in lung cancer incidence.

There were 340 cases of gastrointestinal tract cancer in the period 1969-1972. Of these 127 had cancers in the stomach, 119 in the large intestine, 66 in the rectum, 23 in the oesophagus and 5 in the small intestine. By the end of December 1973, 22 of the 23 patients with oesophageal cancer were dead, 114 of the 127 gastric cancer patients were dead, as were 74 of the 119 cases of cancer of the Colon and 38 of the 66 cases with rectal cancer. Early diagnosis would, no doubt, reduce this high mortality rate especially as far as large intestine and rectum are concerned. Much can be done in this respect by educating the public to appreciate the significance of the early warning symptoms: change of bowel habits and melena. Also, general practitioners could make proctoscopy part of routine medical examinations. Cancer of the breast was diagnosed in 316 females in the four year period under review. At the end of 1973, 112 (35%) of these patients were dead. If we analyse the clinical stage at which these patients presented we find that only 31% were Stage I, 18% were Stage II, 37% were Stage III and 14% were Stage IV. Here we can really appreciate the value of early diagnosis. Of the Stage I cases, 87% are still alive, of Stage II 70% are alive, whereas of the Stage III and Stage IV cases only 14% are still alive. Earlier diagnosis is certainly possible in breast cancer. Education of the public regarding the value of routine monthly breast self-palpation, a greater awareness by general practitioners that all lumps in the breast may be malignant, and breast cancer-detection clinics would all help to increase the number of Stage I cases and reduce the number with more advanced disease. If, as is quite likely, it will be shown that a segmental resection with radiotherapy is just as effective a method of treatment as a radical mastectomy for the early cases, the quite natural dread of a mastectomy should disappear and women may start presenting themselves for examination at an earlier stage. Mammography and Thermography may
have a part to play in early diagnosis but their part would be only secondary to routine breast palpation.

**Gynaecological cancer**

Comparative studies show that, in Malta, we have a low incidence of cancer of the Cervix. During the four year period 1969-1972 there were 108 Body cancers and only 51 Cervix cancers. It is a fact that Cervix cancer incidence is dropping all over the world but, even so, in most European countries the incidence of Cervix cancer is at least 1.5 times higher than that of Body cancer. In Malta, for some unknown reason, the ratio is reversed. With Gynaecological cancer, as with Breast cancer, early diagnosis greatly affects the prognosis. The cervical smear test has an important role in early diagnosis. Bleeding is an early symptom of Uterine cancer and this should make the patient consult her doctor. Not all patients do so early enough and in our series of 51 Cervix patients, only 19 cases were in Stage I at the time of diagnosis. Education of the general public and a greater awareness by general practitioners would lead to earlier diagnosis and would greatly lessen the morbidity and mortality rate.

**Oral and E.N.T.**

Finally, as regards oral and E.N.T. cancers, much can be done to improve the overall poor results of treatment. Cancer of the Larynx, is curable if diagnosed early, and yet, out of the 56 laryngeal cancers which we dealt with during this four year period, 26 (i.e. 46%) are already dead. This is due to the fact that many of the patients ignored their hoarseness and sucked Megazones or some such like for months prior to consulting their doctor. An early laryngoscopy would have saved many of these lives. Cancers of the tongue, floor of mouth and oral cavity tend to metastasize early and consequently carry a bad prognosis. Out of 51 patients, 29 (57%) are already dead. For earlier diagnosis, we must here mostly depend on our dental colleagues. Routine dental examinations are increasingly sought. Dental students and surgeons must be trained to examine the whole mouth prior to extracting or filling teeth. Any suspicion of leucoplaikia or thickening or early superficial ulceration of the tongue, floor of mouth or buccal mucosa should be noted and investigated, and the Papanicolau test can, in such cases, be extremely useful in detecting early oral cancers, Cancers which can easily be cured.

I regret I have had to present such a disheartening picture. In conclusion I wish to stress that it is important that, ever so often, we analyse our results. It is easy for those of us who work in follow-up Ca Clinics to think only of our successes and to forget our failures. We repeatedly see the patients who survive and tend to forget the large number who have died. Between 1969-1972, if we exclude cancers of the skin, lip and salivary glands, we had a total of 1764 new cancer patients. Within a short maximum follow-up period of less than five years, 970 of these patients (55%) are already dead. Earlier diagnosis could have prevented much morbidity and reduced the mortality.