

## SOME FACTS ABOUT LEUKAEMIA IN MALTA

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This analytical study of the records available of all reported cases of Leukaemia during the period January, 1966 to December, 1969 aims at pointing out the inter-relationship between type, age, sex, month and year incidence.

The presenting signs and symptoms are not the aim of this study but it is worth mentioning that in the great majority of cases there was severe anaemia, marked purpura and bleeding gums, and generalised lymphadenopathy with splenomegaly. However a few cases were referred to the Surgical Out-Patients' and wards for as wide a variety of causes as a back abscess, ? N.G. stomach, abdominal pain and abdominal tumour.

A classification of the reported cases of leukaemia shows clearly the relative

frequency of the various haematological types. All the cases under study have been classified according to the predominant cell-type, whether mature or immature, and whether myeloid, lymphatic, monocytic, etc. Peripheral blood films and marrow smears were examined after Leishman and peroxidase stains.

The frequency of occurrence of the main types of leukaemia and the relationship between the age and the type of leukaemia is apparent from table I.

Lymphoblastic leukaemia, though occurring at all ages, has a peak incidence in the first decade of life; lymphocytic leukaemia occurs almost exclusively in people above 60 years; the incidence of myeloblastic and myelocytic leukaemia is

Table I

Decade	Lymphoblastic	Lymphocytic	Myeloblastic	Myelocytic	Monocytic
1st	12	-	-	1	2
2nd	2	-	1	-	-
3rd	4	-	-	1	-
4th	-	-	1	-	-
5th	1	-	1	-	-
6th	-	-	-	1	2
7th	1	4	2	3	2
8th	2	2	-	-	-
<b>Total:</b>	<b>22</b>	<b>6</b>	<b>5</b>	<b>6</b>	<b>6</b>

spread out over all age groups; and finally the monocytic type has a small peak in persons above 50 years. One may add that in this 4-year period there was one of each of the following types: Stem cell leukaemia, megakaryocytic leukaemia and plasma cell leukaemia.

The sex distribution is interesting as shown in Table II. The ratio of incidence is approximately twice as high in males as in females.

Table II

Year	No. of Males	No. of Females
1966	9	3
1967	7	4
1968	7	3
1969	11	9
<b>Total:</b>	<b>34</b>	<b>19</b>

Study of the age incidence among these cases of leukaemia bring forth the following deductions. The highest incidence is equally in the first and seventh decades of life, whereas the lowest incidence is in the fourth and fifth decades.

During these four years 1966/69 the records show 53 confirmed cases of leukaemia with an approximate average incidence of 13 cases per year. During 1969 the number of diagnosed cases of leukaemia increased twofold. There were 12 cases in 1966, 11 in 1967, 10 in 1968 and 20 in 1969.

Incidence by month is given in Table III.

The highest incidence is in July while the lowest is in May and June. What may be worth finding out is whether the peaks in October, 1968, in March/April, 1969, and in July, 1969, were related to any outbreak of infectious disease. Cases arise sporadically over the island; at times, however, two, three or even four cases occur at about the same time of the year

Table III

Month	1966	1967	1968	1969	Total
Jan.	3	1	-	-	4
Feb.	1	2	1	1	5
Mar.	2	-	-	3	5
Apr.	-	2	-	3	5
May.	1	-	-	-	1
June	1	-	-	-	1
July	-	2	2	4	8
Aug.	1	1	1	1	4
Sept.	1	1	1	1	4
Oct.	-	1	4	1	6
Nov.	1	1	-	1	3
Dec.	1	-	1	2	4

in the same region or district as can be seen from the following examples:—

Jan. '66 to June '66 — 5 cases of leukaemia were diagnosed from Zejtun / St. Lucia / Paula Region.

Feb. '69 to April '69 — 4 cases of leukaemia were confirmed from Sliema / St. Julian's Area.

The worst hit places over the four year period were Zejtun, Sta. Lucia, Valletta and Sliema.

This report is limited to a short period and the number of cases are few. There is, however, an increasing incidence of leukaemia in Malta as elsewhere. A more detailed study is indicated; this should possibly be inclusive of all reported cases of malignant disease of the blood-forming tissues.

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