Anti-Cancer Council of Victoria

(AFFILIATED WITH THE BRITISH EMPIRE CANCER CAMPAIGN)

Incorporated by Act of Parliament for the purpose of promoting, co-ordinating, and carrying out investigations in relation to the cause, prevention, and treatment of Cancer

C/o. ROYAL AUSTRALASIAN COLLEGE OF SURGEONS,
Spring Street,
Melbourne, C.1.

6th November, 1941.

Dr. C. V. Mackay, M.D. F.R.A.C.P.,
Executive Medical Officer of the Anti-Cancer Council,
Royal Melbourne Hospital,
MELBOURNE. C.1

Dear Dr. Mackay,

CENTRAL CANCER REGISTRY

With reference to the meeting of the Medical and Scientific Committee to be held on Wednesday, 12th November, 1941, at 5 p.m. I am enclosing a further instalment of Dr. Robert Fowler's report, together with the usual supporting information. There are a few numerical adjustments to be made to the Tables which support the report, but these amendments are not vital.

It is information of this nature which will, from time to time, be made available from the Central Cancer Registry, and which the Executive Committee desires the Sub-Committee of the Medical and Scientific Committee to consider. The Executive Committee wishes the Sub-Committee to keep it advised concerning the action which it recommends should be taken on the information produced by the Registry. Therefore, it follows that the Sub-Committee to be appointed by the Medical and Scientific Committee on Wednesday, 12th November, 1941, will be of a permanent nature and it will hold regular meetings.

Yours faithfully,

H. G. Wheeler,
Secretary.

Anti-Cancer Council of Victoria

(AFFILIATED WITH THE BRITISH EMPIRE CANCER CAMPAIGN)

Incorporated by Act of Parliament for the purpose of promoting, co-ordinating, and carrying out investigations in relation to the cause, prevention, and treatment of Cancer

C/o. ROYAL AUSTRALASIAN COLLEGE OF SURGEONS,
Spring Street,
Melbourne, C.1.

CENTRAL CANCER REGISTRY
TO ALL CANCER REGISTRARS

14th October, 1941.

Dr. C. V. Mackay, M.D. F.R.A.C.P.
Executive Medical Officer of the Anti-Cancer Council,
C/o Royal Melbourne Hospital, C.1.

Dear Dr. Mackay,

At the request of the Honorary Chief Registrar, Dr. Robert Fowler, I am sending, for your information, a further instalment of the report to the Executive Committee of the Council which is supported by the usual statistical information.

Yours faithfully,

H. G. Wheeler,
Secretary.

This copy to be filed.

ANALYSIS OF 1940 RETURN (Continued)

DURATION OF SYMPTOMS (Table 5, Column 6)

By duration in any particular case is meant the time interval or lag between the first symptom (or symptom-complex) and the first consultation. In the present analysis a class-unit of one month forms the basis of classification and in Table 17 reported class-frequencies for the whole sample are shewn cumulated downwards (See also Graph 1).

An average duration has been separately derived for each disease group by taking the median value of the corresponding frequency distribution. As will be seen in Table 5, Column 6, these averages range from approximately six to eight months excepting the average for skin carcinoma which is found to be much longer (13 months).

Correlation between character of first-symptoms and duration. An inspection of the data in Diagram F suggests the possibility of a contingent relationship between the predominant character of first-symptoms and their average duration: that is to say, the higher the ratio of 'functional' to 'physical' the shorter the 'duration' and vice-versa. By omitting the discordant items (Group V - 'Breast'; Group VI -'Male Generative Organs'), a marked degree of rank correlation can be demonstrated in the remaining groups thus:-

Computation of the coefficient of rank correlation between the 'functional' character of first-symptoms and their 'duration'.

(1) Disease Group	(2) Rank on basis of percentage of functional first-symptoms.	(3) Rank on basis of average duration.	(4) Difference (2) - (3) d	(5) d^2
Neoplasm, Brain etc.	1	7	- 6	36
Ca. Digestive Organs	2	6	- 4	16
Ca. Respiratory System	3	8	- 5	25
Ca. Urinary Organs	4	3	+ 1	1
Sarcoma (Mainly)	5	5	0	0
Ca. Female Genital Organs	6	4	+ 2	4
Ca. Buccal Cavity and Sinuses	7	2	+ 5	25
Ca. Skin	8	1	+ 7	49
				156

Calculation:- Using the generalised formula $r = 1 - \frac{6 \Sigma d^2}{n^3 - n}$

where r = coefficient of rank correlation.
Σ = the sum of
n = number of disease groups included

and substituting we get -

$$r = 1 - \frac{6 \times 156}{512 - 8} \qquad \therefore \quad r = 1 - 1.86$$
$$= -.86$$

This coefficient (-.86) measures the degree of inverse correlation and may be accepted with perfect confidence as an accurate description of the cases contained in the eight groups actually studied. We may state for these particular patients that the more the functional symptoms predominated the prompter the quest for advice. Whether additional samples from the same population would yield similar results is another matter.

As regards the discordant items, it may be that, in the case of patients with breast carcinoma, intensive propaganda has overcome a natural indifference towards the physical manifestations; in the case of prostat. carcinoma, indifference towards functional symptoms is not readily explicable.

SEX DISTRIBUTION.(Table 5, Column 2)

There is no need to comment on the notable peculiarities of sex distribution; they are strikingly illustrated in Diagram G. The well known fact that carcinoma of the lip is almost exclusively confined to males is repeated by our figures. No rational explanation of this phenomenon is forthcoming.

CONJUGAL STATE (Table 5, Column 4)

Since there are no records available in 180 cases, the remaining 1602 cases are used in Diagram H to show the proportion of 'unmarried' in the sample. Significant deficiencies in information available are 'Breast' (no record in 5%); 'Male Organs of Generation' (no record in 9.3%).

FERTILITY - FEMALES ONLY (Table 5, Column 5)

Deficiency of information has rendered this analysis valueless. 'No record' is available for 53% of 'all cases'; 46.3% 'Breast cases'; 31.6% 'Female Organs of Generation'.

STAGE OF DISEASE (Table 5, Column 7)

It would appear to be desirable at this point to define the four stages of severity adopted in the classification. It is possible to speak in general terms only and the criteria of judgement will vary in detail with the particular organ involved.

Stage i = early or incipient; favourable for surgical or radiological treatment.
" ii = no longer incipient; borderline for hopeful surgery.
" iii = advanced; surgical removal rarely practicable.
" iv = very advanced; hopeless for all forms of treatment.

Quite properly it will be argued that this standard leaves much to the imagination. It is the best possible and we must make the most of it. Unfortunately, the irregular habits of malignant disease cannot be restrained by the straight-jacket of an arbitrary classification. Experienced clinicians usually diagnose with confidence 'early' and 'hopeless' cases; discrimination between 'Stage ii' and 'Stage iii' can follow no regular rules. In the present investigation numerous independent observers, working in six separate institutions, are responsible for the roughly quantitative assessments given in Table 5, Column 5. In consequence, it is possible that, to some extent, errors may be compensating.

In studying this analysis the outstanding features are:-

(i) 511 out of 1671 cases (all categories of cancer) are classed as 'hopeless' at time of first consultation.
(ii) 335 out of 414 skin cases are classed as 'stage i' at time of first consultation (in spite of the long average duration of symptoms).
(iii) 109 out of 192 Breast cases are classed as 'operable' (i.e. Stage i or Stage ii) at the time of first consultation.

In the above statements cases listed in 'second-hand' and 'no record' columns have been left out of account.

TREATMENT (THERAPEUSIS)(Table 5, Column 8)

In the process of dissecting Table 5 the section on 'treatment' is the next for study. In the above title the term has been qualified by the addition of 'therapeusis'. This precaution, probably quite unnecessary, is intended to avoid confusion with statistical 'treatment'.

The present study is limited to a consideration of surgery and radiology (with the implied association of auxillary nursing measures, etc) for the reason that no other forms of therapeusis are known to be effective. Until the advent of a rational prophylaxis based upon known causes of cancer we must continue to rely on the surgeon and the radiologist.

Treatment frequencies are detailed in Table 18 and it only requires a cursory survey to see how numerically important radiological methods have become. By members of an older generation this will be regarded as strikingly different from the practice of their day. But we are not so much interested in absolute numbers of the various treatments administered as we are in the indications for treatment and the intentions of the practitioners administering them.

As already noted, the prospect of cure, and consequently the intention of the therapist, depends upon the stage of disease; if the condition is localised, cure is attempted; if generalised, only palliation is possible. The applications of both surgery and radiology depend upon the empirically established principle that cancer originates as a localised process and only later progresses towards generalisation. Herein lies the importance of an assessment of the stage of disease and the desirability of considering the intention and design of treatment in the light of this assessment. The statistical analysis from this point of view is set out in Tables 19 - 29 and Diagrams J, K and L, where 'intention and design' will be found associated with 'stage of disease'.

Follow-up data. Although it is much too soon to speak of results at this juncture, nevertheless a glance at the follow-up position is not without interest. A statement of this position as at 31st December, 1940, is given in Table 30. This statement at least serves to remind us of the fundamental importance of follow-up organization in achieving the main purpose of the enquiry, viz.:- the determination of the results of treatments over a period of years. The painstaking work of collection, classification and cross-indexing of case records is largely conditioned by the desire to establish accurate time series. So long as verified follow-up data are consistently forthcoming this work will not have been in vain.

The statement in Table 30 reveals that in the data mentioned 4.8% patients were untraced. A similar survey for the hospitals of London (1938) returned a figure of 7.7% 'untraced'.

SUPPLEMENTARY NOTE ON COMPOSITION OF LONDON SAMPLE.

The survey referred to above represented the pooled practice of all the hospitals in the County of London with a very few exceptions. The return included records of 7872 patients considered to be suffering from cancer.

Table 31 gives the distribution of the disease-group-frequencies in both absolute and relative figures. Diagram M graphically presents the relative figures and should be compared with Diagram A in our series.

ROBERT FOWLER.

14th October, 1941.

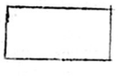
TABLE 17 - CUMULATIVE DISTRIBUTION OF 1782 CANCER CASES CLASSIFIED ACCORDING TO DURATION OF INTERVAL BETWEEN FIRST SYMPTOM AND FIRST CONSULTATION, (DATE OF REGISTRATION).

Melbourne, 1940.

DURATION	NO. OF CASES	PER CENT
0 and more	1782	100
1 month " "	1535	86.1
2 months " "	1427	80.1
3 " " "	1275	71.5
4 " " "	1102	61.8
5 " " "	991	55.7
6 " " "	928	52.1
7 " " "	754	42.3
8 " " "	725	40.7
9 " " "	682	38.3
10 " " "	639	35.9
11 " " "	619	34.7
12 " " "	613	34.4

NOTE: Number of cases with duration of 12 months and more are mainly skin cases, in some of which the duration has extended as long as eight years.

Widow or Widower



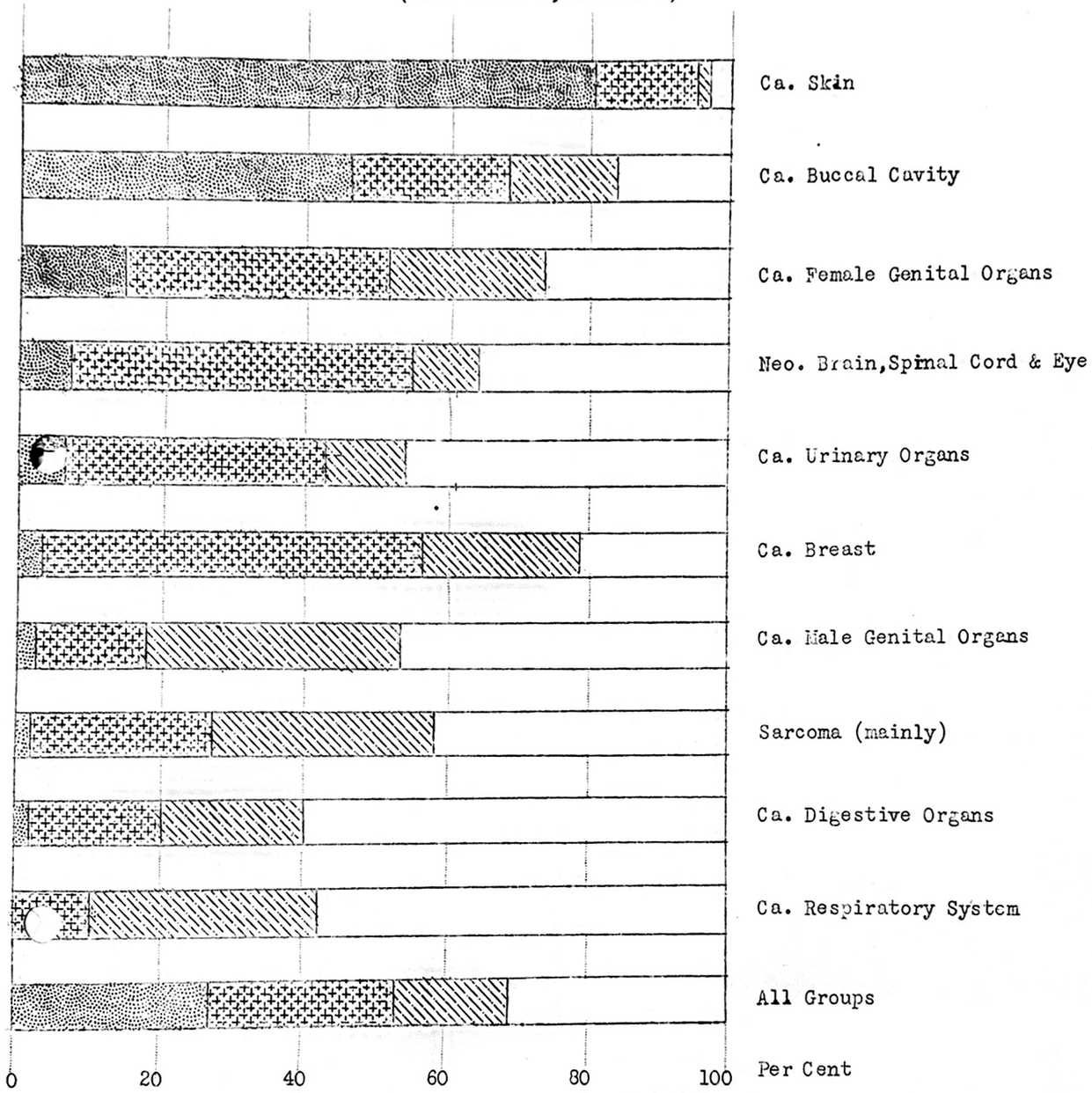
Single

DIAGRAM I

BAR DIAGRAM SHEWING PROPORTION OF SEVERITY-GRADES i TO iv IN EACH OF TEN DISEASE GROUPS - FIRST HAND[X] CASES ONLY.

Melbourne, 1940.

(Vide Table 5, Column 7)



KEY:

(i) Early stage; favourable to all forms of treatment.

(ii) Past Incipient stage; borderline of hopeful operability.

(iii) Advanced Stage; operation rarely practicable.

(iv) Very advanced stage; hopeless for any form of treatment.

NOTE:- [X] First hand = unaffected by previous treatment.

DIAGRAM J. (Vide Table 19)

ILLUSTRATING INTENTION OF TREATMENT AND GIVING RELATIVE PROPORTION OF ATTEMPTED CURES TO HOPELESS TYPES IN TEN DISEASE GROUPS

MELBOURNE, 1940.

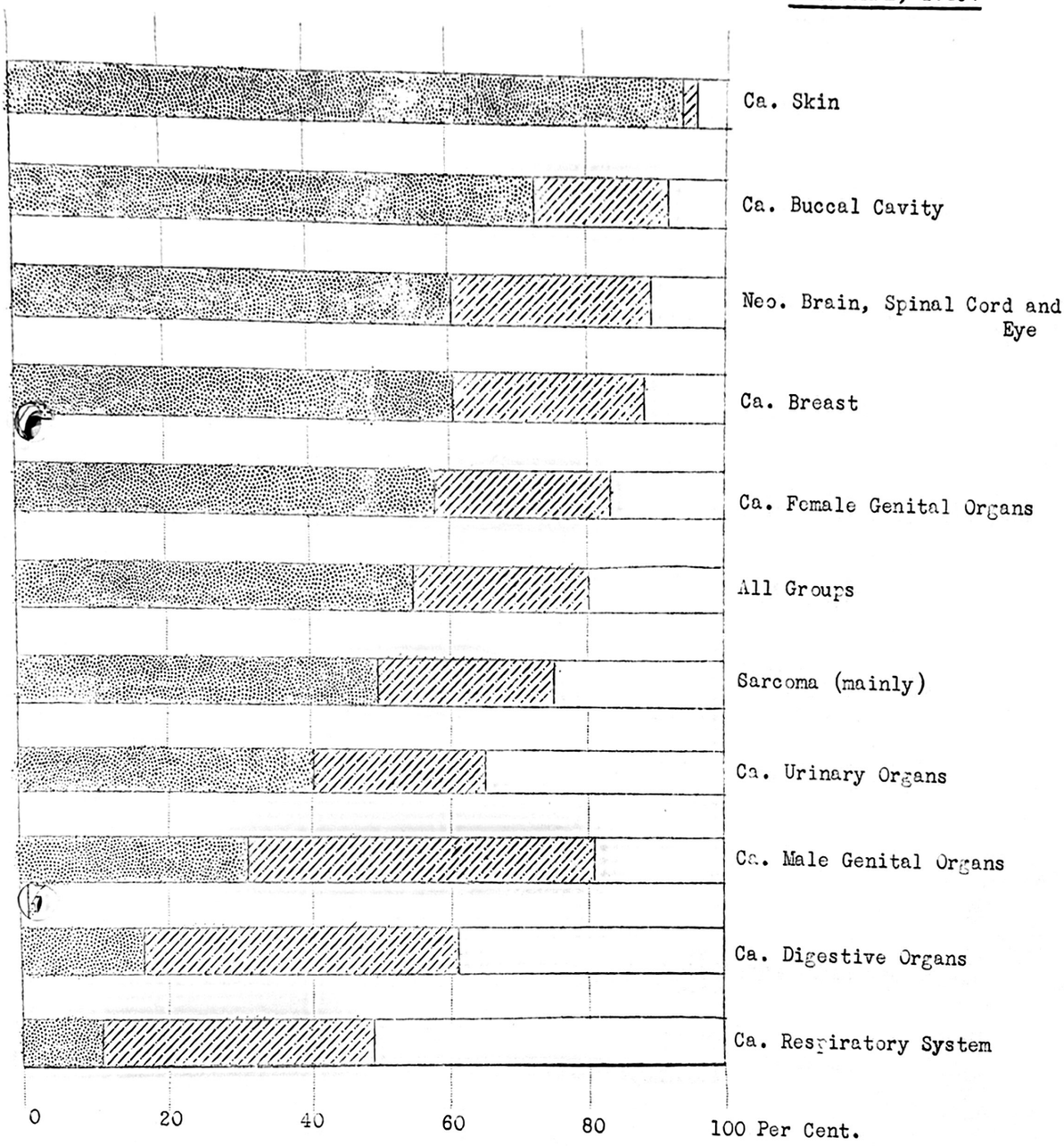


DIAGRAM K. (Vide Tables 20-29)

BAR DIAGRAM SHEWING RELATIVE PROPORTION OF SURGICAL, RADIOLOGICAL AND RADIOSURGICAL TREATMENTS FOR EACH OF TEN DISEASE GROUPS.

MELBOURNE, 1940.

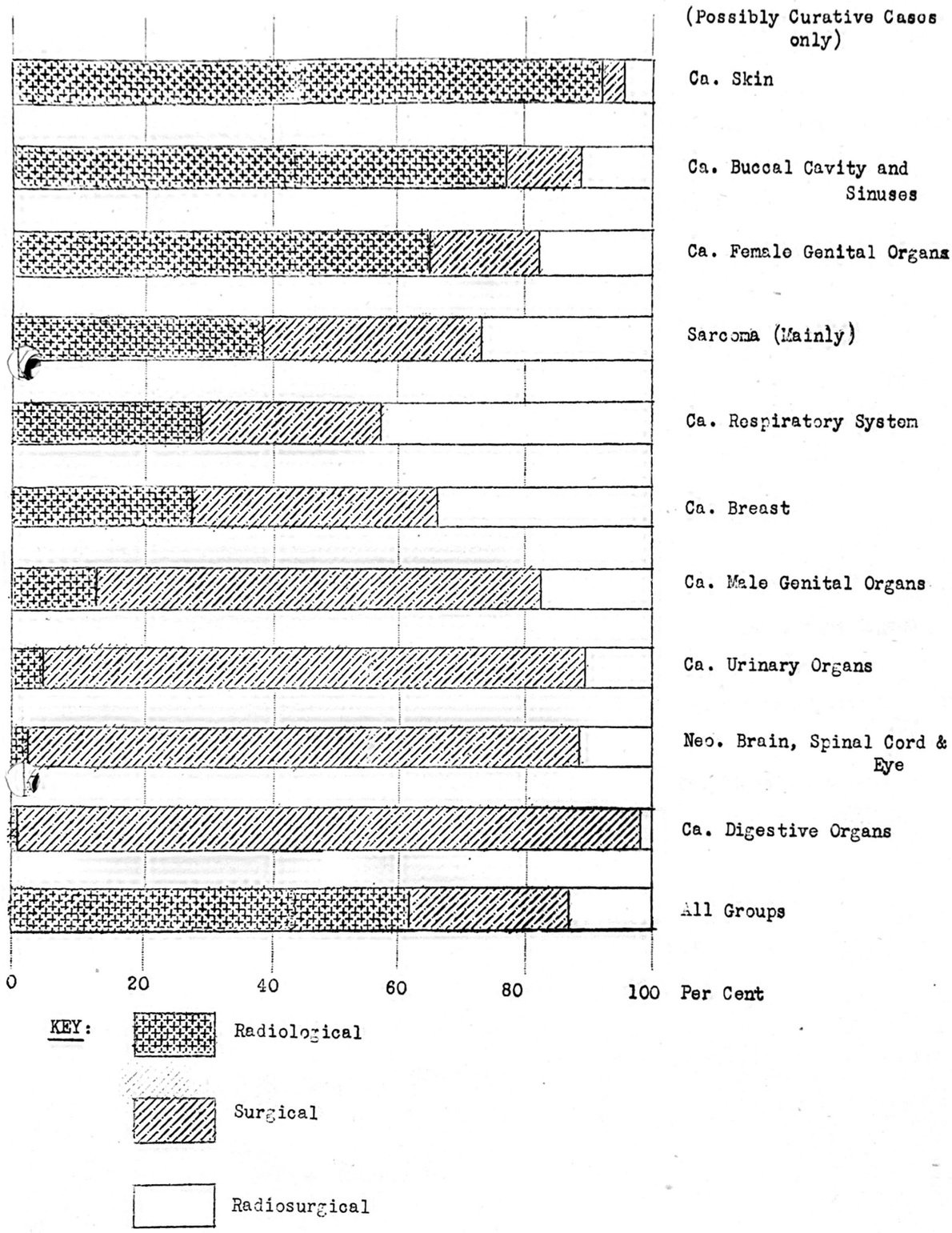


DIAGRAM L. (Vide Tables 20-29)

BAR DIAGRAM SHEWING RELATIVE PROPORTION OF SURGICAL, RADIOLOGICAL AND RADIOSURGICAL TREATMENTS FOR EACH OF TEN DISEASE GROUPS.

MELBOURNE, 1940.

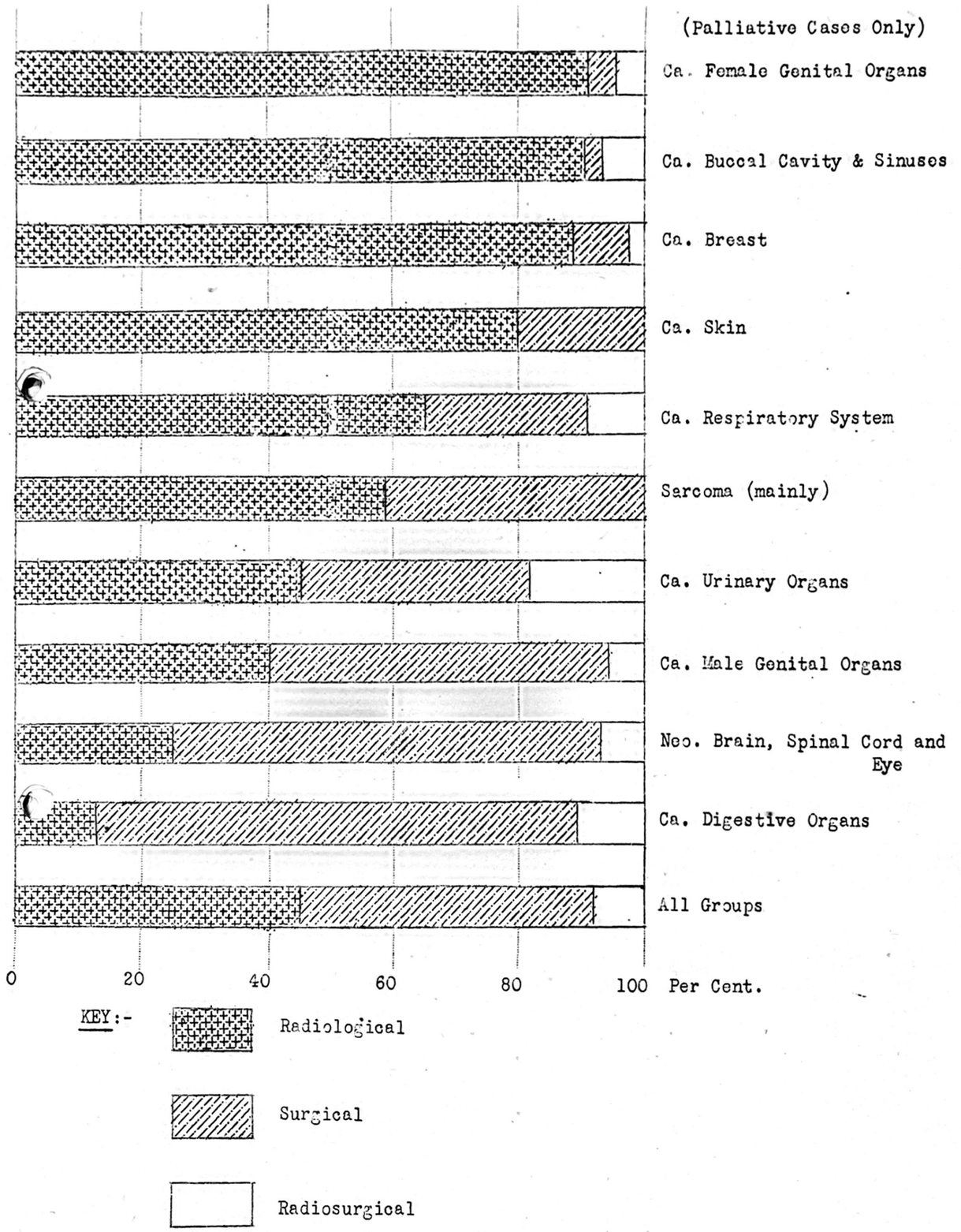


DIAGRAM G

BAR DIAGRAM SHEWING PROPORTIONATE SEX DISTRIBUTION FOR EACH OF TEN DISEASE GROUPS.

Melbourne, 1940.

(Vide Table 5 Column 2)

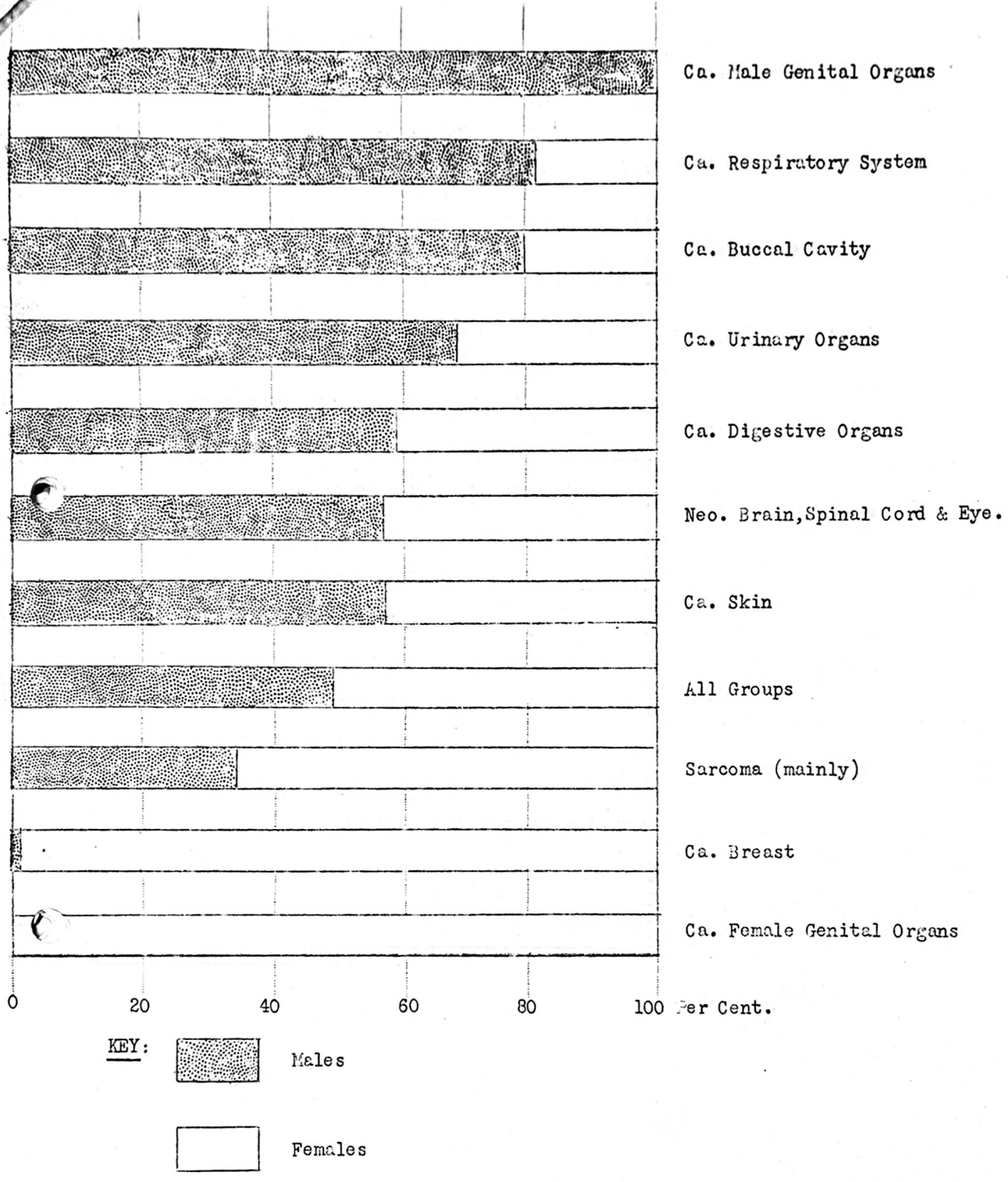


TABLE 30 - SYNOPSIS OF FOLLOW-UP RECORDS CONCERNING 1782 CANCER CASES

Melbourne, 1940.

DISEASE GROUP	UNTRACED	ALIVE	DEAD	NO. OF CASES.
I Ca. Buccal Cavity & Sinuses	7	146	25	178
II " Digestive Organs	19	142	257	418
III " Respiratory System	1	21	41	63
IV " Female Genital Organs	4	126	47	177
V " Breast	10	163	45	218
VI " Male Genital Organs	2	42	31	75
VII " Urinary Organs	3	28	18	49
VIII " Skin	33	390	20	443
IX Neo. Brain, Nervous System	1	27	31	59
X Sarcoma (mainly)	5	63	34	102
Total	85	1148	549	1782
Relatives	4.8	64.4	30.8	100.0

TABLE 31 - FREQUENCY DISTRIBUTION OF 7872 CANCER CASES CLASSIFIED ACCORDING TO DISEASE GROUPS. London, 1938.

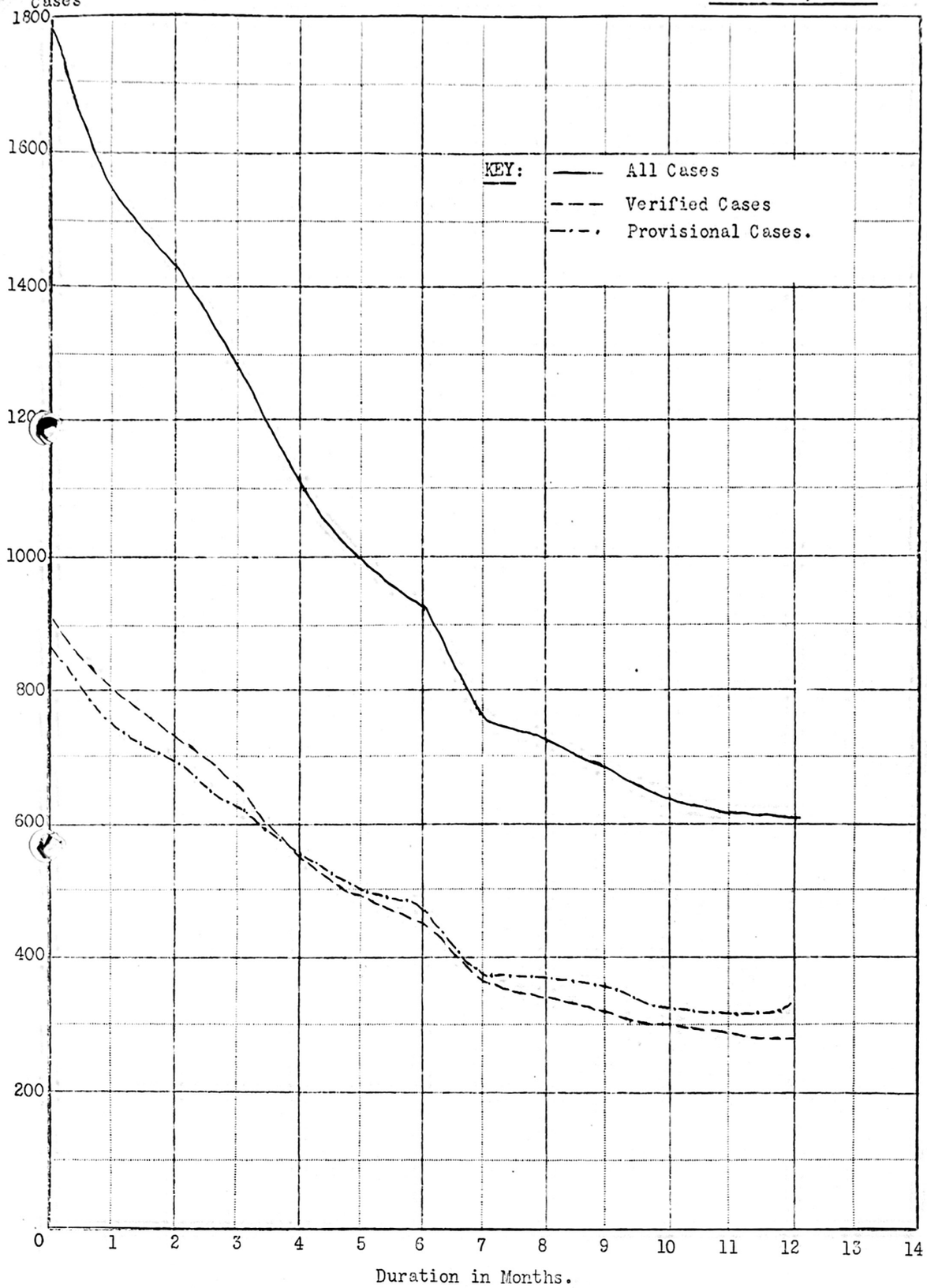
(Source: Annual Report of the British Empire Cancer Campaign, 1940)

DISEASE GROUP	NO. OF CASES	RELATIVES
I Ca. Buccal Cavity and Sinuses	618	7.9
II " Digestive Organs	2433	30.9
III " Respiratory System	780	9.9
IV " Female Genital Organs	914	11.6
V " Breast	1345	17.1
VI " Male Genital Organs	292	3.7
VII " Urinary Organs	322	4.1
VIII " Skin	585	7.4
IX Neoplasm, Brain, Nervous System	138	1.7
X Sarcoma (Mainly)	445	5.7
Total	7872	100.0

GRAPH 1 (Vide Table 17)

CUMULATIVE FREQUENCY CURVE SHEWING DISTRIBUTION OF 1782 CANCER CASES CLASSIFIED ACCORDING TO DURATION OF INTERVAL BETWEEN FIRST SYMPTOM AND FIRST CONSULTATION.

MELBOURNE, 1940.



ABJ

TABLE 26 - TREATMENT FREQUENCIES IN DISEASE GROUP VII (First Hand Cases)

G i v i n g

Frequency distribution of 31 treatments administered to 19 Verified and 12 Provisional Cases of Carcinoma of Urinary organs classified according to the Stage of Disease

Melbourne, 1940.

Basis of Diagnosis		INTENTION AND NATURE OF TREATMENT	KIDNEY					BLADDER					ALL CATEGORIES					
			-	i	ii	iii	iv	-	i	ii	iii	iv	-	i	ii	iii	iv	Total
	Verified	A. POSSIBLY CURATIVE.																
		1. Surgery	.	.	6	.	.	.	1	6	.	.	.	1	12	.	.	13
		5. Radiosurgical	.	.	1	.	.	.	.	.	.	.	.	.	1	.	.	1
		Total	.	.	7	.	.	.	1	6	.	.	.	1	13	.	.	14
		B. PALLIATIVE or INCIDENTAL																
		1. Surgery	.	.	.	.	.	.	.	.	1	1	.	.	.	1	1	2
		3. X-rays	.	.	.	.	.	.	.	.	.	1	.	.	.	.	1	1
		5. Radiosurgical	.	.	.	1	.	.	.	.	.	1	.	.	.	1	1	2
		Total	.	.	.	1	.	.	.	.	1	3	.	.	.	2	3	5
	Provisional	A. POSSIBLY CURATIVE																
		1. Surgery	.	.	.	.	.	.	2	2	.	.	.	2	2	.	.	4
		3. X-rays	.	.	.	.	.	.	.	.	1	.	.	.	.	1	.	1
		5. Radiosurgical	.	.	1	.	.	.	.	.	.	.	.	.	1	.	.	1
		Total	.	.	1	.	.	.	2	2	1	.	.	2	3	1	.	6
		B. PALLIATIVE or INCIDENTAL																
		1. Surgery	.	.	.	.	.	.	.	.	1	1	.	.	.	1	1	2
		3. X-rays	.	.	.	.	1	.	.	.	.	3	.	.	.	.	4	4
		Total	.	.	.	.	1	.	.	.	1	4	.	.	.	1	5	6
		T O T A L	.	.	8	1	1	.	3	8	3	7	.	3	16	4	8	31

NOTE:- Stage of Disease.

(-) = Not Classified.
(i) = Early stage; favourable to all forms of treatment.
(ii) = No longer incipient; borderline for hopeful operability.
(iii) = Advanced; operation rarely practicable.
(iv) = Very advanced; every treatment hopeless.

TABLE 27 - TREATMENT FREQUENCIES IN DISEASE GROUP VIII. (First Hand Cases)

Giving

Frequency distribution of 398 treatments administered to 88 Verified and 310 Provisional Cases of Carcinoma of Skin classified according to the Stage of Disease. Melbourne, 1940.

Basis of Diagnosis	INTENTION AND NATURE OF TREATMENT	RODENT					OTHER					ALL CATEGORIES					
		-	i	ii	iii	iv	-	i	ii	iii	iv	-	i	ii	iii	iv	Total
Verified	A. POSSIBLY CURATIVE.																
	1. Surgery	.	2	1	.	.	.	3	5	.	.	.	5	6	.	.	11
	2. Radium and/or Radon	.	6	1	.	.	1	22	.	.	.	1	28	1	.	.	30
	3. X-rays	.	4	6	.	.	.	9	8	2	.	.	13	14	2	.	29
	4. Combined Radiologic[1]	.	.	.	.	.	.	2	.	1	.	.	2	.	1	.	3
	5. Radiosurgical	.	.	.	.	.	.	6	6	2	.	.	6	6	2	.	14
	Total	.	12	8	.	.	1	42	19	5	.	1	54	27	5	.	87
	B. PALLIATIVE or INCIDENTAL																
	1. Surgery Total	.	.	.	.	.	.	.	.	.	1	.	.	.	.	1	1
Provisional	A. POSSIBLY CURATIVE.																
	1. Surgery	.	.	.	.	.	.	1	.	.	.	.	1	.	.	.	1
	2. Radium and/or Radon	.	128	8	.	.	.	64	2	1	1	.	192	10	1	1	204
	3. X-rays	.	60	11	.	.	.	15	10	.	.	.	75	21	.	.	96
	4. Combined Radiologic[1]	.	1	.	.	.	.	1	.	.	.	.	2	.	.	.	2
	5. Radiosurgical	.	.	.	.	.	.	2	.	1	.	.	2	.	1	.	3
	Total	.	189	19	.	.	.	83	12	2	1	.	272	31	2	1	306
	B. PALLIATIVE or INCIDENTAL																
	3. X-rays Total	.	.	.	.	2	.	.	.	.	2	.	.	.	.	4	4
	T O T A L	.	201	27	.	2	1	125	31	7	4	1	326	58	7	6	398

NOTE: Stage of Disease.

(-) = Not Classified.
(i) = Early stage; favourable to all forms of treatment.
(ii) = No longer incipient; borderline for hopeful operability.
(iii) = Advanced; operation rarely practicable.
(iv) = Very advanced; every treatment hopeless.

TABLE 28 - TREATMENT FREQUENCIES IN DISEASE GROUP IX. (First hand cases)
Giving
Frequency distribution of 51 treatments administered to 41 Verified and 10 Provisional cases of Neoplasm of Brain, Spinal Cord and Eye, classified according to the Stage of Disease.
Melbourne, 1940.

Basis of Diagnosis		INTENTION AND NATURE OF TREATMENT.	BRAIN					NERVOUS SYSTEM					ALL CATEGORIES					
			-	i	ii	iii	iv	-	i	ii	iii	iv	-	i	ii	iii	iv	Total
	Verified	A. POSSIBLY CURATIVE.																
		1. Surgery	.	.	20	1	4	.	.	1	.	.	.	.	21	1	4	26
		2. Radium and/or Radon	.	.	.	.	.	.	1	.	.	.	.	1	.	.	.	1
		5. Radiosurgical	.	.	2	1	1	.	.	.	.	.	.	.	2	1	1	4
		Total	.	.	22	2	5	.	1	1	.	.	.	1	23	2	5	31
		B. PALLIATIVE or INCIDENTAL																
		1. Surgery Total	.	1	2	.	7	.	.	.	.	.	.	1	2	.	7	10
	Provisional	A. POSSIBLY CURATIVE																
		1. Surgery Total	.	2	1	.	1	.	.	.	.	.	.	2	1	.	1	4
		B. PALLIATIVE or INCIDENTAL.																
		1. Surgery	.	.	.	.	1	.	.	.	.	.	.	.	.	.	1	1
		3. X-rays	.	.	.	2	2	.	.	.	.	.	.	.	.	2	2	4
		5. Radiosurgical	1	.	.	.	.	.	.	.	.	.	1	.	.	.	.	1
		Total	1	.	.	2	3	.	.	.	.	.	1	.	.	2	3	6
		TOTAL	1	3	25	4	16	.	1	1	.	.	1	4	26	4	16	51

NOTE:- Stage of Disease.
(-) = Not classified.
(i) = Early stage; favourable to all forms of treatment.
(ii) = No longer incipient; borderline for hopeful operability.
(iii) = Advanced; operation rarely practicable.
(iv) = Very advanced; every treatment hopeless.

TABLE 29 - TREATMENT FREQUENCIES IN DISEASE GROUP X (First hand cases)
Giving
Frequency distribution of 73 treatments administered to 73 Miscellaneous Cases of Cancer (mainly Sarcoma) classified according to the Stage of Disease.
Melbourne, 1940.

Basis of Diagnosis		INTENTION AND NATURE OF TREATMENT	SARCOMA					OTHER					ALL CATEGORIES					
			-	i	ii	iii	iv	-	i	ii	iii	iv	-	i	ii	iii	iv	Total
	Verified	A. POSSIBLY CURATIVE.																
		1. Surgery	.	.	8	2	.	.	.	5	.	.	.	.	13	2	.	15
		2. Radium and/or Radon	.	.	1	.	.	.	.	.	.	.	.	.	1	.	.	1
		3. X-rays	.	1	.	2	3	1	.	1	3	.	1	1	1	5	3	11
		5. Radiosurgical	1	.	4	2	.	.	1	3	.	1	1	1	7	2	1	12
		Total	1	1	13	6	3	1	1	9	3	1	2	2	22	9	4	39
		B. PALLIATIVE or INCIDENTAL.																
		1. Surgery	.	.	.	.	2	.	.	.	1	3	.	.	.	1	5	6
		3. X-rays	.	.	.	1	6	.	.	.	.	1	.	.	.	1	7	8
		Total	.	.	.	1	8	.	.	.	1	4	.	.	.	2	12	14
	Provisional	A. POSSIBLY CURATIVE.																
		1. Surgery	.	.	1	1	.	.	.	.	.	.	.	.	1	1	.	2
		3. X-rays	.	.	.	3	.	.	.	.	1	3	.	.	.	4	3	7
		5. Radiosurgical.	.	.	.	.	.	.	.	.	1	.	.	.	.	1	.	1
		Total	.	.	1	4	.	.	.	.	2	3	.	.	1	6	3	10
		B. PALLIATIVE or INCIDENTAL.																
		1. Surgery	.	.	.	1	1	.	.	.	1	1	.	.	.	2	2	4
		3. X-rays	.	.	.	3	2	.	.	.	1	.	.	.	.	4	2	6
		Total	.	.	.	4	3	.	.	.	2	1	.	.	.	6	4	10
		TOTAL	1	1	14	15	14	1	1	9	8	9	2	2	23	23	23	73

NOTE:- Stage of Disease.
(-) = Not Classified.
(i) = Early stage; favourable to all forms of treatment.
(ii) = No longer incipient; borderline for hopeful operability.
(iii) = Advanced, operation rarely practicable.
(iv) = Very advanced; every treatment hopeless.

TABLE 24 - TREATMENT FREQUENCIES IN DISEASE GROUP V (First hand cases)

Giving

Frequency distribution of 173 treatments administered to 108 Verified and 65 Provisional Cases of Carcinoma of Breast classified according to the Stage of Disease.

Melbourne, 1940.

Basis of Diagnosis		INTENTION AND NATURE OF TREATMENT	-	i	ii	iii	iv	Total
	Verified	A. POSSIBLY CURATIVE						
		1. Surgery	.	5	42	1	.	48
		2. Radium and/or Radon	.	.	1	1	.	2
		3. X-rays	.	.	6	1	.	7
		5. Radiosurgical	.	1	38	5	.	44
		Total	.	6	87	8	.	101
		B. PALLIATIVE or INCIDENTAL						
		1. Surgery	.	1	.	.	2	3
		3. X-rays	.	.	.	1	3	4
		Total	.	1	.	1	5	7
	Provisional	A. POSSIBLY CURATIVE						
		1. Surgery	.	.	1	.	.	1
		2. Radium and/or Radon	.	.	4	5	.	9
		3. X-rays	1	.	6	3	2	12
		4. Combined Radiological	.	.	1	4	1	6
		Total	1	.	12	12	3	28
		B. PALLIATIVE or INCIDENTAL						
		1. Surgery	1	.	.	.	.	1
		2. Radium and/or Radon	.	.	.	6	2	8
		3. X-rays	.	.	1	13	12	26
		4. Combined Radiological	.	.	.	.	1	1
		5. Radiosurgical	.	.	.	1	.	1
		Total	1	.	1	20	15	37
		TOTAL	2	7	100	41	23	173

NOTE:- Stage of Disease

(-) = Not Classified.
(i) = Early stage; favourable to all forms of treatment.
(ii) = No longer incipient; borderline for hopeful operability.
(iii) = Advanced; operation rarely practicable.
(iv) = Very advanced; every treatment hopeless.

TABLE 25 - TREATMENT FREQUENCIES IN DISEASE GROUP VI. (First hand cases)

Giving

Frequency distribution of 58 treatments administered to 33 Verified and 25 Provisional cases of Carcinoma of Male Genital Organs, classified according to the Stage of Disease. Melbourne, 1940.

Basis of Diagnosis		INTENTION AND NATURE OF TREATMENT	PROSTATE					PENIS					OTHER					ALL CATEGORIES					
			-	i	ii	iii	iv	-	i	ii	iii	iv	-	i	ii	iii	iv	-	i	ii	iii	iv	Total
	Verified	A. POSSIBLY CURATIVE.																					
		1. Surgery	.	.	5	5	.	.	1	2	.	.	.	.	1	.	2	.	1	8	5	2	16
		2. Radium and/or Radon	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	1	.	.	.	1
		3. X-rays	.	..	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	1	.	1
		5. Radiosurgical	.	.	1	.	.	.	.	1	.	.	.	.	.	1	.	.	.	2	1	.	3
		Total	.	.	6	5	.	.	2	3	1	.	.	.	1	1	2	.	2	10	7	2	21
		B. PALLIATIVE or INCIDENTAL.																					
		1. Surgery	.	.	.	3	6	.	.	.	.	.	.	.	.	.	1	.	.	.	3	7	10
		3. X-rays	.	.	.	.	1	.	.	.	.	.	.	.	.	1	.	.	.	.	1	1	2
		Total	.	.	.	3	7	.	.	.	.	.	.	.	.	1	1	.	.	.	4	8	12
	Provisional	A. POSSIBLY CURATIVE																					
		3. X-rays	.	.	.		.	.	.	.	1	.	.	.	.	.	.	.	.	.	1	.	1
		5. Radiosurgical	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	1
		Total	.	.	.	1	.	.	.	.	1	.	.	.	.	.	.	.	.	.	2	.	2
		B. PALLIATIVE or INCIDENTAL.																					
		1. Surgery	.	.	.	3	6	.	.	.	.	.	.	.	.	.	.	.	.	.	3	6	9
		3. X-rays	.	.	..	6	6	.	.	.	.	.	.	.	.	.	.	.	.	.	6	6	12
		5. Radiosurgical.	.	.	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	2
		Total	.	.	.	10	13	.	.	.	.	.	.	.	.	.	.	.	.	.	10	13	23
		TOTAL	.	.	6	19	20	.	2	3	2	.	.	.	1	2	3	.	2	10	23	23	58

NOTE:- Stage of Disease.
(-) = Not classified.
(i) = Early stage, favourable to all forms of treatment.
(ii) = No longer incipient; borderline for hopeful operability.
(iii) = Advanced, operation rarely practicable.
(iv) = Very advanced; every treatment hopeless.

TABLE 23 - TREATMENT FREQUENCIES IN DISEASE GROUP IV (First Course) Giving

Frequency distribution of 147 treatments administered to 121 Verified and 26 Provisional cases of Carcinoma of Female Genital Organs classified according to the Stage of Disease. Melbourne, 1940.

Basis of diagnosis		INTENTION AND NATURE OF TREATMENT	UTERUS					OVARY					OTHER					ALL CATEGORIES					
			-	i	ii	iii	iv	-	i	ii	iii	iv	-	i	ii	iii	iv	-	i	ii	iii	iv	Total
	Verified	A. POSSIBLY CURATIVE																					
		1. Surgery	.	3	4	1	.	.	2	2	1	.	.	1	3	1	.	.	6	9	3	.	18
		2. Radium and/or Radon	.	12	24	4	2	.	.	.	.	.	.	1	1	.	.	.	13	25	4	2	44
		3. X-rays	.	.	1	1	.	.	.	.	.	.	.	.	1	.	.	.	.	2	1	.	3
		4. Combined Radiological	.	.	1	4	.	.	.	.	.	.	.	.	1	.	.	.	.	2	4	.	6
		5. Radiosurgical	.	1	11	.	.	.	1	.	.	.	.	.	1	2	.	.	2	12	2	.	16
		Total	.	16	41	10	2	.	3	2	1	.	.	2	7	3	.	.	21	50	14	2	87
		B. PALLIATIVE or INCIDENTAL																					
		1. Surgery	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	1	1
		2. Radium and/or Radon	.	.	1	6	6	.	.	.	.	.	.	.	1	.	1	.	.	2	6	7	15
		3. X-rays	.	.	.	2	2	.	.	1	.	1	.	.	.	.	1	.	.	1	2	4	7
		4. Combined Radiological	.	.	.	6	3	.	.	.	.	.	.	.	.	.	.	.	.	.	6	3	9
		5. Radiosurgical	.	.	1	.	.	.	.	.	.	.	.	.	1	.	.	.	.	2	.	.	2
		Total	.	.	2	14	11	.	.	1	.	2	.	.	2	.	2	.	.	5	14	15	34
	Provisional	A. POSSIBLY CURATIVE																					
		2. Radium and/or Radon	.	3	2	3	.	.	.	.	.	.	.	.	.	.	.	.	3	2	3	.	8
		3. X-rays	.	.	.	.	.	.	.	1	.	.	.	1	.	.	.	.	1	1	.	.	2
		4. Combined Radiological	.	.	.	3	.	.	.	.	.	.	.	.	.	1	.	.	.	.	4	.	4
		5. Radiosurgical	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	.	.	2
		Total	.	3	4	6	.	.	.	1	.	.	.	1	.	1	.	.	4	5	7	.	16
		B. PALLIATIVE or INCIDENTAL																					
		1. Surgery	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1
		2. Radium and/or Radon	.	.	1	1	1	.	.	.	.	.	.	.	.	.	1	.	.	1	1	2	4
		3. X-rays	.	.	.	.	2	.	.	.	.	.	.	.	1	.	.	.	.	1	.	2	3
		4. Combined Radiological	.	.	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	2
		Total	.	.	1	2	5	.	.	.	.	.	.	.	1	.	1	.	.	2	2	6	10
		TOTAL	.	19	48	32	18	.	3	4	1	2	.	3	10	4	3	.	25	62	37	23	147

NOTE: Stage of Disease.
(-) = Not Classified.
(i) = Early Stage; favourable to all forms of treatment.
(ii) = No longer incipient; borderline for hopeful operability.
(iii) = Advanced; operation rarely practicable.
(iv) = Very advanced; every treatment hopeless.

TABLE 22 - TREATMENT FREQUENCIES IN DISEASE GROUP III (First hand cases)

G i v i n g

Frequency distribution of 30 treatments administered to 16 Verified and 14 Provisional Cases of Carcinoma of the Respiratory System classified according to the Stage of Disease. Melbourne, 1940.

Basis of Diagnosis		INTENTION AND NATURE OF TREATMENT	LARYNX					BRONCHI & LUNG					ALL CATEGORIES					
			-	i	ii	iii	iv	-	i	ii	iii	iv	-	i	ii	iii	iv	Total
	Verified	A. POSSIBLY CURATIVE																
		1. Surgery	.	.	.	.	.	.	.	2	.	.	.	.	2	.	.	2
		4. Combined Radiological	.	.	.	1.	.	.	.	.	.	.	.	.	.	1	.	1
		5. Radiosurgical	.	.	.	.	.	.	.	1	2	.	.	.	1	2	.	3
		Total	.	.	.	1	.	.	.	3	2	.	.	.	3	3	.	6
		B. PALLIATIVE or INCIDENTAL																
		1. Surgery	.	.	.	1	.	.	.	1	1	2	.	.	1	2	2	5
		3. X-rays	.	.	.	1	2	.	.	.	.	1	.	.	.	1	3	4
		5. Radiosurgical	.	.	.	1	.	.	.	.	.	.	.	.	.	1	.	1
		Total	.	.	.	3	2	.	.	1	1	3	.	.	1	4	5	10
	Provisional	A. POSSIBLY CURATIVE																
		3. X-rays Total	.	.	.	.	.	1	.	.	.	.	1	.	.	.	.	1
		B. PALLIATIVE or INCIDENTAL																
		1. Surgery	.	.	.	.	1	.	.	.	.	.	.	.	.	.	1	1
		3. X-rays	.	.	1	2	1	.	.	.	2	5	.	.	1	4	6	11
		5. Radiosurgical	.	.	.	1	.	.	.	.	.	.	.	.	.	1	.	1
		Total	.	.	1	3	2	.	.	.	2	5	.	.	1	5	7	13
		T O T A L	.	.	1	7	4	1	.	4	5	8	1	.	5	12	12	30

NOTE:- Stage of Disease.
(-) = Not Classified.
(i) = Early stage; favourable to all forms of treatment.
(ii) = No longer incipient; borderline for hopeful operability.
(iii) = Advanced; operation rarely practicable.
(iv) = Very advanced; every treatment hopeless.

TABLE 21 - TREATMENT FREQUENCIES IN DISEASE GROUP II (First Hand Cases)

Giving

Frequency distribution of 254 treatments administered to 142 Verified and 112 Provisional Cases of Carcinoma of the Digestive Organs classified according to the Stage of Disease.

Melbourne, 1940.

Basis of Diagnosis	INTENTION AND NATURE OF TREATMENT	OESOPHAGUS					STOMACH					INTESTINES					RECTUM					OTHER					ALL CATEGORIES					
		-	i	ii	iii	iv	-	i	ii	iii	iv	-	i	ii	iii	iv	-	i	ii	iii	iv	-	i	ii	iii	iv	-	i	ii	iii	iv	Total
Verified	A. POSSIBLY CURATIVE																															
	1. Surgery	.	.	1	.	.	.	1	12	3	.	.	1	22	2	2	.	2	12	.	.	.	1	1	.	.	.	5	18	5	2	60
	5. Radiosurgical	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	1	.	.	.	1
	Total	.	.	1	.	.	.	1	12	3	.	.	1	22	2	2	.	2	13	.	.	.	1	1	.	.	.	5	19	5	2	61
	B. PALLIATIVE or INCIDENTAL																															
	1. Surgery	.	.	1	2	4	.	.	2	3	13	.	.	1	5	13	.	.	.	4	10	.	.	1	3	5	.	.	5	17	45	67
	2. Radium and/or Radon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	1	.	1
	3. X-rays	.	.	.	1	3	.	.	.	.	.	.	.	.	.	1	.	.	.	1	1	.	.	.	.	2	.	.	.	2	7	9
	5. Radiosurgical	.	.	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.	1	3	4
	Total	.	.	1	4	8	.	.	2	3	13	.	.	1	5	14	.	.	.	6	13	.	.	1	3	7	.	.	5	21	55	81
Provisional	A. POSSIBLY CURATIVE																															
	1. Surgery	.	.	.	.	.	.	.	1	1	.	.	.	4	.	1	.	1	.	.	.	.	.	.	.	.	.	1	5	1	1	8
	2. Radium and/or Radon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	1	.	.	.	1
	Total	.	.	.	.	.	.	.	1	1	.	.	.	4	.	1	.	2	.	.	.	.	.	.	.	.	.	2	5	1	1	9
	B. PALLIATIVE or INCIDENTAL																															
	1. Surgery	.	.	1	1	3	.	.	3	6	9	.	.	3	6	8	.	1	2	9	15	.	.	1	2	4	.	1	10	24	39	74
	2. Radium and/or Radon	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	1	.	1
	3. X-rays	.	.	.	2	1	.	.	.	1	1	.	.	.	.	2	.	.	.	2	2	.	.	.	.	2	.	.	.	5	8	13
	5. Radiosurgical	.	.	.	.	3	.	.	.	2	1	.	.	.	1	2	.	.	.	1	5	.	.	.	.	.	.	.	.	4	11	15
	Total	.	.	1	3	7	.	.	3	9	11	.	.	3	7	12	.	1	2	13	22	.	.	1	2	6	.	1	10	34	58	103
	TOTAL	.	.	3	7	15	.	1	18	16	24	.	1	30	14	29	.	5	15	19	35	.	1	3	5	13	.	8	69	51	116	254

NOTE:- Stage of Disease.

(-) = Not Classified.
(i) = Early Stage; favourable to all forms of treatment.
(ii) = No longer incipient; borderline for hopeful operability.
(iii) = Advanced; operation rarely practicable.
(iv) = Very advanced; every treatment hopeless.

TABLE 19 - DESIGN OF TREATMENT IN DISEASE GROUPS I TO [illegible] Melbourne, 1940.

INTENTION AND EXTENT OF TREATMENT	DISEASE GROUP																					
	I		II		III		IV		V		VI		VII		VIII		IX		X		All Groups	
	1°	2°	1°	2°	1°	2°	1°	2°	1°	2°	1°	2°	1°	2°	1°	2°	1°	2°	1°	2°	1°	2°
A. ATTEMPT AT CURE.																						
1. Circumscribed	95	7	55	.	3	.	38	.	32	1	19	.	17	.	386	23	34	1	39	1	718	33
2. Extensive	24	3	15	.	4	.	65	.	97	3	4	1	3	.	7	.	1	.	10	1	230	8
Total	119	10	70	.	7	.	103	.	129	4	23	1	20	.	393	23	35	1	49	2	948	41
B. NO THOUGHT OF CURE.																						
1. Palliative	31	3	90	3	18	1	41	.	43	15	20	2	10	1	4	3	9	1	16	2	282	31
2. Incidental and Exploratory	.	.	94	.	5	.	3	.	1	.	15	.	1	.	1	.	7	.	8	.	135	.
Total	31	3	184	3	23	1	44	.	44	15	35	2	11	1	5	3	16	1	24	2	417	31
C. NO SPECIAL TREATMENT.																						
Reasons:-																						
1. Intercurrent disease or death	.	.	5	.	3	.	2	1	.	.	.	.	.	.	2	.	1	.	1	.	14	1
2. Seeking treatment elsewhere.	.	.	2	.	.	.	.	1	.	1	.	.	.	.	1	.	1	.	1	.	5	2
3. Unknown reasons.	1	.	1	.	.	.	.	.	.	.	.	.	.	1	3	.	.	.	.	.	5	1
4. Lack of therapeutic facilities.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
5. Refusal by patient.	.	.	9	.	.	.	1	.	2	.	.	.	.	.	.	.	.	.	.	.	12	.
6. Disease too extensive.	7	2	114	3	18	1	19	1	18	3	12	.	8	2	7	1	2	.	16	1	221	14
7. Undiagnosed till Post-mortem	.	.	25	.	9	.	3	.	.	.	2	.	5	.	.	.	2	.	5	.	51	.
8. Delayed till 1941.	3	1	2	.	1	.	1	1	1	1	.	.	1	.	5	.	.	.	1	.	15	3
Total	12	3	158	3	31	1	26	4	21	5	14	.	14	3	18	1	6	.	24	1	324	21
T O T A L	162	16	412	6	61	2	173	4	194	24	72	3	45	4	416	27	57	2	97	5	1689	93

NOTE:- 1. Circumscribed = Measures counteracting focal lesion only.
2. Extensive = Radical measures directed against both primary focus and regional lymphatic field.
3. Incidental = Episodal (e.g. paracentesis)
4. Palliative = Measures aimed at reducing pain, haemorrhage, discharge from advanced local and/or metastatic lesions.
5. 1°(First Hand) = unaffected by previous treatment.
2°(Second Hand) = following treatment elsewhere.

Key to numbering of disease groups.
I = Ca. Buccal Cavity and Sinuses.
II = " Digestive Organs.
III = " Respiratory System.
IV = " Female Genital Organs.
V = " Breast.
VI = " Male Genital Organs.
VII = " Urinary Organs.
VIII = " Skin.
IX = Neoplasm Brain, Spinal Cord and Eye.
X = Sarcoma (mainly)

TABLE 20 - TREATMENT FREQUENCIES IN DISEASE GROUP I. (First [illegible]d cases)

Giving

Frequency distribution of 150 treatments administered to 70 Verified and 80 Provisional cases of Carcinoma of Buccal Cavity and Sinuses classified according to the Stage of Disease. - Melbourne, 1940.

Basis of Diagnosis	INTENTION AND NATURE OF TREATMENT	LIP					TONGUE					OTHER					ALL CATEGORIES.					
		-	i	ii	iii	iv	-	i	ii	iii	iv	-	i	ii	iii	iv	-	i	ii	iii	iv	Total
Verified	A. POSSIBLY CURATIVE																					
	1. Surgery	.	7	3	.	.	.	.	.	.	.	.	.	4	.	.	.	7	7	.	.	14
	2. Radium and/or Radon	.	6	5	1	.	.	.	.	1	.	.	1	3	.	.	.	7	8	2	.	17
	3. X-rays	.	2	4	.	.	.	.	.	.	.	.	.	1	3	.	.	2	5	3	.	10
	4. Combined Radiological	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	.	.	1	1	1	3
	5. Radiosurgical	.	.	1	.	.	.	.	.	.	.	1	.	4	2	1	1	.	5	2	1	9
	Total	.	15	13	1	.	.	.	.	1	.	1	1	13	6	2	1	16	26	8	2	53
	B. PALLIATIVE or INCIDENTAL																					
	1. Surgery	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	1	1
	2. Radium and/or Radon	.	.	.	.	.	.	.	.	2	.	.	.	.	2	.	.	.	.	4	.	4
	3. X-rays	.	.	.	1	.	.	.	.	1	1	.	.	.	2	2	.	.	.	4	3	7
	4. Combined Radiological	.	.	.	.	.	.	.	.	1	1	.	.	.	.	1	.	.	.	1	2	3
	5. Radiosurgical	.	.	.	.	1	.	.	.	.	.	.	.	.	1	.	.	.	.	1	1	2
	Total	.	.	.	1	1	.	.	.	4	2	.	.	.	5	4	.	.	.	10	7	17
Provisional	A. POSSIBLY CURATIVE																					
	2. Radium and/or Radon	.	45	3	.	.	.	1	.	.	.	.	1	1	1	.	.	47	4	1	.	52
	3. X-rays	.	5	1	.	.	.	.	.	.	.	.	.	2	.	.	.	5	3	.	.	8
	4. Combined Radiological	.	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	.	2
	5. Radiosurgical	.	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	2	2	.	.	4
	Total	.	52	7	1	.	.	1	.	.	.	.	1	3	1	.	.	54	10	2	.	66
	B. PALLIATIVE or INCIDENTAL																					
	2. Radium and/or Radon	.	.	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.	2	.	2
	3. X-rays	.	.	.	.	1	.	.	.	.	2	.	.	.	2	7	.	.	.	2	10	12
	Total	.	.	.	.	1	.	.	.	.	2	.	.	.	4	7	.	.	.	4	10	14
	TOTAL	.	67	20	3	2	.	1	.	5	4	1	2	16	16	13	1	70	36	24	19	150

NOTE:- Stage of Disease.

(-) = Not classified.
(i) = Early stage; favourable to all forms of treatment.
(ii) = No longer incipient; borderline for hopeful operability.
(iii) = Advanced; operation rarely practicable.
(iv) = Very advanced; every treatment hopeless.

TABLE 18 - DETAIL OF TREATMENTS IN 1782 CANCER CASES CLASSIFIED ACCORDING TO DISEASE GROUPS

MELBOURNE, 1940.

Detail of Treatment	DISEASE GROUP																								
	Buccal Cavity & Sinuses		Digestive Organs		Respiratory System		Female Genital Organs		Breast		Male Genital Organs		Urinary Organs		Skin		Brain etc.		Other (Sarcoma mainly)		All Categories				
	V.	P.	V.	P.	V.	P.	V.	P.	V.	P.	V.	P.	V.	P.	V.	P.	V.	P.	V.	P.	V.	P.	Total		
1. Surgical a. 'ectomies	14	.	25	1	2	.	17	.	51	1	17	.	9	1	11	1	27	4	17	2	191	10	201		
b. 'ostomies	.	.	42	53	2	1	1	.	.	.	7	9	1	1	.	.	.	.	1	.	54	64	118		
c. compound a. & b.	.	.	34	6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	35	6	41		
d. 'otomies	.	.	22	19	3	.	1	1	.	.	.	.	.	.	1	.	9	.	3	3	39	23	62		
e. other operations	.	.	5	3	.	.	.	.	.	.	1	.	.	.	.	.	1	2	1	1	8	6	14		
	14	.	129	82	7	1	19	1	51	1	25	9	10	2	12	1	37	6	23	3	327	109	436		
2. Electro-Surgical	.	.	.	.	.	.	.	.	.	1	.	.	2	3	.	.	.	.	.	.	2	4	6		
3. Combined Surgical (1 and 2)	1	.	.	.	.	.	.	.	.	.	1	.	3	1	.	.	.	.	.	.	5	1	6		
4. Radium and/or Radon																									
a. Interstitial	21	53	.	2	.	.	8	8	2	20	.	.	.	.	26	123	1	.	.	.	58	206	264		
b. Contact - surface	.	3	.	.	.	.	1	.	.	.	1	.	.	.	4	91	.	.	.	.	6	94	100		
c. Contact - Cavity	1	1	1	.	.	.	40	4	.	.	.	.	.	.	.	.	.	.	1	.	43	5	48		
d. Mixed types	.	2	.	.	.	.	10	.	.	.	.	.	.	.	2	11	.	.	.	.	12	13	25		
	22	59	1	2	.	.	59	12	2	20	1	.	.	.	32	225	1	.	1	.	119	318	437		
5. X-radiation																									
a. Contact - Surface	7	5	.	.	.	.	1	.	.	1	.	.	.	.	20	94	.	.	1	.	29	100	129		
b. Contact - Cavity	2	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	3	.	3		
c. Distant Rays - Superficial	.	.	.	.	.	.	.	1	.	.	1	.	.	.	6	.	.	.	.	.	7	1	8		
d. Distant Rays - Deep	8	17	9	13	5	12	8	4	15	47	4	14	1	5	3	6	.	4	19	14	72	136	208		
e. Mixed types	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	2	.	.	.	.	.	3	3		
	17	22	9	13	5	12	10	5	15	49	5	14	1	5	29	102	.	4	20	14	111	240	351		
6. Combined Radiological	7	4	.	.	1	.	15	6	.	8	.	.	.	.	3	2	.	.	.	.	26	20	46		
7. Combined Radiosurgical																									
a. 'ectomy followed by radiological	8	2	.	.	3	.	13	1	42	.	2	.	3	1	7	1	4	.	11	.	93	5	98		
b. 'ectomy preceded by radiological	1	3	.	.	1	.	4	1	1	1	.	.	.	.	.	1	.	.	.	.	7	6	13		
c. 'ostomy with deep x-rays	.	.	5	15	.	1	.	.	.	.	.	3	.	.	.	.	.	1	.	.	5	20	25		
d. Other combinations	3	.	1	.	.	.	1	.	1	.	1	.	1	.	8	1	.	.	1	1	17	2	19		
	12	5	6	15	4	1	18	2	44	1	3	3	4	1	15	3	4	1	12	1	122	33	155		
8. No treatment given	3	12	100	61	23	9	18	12	13	13	8	6	8	9	6	13	3	3	16	9	193	147	345		
TOTAL	76	102	245	173	40	23	139	38	125	93	43	32	28	21	97	346	45	14	72	30	910	872	1782		

NOTE: V. = Verified by biopsy and/or post mortem
P. = Provisional (i.e. clinical diagnosis only).

STATISTICAL DESCRIPTION:

Statistics have been spoken of by Hogben as "the arithmetic of human welfare". This arithmetic serves a dual purpose, namely statistical description and statistical inference. The primary data, of course, afford basis for both.

In the current investigation, the available information is drawn from 1782 responses to a questionnaire concerning pre-selected clinical attributes of cancer (e.g. sex, age, symptoms at onset, severity of disease when first diagnosed, treatment, etc.). Marshalling of this material into appropriate frequency series and, where possible, the computing of constants will presently make up the business of statistical description; the problems of statistical inference will be left until later.

Table 5 is an attempt to include most of the descriptive data in one comprehensive array. In reality the arrangement is a composite of several tables since the same material, differently treated, figures in each major column. Such a broad survey can only be presented in condensed form; to show the necessary detail Table 5 will require dissection and a closer analysis of component series.

Quantitative and Qualitative Data. It will be noticed in Table 5 that average magnitudes have been computed for "age" and "duration of symptoms". This introduces the distinction between quantitative and qualitative data. The majority of observations relevant to this enquiry are qualitative judgements not involving measurement: variables such as sex, symptoms, methods of treatment etc. admit of classification as to kind, but not of degree. However, three clinical attributes have been measured with more or less precision; ages have been registered in years, duration of symptoms in months, whereas estimates of the stage (severity) of the disease are roughly quantitative.

Corresponding with this distinction is a difference in the elaboration of descriptive technique. In dealing with qualitative data, statistical description is usually complete when the respective frequencies have been distributed among the several categories of whatever classification has been adopted - two categories in the case of sex, considerably more in the case of detailed methods of treatment etc. On the other hand succinct description of a quantitative distribution may require the derivation of four representative figures or constants: in biological work two usually suffice, viz. a measure of central tendency (i.e. an average) and a measure of the degree of dispersion about the average (e.g. standard deviation). These methods will be discuss ed more fully when we come to deal with age frequencies.

SYMPTOMATOLOGY.

The dissection of Table 5 will commence with the excision of the section on symptomatology (Col. 6) but, regardless of the fact that the main interest of this study lies in further analysis, we may digress for a moment to consider how such information is collected and classified.

When the questionnaire was being planned a constructive critic suggested that the determination of first symptoms and their duration would prove a profitable line of research. "What" he asked, "are the premonitory elements of disquietude in the patient?" "For how long does the patient delay in seeking advice?" The significance of these questions was readily appreciated and the questionnaire drafted accordingly. In future years it may prove useful to add a question on symptomatology at the time of first consultation: that is to say, an effort might be made to determine the clinical evidences that prompt the medical practitioner to register a provisional diagnosis of cancer.

Classification of Symptoms. Before final presentation, all primary data requires classification or grouping according to the points it is desired to bring out. In the process, of course, there is sacrifice of detail; the more condensed the grouping, the less there is of detail. Nevertheless this is the only way in which the mind's eye can comprehend the relationships of numerous and apparently isolated facts such as the hundred-and-one possibilities in symptomatology. A satisfactory classification associates related items by grouping them into compact or graded categories (i.e. into discrete or continuous series).

In classifying first-symptoms of cancer we have made use of the time honoured division into 'subjective' and 'objective'. The distinction is not hard and fast but holds true in general. Objective symptoms are physical manifestations apparent to both patient and intimate associates; subjective or functional symptoms are such that their appreciation is more or less confined to the patient's own sensibilities. Having defined this difference, we further classified symptoms on the basis of 'localising value' (some symptoms being indicative of the site of a lesion). Hence one finds (i) physical manifestations sub-divided into 'general', 'regional' and 'focal', whilst (ii) functional disturbances are arranged according to 'systemic characteristics'. The scheme of classification is set out hereunder:-

SCHEME OF SYMPTOM CLASSIFICATION

A. PHYSICAL MANIFESTATIONS (OBJECTIVE SYMPTOMS)

1. General, e.g. Emaciation, Jaundice etc.
2. Regional, e.g. Lymph-node enlargement; Ascites; Paralysis etc.
3. Focal, e.g. Tumour, Ulcer, Bleeding, Discharge, etc.

B. FUNCTIONAL DISTURBANCES (SUBJECTIVE SYMPTOMS)

1. Pain (a) characteristic or (b) non-characteristic of organ or system involved.
2. Tenderness (a) on focal pressure or (b) during functional activity.
3. Systemic (or organic) functional derangement; inhibition or perversion.
   - Alimentary:- e.g. Vomiting, Diarrhoea, etc.
   - Cardio-respiratory:- e.g. Cough, Difficulty in breathing, etc.
   - Cerebral:- e.g. Coma, Insanity, etc.
   - Special Senses:- e.g. Blindness, Vertigo, Tinnitus, etc.
   - Cutaneous Sensation:- e.g. Pruritis, Disturbance of Skin Sensibility etc.
   - Urinary:- e.g. Retention, Nycturia, etc.
   - Reproductive:- e.g. Menstrual disturbance, Sterility etc.
   - etc. etc. etc.

Frequency Tables. Absolute symptom-frequencies are dealt with in the attached sequence of eleven tables. Table 6 compares the main features of symptomatology in the ten major disease groups (I to X). Detailed symptom-frequencies will be found separately distributed in the ten tables that follow (7 to 16 inclusive). In these latter tables individual disease groups have been broken up into subordinate categories and a distinction drawn between "verified" (V.) and "provisional" (P.) diagnoses.

Graphic Presentation. In diagram F is shewn the proportionate distribution of physical (objective) and functional (subjective) symptoms for each of the ten disease groups. The material for this chart has been derived from the absolute figures in Table 6. The reader can develop similar comparisons for the detailed sumptomatology of Tables 7 to 16 (inclusive).

(To be continued)

TABLE 5. STATISTICAL DESCRIPTION OF 1782 CANCER CASES - MELBOURNE, 1940.

Disease Groups	(1) No. of Cases	(2) Sex		(3) Average Age (Years)	(4) Conjugal State				(5) Fertility (Females only)				(6) Mode of Onset				(7) Stage of Disease						(8) Treatment			
																	First Hand					2nd Hand				
		M	F		-	M	S	W	-	0	1	x	No Record	1-Symptom Onset	2-Symptom Onset	Average Duration (Mths)	-	I	II	III	IV		None	Surgical	Radiological	Radiosurgical
I. Ca. of Buccal Cavity	178	142	36	61.19	17	111	22	28	24	4	4	4	20	109	49	7.38	1	74	36	25	26	16	15	15	131	17
II. Ca. of Digestive Organs	418	249	169	61.19	22	268	47	81	89	29	9	42	14	86	318	6.36	3	8	76	81	244	6	161	211	25	21
III. Ca. of Respiratory System	63	51	12	60.24	6	35	13	9	8	3	1	.	5	10	48	5.77	4	.	6	18	33	2	32	8	18	5
IV. Ca. of Female Genital Organs	177	.	177	54.15	4	118	18	37	56	27	23	71	6	68	103	7.14	.	25	64	39	45	4	30	20	107	20
V. Ca. of Breast	218	2	216	57.44	11	126	33	48	100	39	11	66	28	117	73	6.03	2	7	102	43	40	24	26	53	94	45
VI. Ca. of Male Genital Organs	75	75	.	66.33	7	52	6	10	.	.	.	.	5	30	40	7.86	1	2	11	25	33	3	14	35	20	6
VII. Ca. of Urinary Organs	49	34	15	58.88	2	23	13	11	10	4	1	.	6	9	34	7.29	1	3	16	5	20	4	17	21	6	5
VIII. Ca. of Skin	443	255	188	65.48	104	213	41	85	146	7	5	30	39	369	35	13.3	2	335	61	7	11	27	19	13	393	18
IX. Neoplasm of Brain Spinal Cord & Eye.	59	34	25	41.95	5	31	20	3	14	7	.	4	3	12	44	5.96	1	4	27	5	20	2	6	43	5	5
X. Other (Mainly Sarcoma)	102	35	67	48.92	2	68	20	12	33	17	5	12	9	48	45	7.06	3	2	24	29	39	5	25	29	35	13
T o t a l	1782	877	905		180	1045	233	324	480	137	59	229	135	858	789		18	460	423	277	511	93	345	448	834	155

Column 3 Average employed = arithmetic mean
" 4 (-) = no record; M = married; S = single; W = widow or widower.
" 5 (-) = no record; 0 = nulliparous; 1 = primiparous; x = multiparous.
" 6 Average employed = median.
" 7 "First Hand" = unaffected by previous treatment.
"Second Hand" = following treatment elsewhere.
(-) = no record; I = Early; II = Borderline; III = Moderately advanced (inoperable); IV = Hopelessly advanced

TABLE 6 SYMPTOM FREQUENCIES IN DISEASE GROUPS I TO X

Giving frequency distribution of 2436 symptoms characterising onset of 1647 Cancer Cases. Melbourne, 1940.

SYMPTOM CLASSIFICATION	DISEASE GROUPS									
	I	II	III	IV	V	VI	VII	VIII	IX	X
A. PHYSICAL MANIFESTATIONS (Objective)										
1. General	2	98	13	13	2	8	7	5	.	6
2. Regional	.	5	4	5	5	1	1	.	6	3
3. Focal	167	87	16	195	205	20	31	426	2	63
Total	169	190	33	213	212	29	39	431	8	72
B. FUNCTIONAL DISTURBANCES (Subjective)										
1 & 2. Pain and/or Tenderness[x]	22	188	18	43	43	20	15	4	33	42
3. Systemic functional derangement	16	344	55	18	8	61	23	4	59	24
Total	38	532	73	61	51	81	38	8	92	66
T O T A L	207	722	106	274	263	110	77	439	100	138

[x] Note:- The 1940 return does not discriminate between "pain" and "tenderness" nor does it record any worth-while classification of characteristics.

Key to numbering of disease groups:

I. Ca. Buccal Cavity and Sinuses
II. Ca. Digestive Organs
III. Ca. Respiratory System
IV. Ca. Female Genital Organs.
V. Ca. Breast
VI. Ca. Male Genital Organs
VII. Ca. Urinary Organs.
VIII. Ca. Skin
IX. Neoplasm of Brain, Spinal Cord and Eye.
X. Sarcoma (mainly)

TABLE 7 SYMPTOM FREQUENCIES IN DISEASE GROUP I

Giving frequency distribution of 207 symptoms characterising onset of 158 cases of Carcinoma of Buccal Cavity.
Melbourne, 1940.

SYMPTOM CLASSIFICATION	LIP		TONGUE		OTHER		ALL CATEGORIES		
	V.	P.	V.	P.	V.	P.	V.	P.	TOTAL
A. PHYSICAL MANIFESTATIONS (Objective)									
1. General									
a. Emaciation	.	.	.	.	.	2	.	2	2
3. Focal									
a. Tumour, Swelling, Lump	10	19	6	3	17	11	33	33	66
b. Ulcer	22	42	3	.	7	4	32	46	78
c. Bleeding	1	.	1	.	3	.	5	.	5
d. Discharge	.	.	.	.	3	.	3	.	3
3. Keratosis	4	10	.	1	.	.	4	11	15
Total	37	71	10	4	30	17	77	92	169
B. FUNCTIONAL DISTURBANCES (Subjective)									
1 & 2. Pain and/or tenderness	1	.	3	1	11	6	15	7	22
3. Systemic functional derangement									
a. Alimentary									
Deglutition, difficulty of	.	1	.	1	1	6	1	8	9
b. Cardio-Respiratory									
Breathing, difficulty of	.	.	.	.	.	1	.	1	1
Cough	.	.	.	.	1	.	1	.	1
c. Special Senses									
Vision, difficulty of	.	.	.	.	.	1	.	1	1
Speech, " "	.	.	.	.	1	2	1	2	3
d. Cutaneous Sensation									
Pruritis	.	.	1	.	.	.	1	.	1
Total	1	1	4	2	14	16	19	19	38
T O T A L	38	72	14	6	44	33	96	111	207

NOTE V. = Verified by biopsy and/or post-mortem
P. = Provisional (i.e. clinical diagnosis only)

TABLE 8 SYMPTOM FREQUENCIES IN DISEASE GROUP II.

Giving frequency distribution of 722 symptoms characterising onset of 404 cases of Carcinoma of Digestive Organs.

Melbourne, 1940.

SYMPTOM CLASSIFICATION	OESOPHAGUS		STOMACH		INTESTINES		RECTUM		OTHER		ALL CATEGORIES		
	V.	P.	V.	P.	V.	P.	V.	P.	V.	P.	V.	P.	TOTAL
A. PHYSICAL MANIFESTATIONS (Objective)													
1. General													
a. Emaciation	8	10	8	14	9	2	4	4	9	1	38	31	69
b. Pallor	.	.	2	1	2	.	.	.	1	.	5	1	6
c. Jaundice	.	.	1	1	1	.	.	.	11	8	13	9	22
d. Paresis	.	.	.	1	.	.	.	.	.	.	.	1	1
2. Regional													
a. Lymph-node enlargement	.	.	.	.	.	.	.	.	1	.	1	.	1
b. Ascites	.	.	1	.	.	.	.	.	.	.	1	.	1
c. Dropsy	.	.	1	1	.	.	.	.	.	1	1	2	3
3. Focal													
a. Tumour, Swelling, Lump	1	.	2	2	1	3	2	5	4	1	10	11	21
b. Ulcer	.	.	.	.	.	.	1	.	.	.	1	.	1
c. Bleeding	1	.	4	4	7	4	8	24	1	.	21	32	53
d. Discharge	.	.	.	.	2	.	.	2	.	.	2	2	4
e. Intestinal Obstruction	.	.	.	.	5	.	3	.	.	.	8	.	8
Total	10	10	19	24	27	9	18	35	27	11	101	89	190
B. FUNCTIONAL DISTURBANCES (Subjective)													
1 & 2. Pain and/or Tenderness	2	.	36	39	37	20	14	12	21	7	110	78	188
3. Systemic Functional Derangement													
a. Alimentary													
Appetite, loss of	3	.	12	7	3	.	.	1	4	.	22	8	30
Digestion, disturbance of	1	1	21	16	2	2	1	1	4	1	29	21	50
Deglutition, difficulty of	16	10	4	2	.	.	.	.	.	.	20	12	32
Vomiting	8	4	23	24	11	3	.	2	1	2	41	35	76
Defaecation, disturbance of	.	.	3	.	15	5	11	24	1	.	30	29	59
Constipation	.	.	1	1	14	8	10	9	2	1	27	19	46
Diarrhoea	.	.	.	2	9	3	8	7	.	1	17	13	30
b. Cardio-Respiratory													
Breathing, difficulty of	.	.	2	3	.	.	.	.	.	.	2	3	5
Cough	.	1	3	.	.	.	.	.	1	.	4	1	5
c. Special Senses													
Speech, difficulty of	1	2	1	.	.	.	.	.	.	.	2	2	4
d. Cerebral													
Convulsions	.	.	1	.	.	.	.	.	.	.	1	.	1
Equilibrium, disturbance of	.	.	.	.	1	.	.	.	.	.	1	.	1
e. Urinary													
Micturition, disturbance of	.	.	.	.	2	.	1	.	1	.	4	.	4
Retention of Urine	.	.	.	.	.	.	1	.	.	.	1	.	1
Total	29	18	107	94	94	41	46	56	35	12	311	221	532
T O T A L	39	28	126	118	121	50	64	91	62	23	412	310	722

NOTE: V. = Verified by biopsy and/or post mortem.
P. = Provisional (i.e. clinical diagnosis only).

TABLE 9 SYMPTOM FREQUENCIES IN DISEASE GROUP III

Giving frequency distribution of 106 symptoms characterising onset of 58 cases of Carcinoma of Respiratory System.
Melbourne, 1940.

SYMPTOM CLASSIFICATION	LARYNX		BRONCHI & LUNG		ALL CATEGORIES		
	V.	P.	V.	P.	V.	P.	TOTAL
A. PHYSICAL MANIFESTATIONS (Objective)							
1. General							
a. Emaciation	1	1	6	3	7	4	11
b. Pallor	.	.	1	.	1	.	1
c. Jaundice	.	.	1	.	1	.	1
2. Regional							
a. Dropsy	.	.	1	.	1	.	1
b. Paralysis	.	.	1	.	1	.	1
c. Lymph-node enlargement	.	.	2	.	2	.	2
3. Focal							
a. Tumour, Swelling, Lump	1	1	.	.	1	1	2
b. Bleeding	1	.	5	8	6	8	14
Total	3	2	17	11	20	13	33
B. FUNCTIONAL DISTURBANCES (Subjective)							
1 & 2. Pain and/or tenderness	2	.	11	5	13	5	18
2. Systemic functional derangement							
a. Alimentary							
Appetite, loss of	.	.	1	1	1	1	2
Deglutition, difficulty of	2	.	2	1	4	1	5
b. Cardio-Respiratory							
Breathing, difficulty	1	1	11	7	12	8	20
Cough	.	1	12	4	12	5	17
c. Special Senses							
Speech, difficulty of	5	5	1	.	6	5	11
Total	10	7	38	18	48	25	73
T O T A L	13	9	55	29	68	38	106

NOTE V. = Verified by biopsy and/or post mortem.
P. = Provisional (i.e. clinical diagnosis only).

TABLE 10 SYMPTOM FREQUENCIES IN DISEASE GROUP IV

Giving frequency distribution of 274 symptoms characterising onset of 171 cases of Carcinoma of Female Genital Organs.
Melbourne, 1940.

SYMPTOM CLASSIFICATION	UTERUS		OVARY		OTHER		ALL CATEGORIES		
	V.	P.	V.	P.	V.	P.	V.	P.	TOTAL
A. PHYSICAL MANIFESTATIONS (Objective)									
1. General									
a. Emaciation	7	4	1	.	.	.	8	4	12
b. Pallor	1	.	.	.	.	.	1	.	1
2. Regional									
a. Lymph-node enlargement	.	.	.	.	1	.	1	.	1
b. Ascites	.	.	2	1	.	.	2	1	3
c. Paralysis	1	.	.	.	.	.	1	.	1
3. Focal									
a. Tumour, Swelling, Lump	1	.	9	1	7	1	17	2	19
b. Ulcer	.	.	.	.	3	2	3	2	5
c. Bleeding	83	21	2	2	7	3	92	26	118
d. Discharge	42	6	.	1	2	1	44	8	52
e. Keratosis	.	.	.	.	.	1	.	1	1
Total	135	31	14	5	20	8	169	44	213
B. FUNCTIONAL DISTURBANCES (Subjective)									
1 & 2. Pain and/or Tenderness	27	3	8	2	3	.	38	5	43
3. Systemic functional derangement.									
a. Alimentary									
Appetite, loss of	1	.	.	.	.	.	1	.	1
Digestion, disturbance of	.	.	1	.	.	.	1	.	1
Vomiting	.	.	.	.	1	.	1	.	1
Defaecation, disturbance of	.	.	1	.	1	.	2	.	2
b. Cardio-Respiratory									
Breathing, difficulty of	.	.	1	.	.	.	1	.	1
Cough	1	.	.	.	.	.	1	.	1
c. Urinary									
Micturition, difficulty of	4	1	.	.	3	1	7	2	9
d. Cutaneous sensation									
Pruritis	.	.	.	.	1	.	1	.	1
e. Unclassified	1	.	.	.	.	.	1	.	1
Total	34	4	11	2	9	1	54	7	61
T O T A L	169	35	25	7	29	9	223	51	274

NOTE. V. = Verified by biopsy and/or post mortem.
P. = Provisional (i.e. clinical diagnosis only)

TABLE 11, SYMPTOM FREQUENCIES IN DISEASE GROUP V.

Giving Frequency distribution of 263 symptoms characterising onset of 190 cases of Carcinoma of Breast.

Melbourne, 1940.

SYMPTOM CLASSIFICATION	V.	P.	TOTAL
A. PHYSICAL MANIFESTATIONS (Objective)			
1. General			
a. Emaciation	1	1	2
2. Regional			
a. Lymph-node enlargement	2	.	2
b. Ascites	1	.	1
c. Fracture	.	1	1
d. Paralysis	1	.	1
3. Focal			
a. Tumour, Swelling, Lump	111	67	178
b. Ulcer	3	8	11
c. Bleeding	1	1	2
d. Discharge	3	7	10
e. Retraction of Nipple	1	3	4
Total	124	88	212
B. FUNCTIONAL DISTURBANCES (Subjective)			
1 & 2 Pain and/or Tenderness	28	15	43
3. Systemic functional derangement			
a. Alimentary			
Vomiting	.	1	1
b. Cardio-Respiratory			
Breathing, difficulty of	.	1	1
Cough	2	3	5
c. Urinary			
Micturition, difficulty of	1	.	1
Total	31	20	51
T O T A L	155	108	263

NOTE. V. = Verified by biopsy and/or post mortem
P. = Provisional (i.e. clinical diagnosis only)

TABLE 12 SYMPTOM FREQUENCIES IN DISEASE GROUP VI

Giving frequency distribution of 110 symptoms characterising onset of 70 cases of Carcinoma of Male Genital Organs. Melbourne, 1940.

SYMPTOM CLASSIFICATION	PROSTATE		PENIS		OTHER		ALL CATEGORIES		
	V.	P.	V.	P.	V.	P.	V.	P.	TOTAL
A. PHYSICAL MANIFESTATIONS (Objective)									
1. General									
a. Emaciation	4	2	.	.	1	.	5	2	7
b. Pallor	.	1	.	.	.	.	.	1	1
2. Regional									
a. Dropsy	.	1	.	.	.	.	.	1	1
3. Focal									
a. Swelling, Lump	.	.	4	1	6	.	10	1	11
b. Ulcer	.	.	2	1	.	.	2	1	3
c. Bleeding	2	4	.	.	.	.	2	4	6
Total	6	8	6	2	7	.	19	10	29
B. FUNCTIONAL DISTURBANCES (Subjective)									
1 & 2. Pain and/or Tenderness	7	11	.	.	2	.	9	11	20
3. Systemic Functional derangement									
a. Alimentary									
Constipation	1	.	.	.	.	.	1	.	1
Defaecation, disturbance of	.	1	.	.	.	.	.	1	1
b. Cardio-respiratory									
Breathing, difficulty of	1	2	.	.	.	.	1	2	3
c. Urinary									
Micturition, difficulty of	21	21	.	.	.	.	21	21	42
Retention of urine	8	5	.	.	.	.	8	5	13
d. Cutaneous Sensation									
Pruritis	.	.	1	.	.	.	1	.	1
Total	38	40	1	.	2	.	41	40	81
T O T A L	44	48	7	2	9	.	60	50	110

NOTE V. = Verified by biopsy and/or post mortem
P. = Provisional (i.e. clinical diagnosis only)

TABLE 13 SYMPTOM FREQUENCIES IN DISEASE GROUP VII

Giving frequency distribution of 77 symptoms characterising onset of 43 cases of Carcinoma of Urinary Organs.

Melbourne, 1940.

SYMPTOM CLASSIFICATION	KIDNEY		BLADDER		ALL CATEGORIES		
	V.	P.	V.	P.	V.	P.	TOTAL
A. PHYSICAL MANIFESTATIONS (Objective)							
1. General							
a. Emaciation	5	1	1	.	6	1	7
2. Regional							
a. Paralysis	1	.	.	.	1	.	1
3. Focal							
a. Tumour, Swelling, Lump	1	3	.	.	1	3	4
b. Bleeding	5	2	9	11	14	13	27
Total	12	6	10	11	22	17	39
B. FUNCTIONAL DISTURBANCES (Subjective)							
1 & 2 Pain and/or Tenderness	7	.	4	4	11	4	15
3. Systemic functional derangement						-	
a. Alimentary							
Appetite, loss of	1	.	1	1	2	1	3
Vomiting	.	1	.	.	.	1	1
b. Cardio-Respiratory							
Cough	.	1	.	.	.	1	1
c. Urinary							
Micturition, difficulty of	1	1	4	4	5	5	10
Retention of urine	1	.	1	1	2	1	3
d. Cerebral							
Cerebration, disturbance of	.	1	.	.	.	1	1
Equilibrium " "	2	.	.	.	2	.	2
e. Special Senses							
Speech, difficulty of	2	.	.	.	2	.	2
Total	14	4	10	10	24	14	38
T-O T A L	26	10	20	21	46	31	77

NOTE V. = Verified by biopsy and/or post mortem.
P. = Provisional (i.e. clinical diagnosis only)

TABLE 14 SYMPTOM FREQUENCIES IN DISEASE GROUP VIII

Giving Frequency distribution of 439 symptoms characterizing onset of 404 cases of Carcinoma of Skin.

Melbourne, 1940.

SYMPTOM CLASSIFICATION	RODENT		OTHER		ALL CATEGORIES		
	V.	P.	V.	P.	V.	P.	TOTAL
A. PHYSICAL MANIFESTATIONS (Objective)							
1. General							
a. Emaciation	.	.	.	1	.	1	1
b. Pallor	.	.	.	1	.	1	1
c. Pigmentation	.	.	1	2	1	2	3
2. Focal							
a. Tumour, Swelling, Lump	6	43	36	61	42	104	146
b. Ulcer	18	159	35	42	53	201	254
c. Bleeding	.	2	1	.	1	2	3
d. Discharge	.	1	.	.	.	1	1
e. Keratosis	.	11	2	9	2	20	22
Total	24	216	75	116	99	332	431
B. FUNCTIONAL DISTURBANCES (Subjective)							
1 & 2. Pain and/or Tenderness	.	1	3	.	3	1	4
3. Systemic functional derangement							
a. Alimentary Vomiting	.	.	1	.	1	.	1
b. Cardio-Respiratory Cough	.	1	.	.	.	1	1
c. Cerebral Cerebration, disturbance of	.	.	1	.	1	.	1
d. Cutaneous Sensation Pruritis	.	.	.	1	.	1	1
Total	.	2	5	1	5	3	8
T O T A L	24	218	80	117	104	335	439

NOTE V. = Verified by biopsy and/or post mortem
P. = Provisional (i.e. clinical diagnosis only)

TABLE 15 SYMPTOM FREQUENCIES IN DISEASE GROUP IX.

Giving frequency distribution of 100 symptoms characterising onset of 56 cases of Neoplasm of Brain and Nervous System.
Melbourne, 1940.

SYMPTOM CLASSIFICATION	BRAIN		NERVOUS SYSTEM		ALL CATEGORIES.		
	V.	P.	V.	P.	V.	P.	TOTAL
A. PHYSICAL MANIFESTATIONS (Objective)							
2. Regional							
a. Paralysis	3	2	.	.	3	2	5
b. Paresis	.	1	.	.	.	1	1
3. Focal							
a. Swelling	.	.	1	.	1	.	1
b. Discharge	.	.	1	.	1	.	1
Total	3	3	2	.	5	3	8
B. FUNCTIONAL DISTURBANCES (Subjective)							
1 & 2. Pain and/or tenderness	27	6	.	.	27	6	33
3. Systemic functional derangement							
a. Alimentary							
Appetite, loss of	1	.	.	.	1	.	1
Vomiting	9	3	.	.	9	3	12
b. Cerebral							
Cerebration, disturbance of	11	4	.	.	11	4	15
Convulsions	7	4	.	.	7	4	11
Equilibrium, disturbance of	7	.	1	.	8	.	8
c. Special Senses							
Vision, difficulty of	6	4	.	.	6	4	10
Hearing, disability	2	.	.	.	2	.	2
Total	70	21	1	.	71	21	92
T O T A L	73	24	3	.	76	24	100

NOTE V. = Verified by biopsy and/or post mortem
P. = Provisional (i.e. clinical diagnosis only)

TABLE 16 SYMPTOM FREQUENCIES IN DISEASE GROUP X.

Giving Frequency distribution of 138 symptoms characterising onset of 93 miscellaneous cases of Cancer (mainly Sarcoma)
Melbourne, 1940.

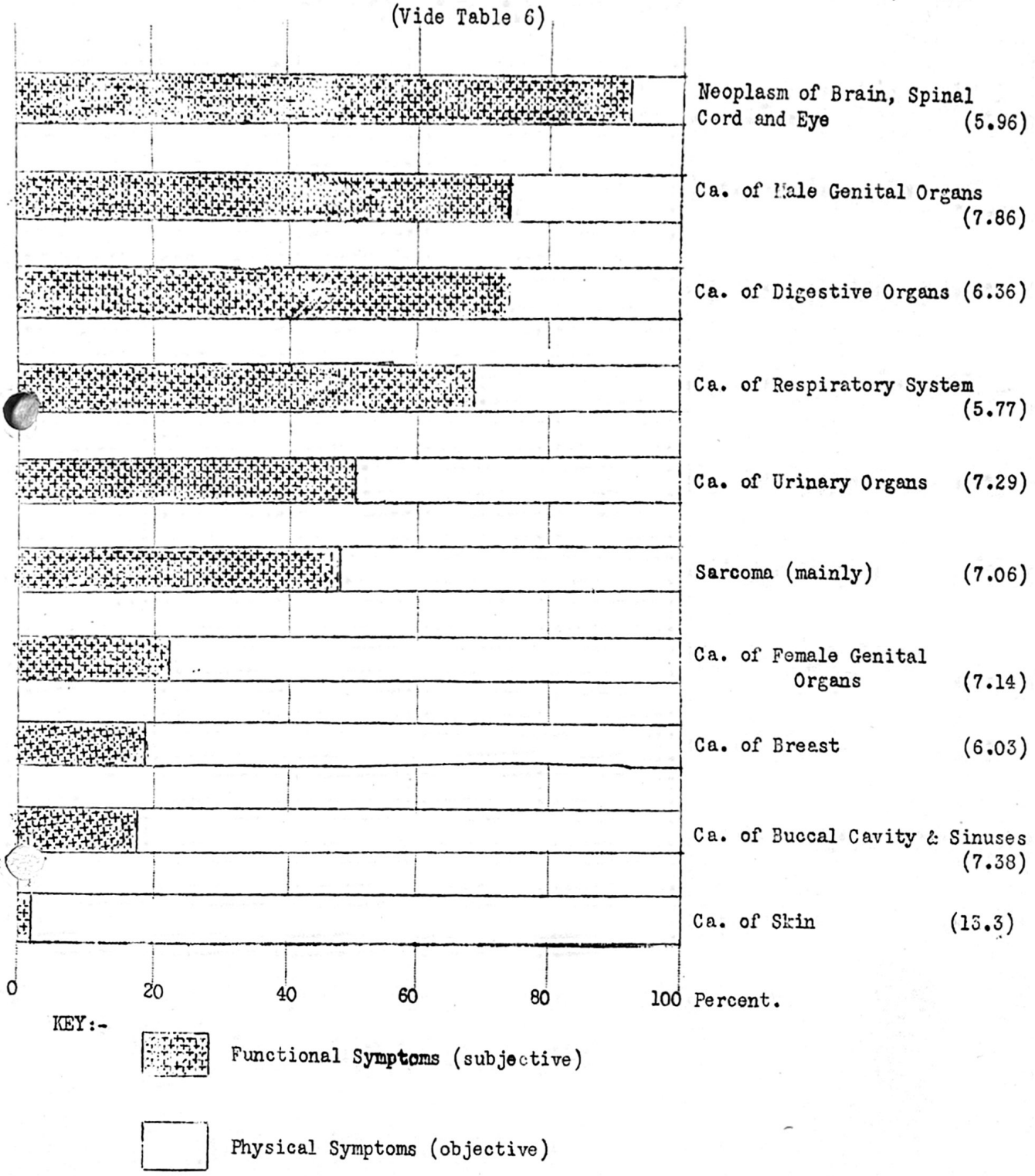
SYMPTOM CLASSIFICATION	SARCOMA		OTHER		ALL CATEGORIES		
	V.	P.	V.	P.	V.	P.	TOTAL
A. PHYSICAL MANIFESTATIONS (Objective)							
1. General.							
a. Emaciation	1	.	1	2	2	2	4
b. Jaundice	.	.	.	1	.	1	1
c. Hirsutes	.	.	.	1	.	1	1
2. Regional							
a. Fracture	1	.	.	.	1	.	1
b. Dropsy	1	.	.	.	1	.	1
c. Paralysis	.	1	.	.	.	1	1
3. Focal							
a. Tumour, Swelling, Lump	28	7	16	6	44	13	57
b. Bleeding	4	.	.	.	4	.	4
c. Discharge	2	.	.	.	2	.	2
Total	37	8	17	10	54	18	72
B. FUNCTIONAL DISTURBANCES (Subjective)							
1 & 2. Pain and/or Tenderness	17	10	9	6	26	16	42
3. Systemic functional derangement							
a. Alimentary							
Appetite, loss of	1	.	.	1	1	1	2
Digestion, disturbance of	.	.	.	1	.	1	1
Deglutition, difficulty of	2	.	.	1	2	1	3
Vomiting	4	.	1	.	5	.	5
b. Cardio-Respiratory							
Breathing, difficulty of	1	.	2	2	3	2	5
Cough	.	.	1	.	1	.	1
c. Cerebral							
Cerebration, disturbance of	1	.	1	.	2	.	2
d. Special Senses							
Vision, difficulty of	.	.	.	1	.	1	1
e. Urinary							
Micturition, difficulty of	1	.	1	.	2	.	2
Retention of Urine	1	.	.	.	1	.	1
f. Reproductive							
Amenorrhea	.	.	.	1	.	1	1
Total	28	10	15	13	43	23	66
T O T A L	65	18	32	23	97	41	138

NOTE V. = Verified by biopsy and/or post mortem
P. = Provisional (i.e. clinical diagnosis only).

DIAGRAM F

BAR DIAGRAM SHEWING THE PROPORTIONATE DISTRIBUTION OF PHYSICAL AND FUNCTIONAL SYMPTOMS FOR EACH OF TEN DISEASE GROUPS. Melbourne, 1940.

(Vide Table 6)



NOTE:- The figures in brackets indicate the average duration in months from the first symptom to the month of registration.