

*Cancer in its Relations to Insanity.* By HERBERT SNOW,  
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The influence of mental distress in generating cancer of the breasts and uterus of women has long been notorious. The testimony of Dr. Walshe ("On Cancer," 1846, p. 155), and of Sir James Paget ("Surgical Pathology," 3rd edition, p. 800) is sufficiently emphatic; and in my own writings I have had occasion to lay great stress upon the significance of such conditions as antecedents to malignant disease of almost every pathological variety. Among Cancer Hospital in-patients, of both sexes, symptoms of mental unsoundness are far from infrequent. It occurred to me, therefore, that an inquiry as to the actual prevalence of cancerous maladies among the insane might prove of some value, especially as such developments are becoming so increasingly frequent among us, and as anything bearing upon their peculiarities of selection or of distribution cannot well be devoid of interest to the pathological inquirer. I accordingly instituted on my own account a miniature "collective investigation," the net results of which I now venture to lay before you, with the expression of my great indebtedness to those medical gentlemen practising in this particular field who have so kindly assisted me by courteous, and often very full, replies to my questions.

Mr. J. Peeke Richards, of Hanwell, has been at the pains to draw up for me a most elaborate table of the deaths from cancerous neoplasms on the *female* side of that institution during the 23 years period 1867-1890. The total of patients under treatment was 4,407; among these 1,612 deaths took place, and 87 of the latter were due to cancer. The proportion of deaths from this source to the aggregate from all causes thus amounted to 5.39 per cent. In five of the 87 cancer cases the mental disease was *secondary* to the malignant.

The following were the localities attacked:—

Uterus	...	...	...	...	20
Stomach, pylorus and body...	...	...	...	...	16
„ cardiac end	...	...	...	...	2
Liver	...	...	...	...	12
Breast...	...	...	...	...	9
Ovary	...	...	...	...	5
Face (epithelioma)	...	...	...	...	4

\* Paper read at the Psychology Section of the British Medical Association held at Bournemouth, July, 1891.

Mediastinal glands ... ..	4
Kidney ... ..	4
Pancreas ... ..	3
Rectum ... ..	3
Cæcum ... ..	1
Esophagus ... ..	1
Brain ... ..	1
Iliac Fossa (sarcoma) ... ..	2

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On the *male* side, Dr. Alexander states that during the 20 years period 1869-89, 1,379 deaths took place among 4,279 inmates; of these 28 were attributable to cancer. In eight, this preceded the mental unsoundness. The following were the sites :

Organ affected.	Cancer prior to mental disorder.	Cancer subsequent to mental disorder.
Stomach ... ..	1	6
Liver ... ..	1	5
Lips and orbit ... ..	1	2
Lungs ... ..	1	2
Brain ... ..	1	1
Bladder ... ..	0	1
Large intestine ... ..	0	1
Anterior mediastinum ... ..	0	1
Knee-joint ... ..	0	1
Kidney ... ..	3	0
	8	20

According to the same authority, the annual mortality in *both* sexes in the 20 years period, 1869-89, was as follows :—

Year.	Men.	Women.	Total.	Year.	Men.	Women.	Total.
1870	0	3	3	1880	0	4	4
1871	1	1	2	1881	0	3	3
1872	0	1	1	1882	1	2	3
1873	2	3	5	1883	0	5	5
1874	2	2	4	1884	0	0	0
1875	0	5	5	1885	1	4	5
1876	1	5	6	1886	1	4	5
1877	1	0	1	1887	3	0	3
1878	1	7	8	1888	1	4	5
1879	2	3	5	1889	3	5	8

At the Surrey County Asylum, according to Mr. J. E. Barton, cancerous disease is rare. Since the opening of that

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institution in July, 1867, 6,945 patients have been admitted, of whom 30 died from this cause. The mental unsoundness appears to have been secondary to the cancer in three instances; all three persons were melancholics.

The forms of insanity here concerned were:

	Males.	Females.	Total.
Chronic mania ... ..	5	9	14
Melancholia ... ..	3	0	3
Secondary dementia ..	1	11	12
Imbecility... ..	1	0	1
	<u>10</u>	<u>20</u>	<u>30</u>

At the Three Counties Asylum, Hitchin, 33 patients (males 14, females 19) have died from cancer in the past 31 years. The aggregate mortality from all causes was 2,386 (males 1,252, females 1,134); 5,336 individuals (males 2,594, females 2,742) had been under treatment. Mr. E. Swain has very kindly furnished me with the following table of annual cancer mortality:—

Year.	Males.	Females.	Total.	Year.	Males.	Females.	Total.
1860	0	0	0	1876	1	0	1
1861	0	0	0	1877	1	0	1
1862	0	0	0	1878	1	1	2
1863	0	1	1	1879	0	1	1
1864	0	0	0	1880	0	2	2
1865	0	0	0	1881	0	2	2
1866	1	1	2	1882	0	3	3
1867	0	0	0	1883	0	0	0
1868	0	0	0	1884	2	0	2
1869	0	2	2	1885	2	1	3
1870	0	1	1	1886	0	0	0
1871	0	0	0	1887	1	0	1
1872	0	0	0	1888	2	0	2
1873	0	0	0	1889	2	1	3
1874	0	0	0	1890	1	1	2
1875	0	2	2				

Of the 14 men, seven died from cancer of the stomach or œsophagus; four ditto of the brain, jaw, liver, omentum; mesentery, rectum, one respectively; the site in one case was not recorded.

Of the 19 women, five died from uterine cancer, three from that of the breast; the ovaries were the site attacked in one instance, the liver in two, the rectum in two, the other intestines in two, the stomach in one; in three cases the locality was not stated.

I was unable to ascertain whether in any of these the malignant was the primary lesion.

At the Berry Wood Asylum, Dr. Richard Greene states that during the ten years ending in December, 1889, 656 persons died; only 10 of these from cancer.

At Moulsoford, Dr. Harrington Douty returns 16 deaths from malignant disease, out of 435 from all causes, in 1880-90, a ratio of 3·7 per cent.

Year.	Deaths from Cancer.	Total Deaths.	Year.	Deaths from Cancer.	Total Deaths.
1881	1	40	1887	1	63
1882	0	55	1888	4	41
1883	1	52	1889	3	28
1884	1	52	1890	1	40
1885	3	36			
1886	1	28		16	435

Dr. G. H. Savage states: "In reply to your questions I can only say that the general experience of alienist physicians, which is certainly mine, is that cancer is very rare in asylums. I do not think I saw six cases all the 17 years I was in Bethlem; two of stomach, two of breast (one of these also ovarian), one of brain, and one epithelial. This is from memory."

Dr. Thomson, of the Norfolk County Asylum, says: "Out of the thousand post-mortems I have made or assisted at I don't think I have found six malignant tumours." Mr. Moody, of Cane Hill Asylum, Purley, says: "As far as my experience goes cancer is a very rare disease in asylums." Mr. Stirling Christie, of the Stafford Asylum: "We get in very few patients who are subjects of cancer; when we do it is usually uterine." Dr. Harris, of Hillesdon, has known only a small number of cancer cases. Among some negative replies, Dr. Saunders, of the asylum at Haywards Heath, and Dr. Ernest W. White, of the City of London Asylum, at Dartford, consider on the other hand that cancer is not infrequent among the insane.

Dr. Langdon Down makes the important observation: "It has been frequently a matter of comment that I have never seen a congenital idiot or imbecile suffering from malignant disease."

Dr. Henry Forbes Winslow has favoured me with the following very suggestive remarks, which appear well worthy of the attention of neurological specialists: "I feel assured that the two diseases (cancer and insanity) have a close relationship to one another. You frequently find that cancerous disease

manifests itself in families in which insanity is rife. I call to mind now a family in which three brothers died of carcinoma of the stomach and intestines. One brother is now insane, and has been under certificate, and numerous other members of the family have been undoubtedly of unsound mind—epileptic or eccentric. . . . I think it is not an uncommon thing to find that some members of a family suffer from cancerous growths, while others are more or less mentally affected.” In answer to a further inquiry, Dr. H. Winslow says: “I have a strong opinion on the point” (*i.e.*, proclivities to cancer in neurotic families), “and I think the case which I cited to you points in a marked manner in that direction. . . . The case which I mentioned to you of the three brothers was not in any way connected with habits of intemperance; they were all exceptionally temperate and steady gentlemen.” Sir J. Crichton Browne expresses his “very strong conviction of the nervous element in cancer-*etiology*,” without, however, specifying any details.

Neither the reports of the Lunacy Commissioners, nor the late Dr. Thirnam’s valuable “Statistics of Insanity” contain any information upon the subject of this paper. The tables I have quoted show a substantial minority of cases in which mental unsoundness was secondary to malignant disease, and I conceive that in future official publications, statistics (especially when authenticated by an autopsy) would be most valuable on these two points—(a) the mortality from cancer among lunatics, and (b) the occurrence of insanity as a consequence of cancer.

In his article (of which he has kindly shown me the proof) on “Cancer on the Brain” for the “Dictionary of Psychological Medicine,” Dr. Hack Tuke refers to several cases of insanity associated with, and evidently caused by a malignant tumour-formation in the brain. The growth was sometimes primary, with a tumour of the middle lobe, secondary to pyloric carcinoma, the patient suffered from melancholia. Actual deposits of cancer in the brain or its vicinity do not fall within the scope of my paper. I imagine, however, that such cases as the above must be rare. In all the autopsies I can remember on cancer patients, in which a secondary cerebral tumour was found, the symptoms had been of a paralytic or comatose character.

In my own experience patients with malignant deposit (primary or secondary) in the cervical lymph-glands very commonly display considerable mental derangement several weeks, and even months, before death. This usually assumes

the form of dementia; a fortunate circumstance, as the sufferers are usually males. The mental condition is accounted for, I apprehend, by the very considerable interference with nerves and vessels, which the presence of these masses necessarily involves. Such cases, I apprehend, will rarely figure in asylums. Next in frequency as to secondary association with mental unsoundness rank cases of *uterine carcinoma*; as with any exhausting disease there may be merely dementia; but not seldom the patients are troublesome and as violent as their condition will allow. Here I imagine that the impairment of the renal functions, which is a common local consequence of the malignant deposits, plays a considerable part in the cerebral result. I have not often seen mammary carcinoma associated with insanity; a case, however, is referred to in the *Lancet* of March 14th, 1891, wherein the woman was acutely maniacal, and after death the marrow of various distant bones was found to be pervaded by the malignant cells. Lately a particularly robust-looking woman, aged 59, the wife of a publican, developed acute mania immediately after excision of the affected organ, and had to be removed to an asylum. I could ascertain nothing of a neurotic character in her family history, probably the anæsthetic had some share in effecting the mind-derangement.

The conclusions I beg to submit to the section are:—

I. *Cancerous disease among the insane is rare.*—Among individuals with congenital mental deficiency it seems to be almost wanting.\*

II. *Cancer is not increasing in frequency among the insane.*—This fact is of no slight importance in connection with the view of cancer as specially a disease of civilization largely caused by depressive mental emotion; and with the explanation of its greater prevalence in recent years on the ground of the increasing wear-and-tear which nineteenth century life involves. With the tables here published may be contrasted the steadily progressive increase in the cancer mortality of each successive year, and in the ratio to 1,000,000 persons living, of those who have annually succumbed to this cause, shown by the Registrar-General's returns since 1864.

III. *Cancer not uncommonly precedes and causes mental derangement without cerebral tumour formation.*—It should rank among the recognized causes of insanity.

\* This immunity can only in a small measure be accounted for by the absence of exposure to alcoholic temptation, to accidents, etc., in asylum inmates.