

- On *Melancholia: An Analysis of 730 Consecutive Cases*. By W. F. FARQUHARSON, M.B., Assistant Medical Superintendent, Counties Asylum, Carlisle.

(Continued from p. 21.)

Conditions as to age affecting attacks of melancholia.

I. *Admissions*.—The following table shows in decennial periods the numbers admitted at different ages, and the percentage proportion of admissions in each age-period:—

Age-periods.	10-20	20-30	30-40	40-50	50-60	60-70	70-80	Tl.
Numbers admitted...	18	110	161	160	160	96	25	730
Percentage proportions ... }	2·5	15·1	22·1	21·9	21·9	13·1	3·4	100

The maximum number of admissions of melancholia occurred during the 30-40 age-period, and this was almost identical with the numbers admitted during the two succeeding periods; 65·9 per cent. of the cases admitted were between the ages of 30 and 60 years; 16·5 per cent. were above 60 years of age; only 17·6 per cent. were below 30 years of age. Thurnam* gives the percentage proportion admitted (and re-admitted) at different ages, out of 21,333 cases of all varieties of insanity, treated in twenty asylums (British, Continental, and American), the average results being as follows:—

Age-periods.	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90
Percentage proportions admitted ... }	·04	5·4	25·3	26·3	22·6	12·7	5·9	1·6	·15

Comparing these statistics with the corresponding proportions of the 730 cases of melancholia, it is to be noted that in both instances the maximum number of admissions

* "Statistics of Insanity," p. 161.

occurred in the 30-40 age-period, but the proportion of cases of melancholia admitted in the 20-30 age-period is 10 per cent. lower than the average number of admissions of all classes of cases in that period; 30·74 per cent. of all classes of cases admitted were below 30 years of age, as compared with 17·6 per cent. of the cases of melancholia; only 7·65 per cent. of all classes of cases admitted were above 60 years of age, as compared with 16·5 per cent. of the cases of melancholia; only 20·35 per cent. of all classes were above 50 years of age, as compared with 38·4 per cent. of the melancholic cases. These statistics show that melancholia is most frequently met with in persons between the ages of thirty and sixty years, that it is proportionately less common below thirty, and more frequent in advanced life than other forms of insanity.

II. *Recoveries.*—The following table shows in decennial periods the numbers admitted at different ages, the numbers of those admitted in each age-period who recovered, and the percentage proportion of recoveries to admissions at different ages:—

Age-periods.	10-20	20-30	30-40	40-50	50-60	60-70	70-80	Tl.
Numbers admitted...	18	110	161	160	160	96	25	730
„ recovered...	13	70	105	95	79	53	8	423
Proportion per cent. of recoveries to admissions...	72·2	63·6	65·2	59·4	49·4	55·2	32	57·9

The highest recovery-rate was thus obtained amongst the cases of adolescent melancholia; the proportion of recoveries progressively diminished in each succeeding age-period, with two exceptions; the recovery-rate in the 20-30 age-period was slightly below that of the succeeding period, and the recovery-rate in the 60-70 period was almost 6 per cent. higher than that of the 50-60 period. On the whole, then, it may be stated generally that the chance of recovery from an attack of melancholia diminishes as the age increases; but even when the attack comes on in advanced life there is a fair chance of recovery.

III. *Deaths.*—The next table shows the numbers of those admitted in each age-period who died, and the percentage proportion of deaths to admissions at different ages.

Age-periods.	10-20	20-30	30-40	40-50	50-60	60-70	70-80	Tl.
Numbers admitted...	18	110	161	160	160	96	25	730
„ died ...	1	6	20	27	45	35	12	146
Proportion per cent. of deaths to admissions ...	5.5	5.4	12.4	16.8	28.1	36.4	44	20

The proportion of deaths was practically identical in the first two age-periods, and was the lowest of all; it rose progressively, and reached its maximum in the 70-80 age-period.

Duration of the disorder on admission.—In the following table the cases of melancholia are grouped into four classes according to the duration of the disease before the patient was brought to the asylum; the results of treatment of the cases in the different classes are shown, and these bear out the importance of this factor in relation to the prognosis in cases of mental disease:—

Class.	Admitted.	Recovered.	Died.	Relieved and Unimproved.	Remaining under treatment.
First Class— 1st attack and within 3 months on admission ...	345 or 47.2 per cent.	202 or 58.5 per cent.	69 or 20 per cent.	45 or 13.04 per cent.	29 or 8.4 per cent.
Second Class— 1st attack, above 3 and within 12 months on admission ...	157 or 21.5 per cent.	86 or 54.7 per cent.	32 or 20.5 per cent.	18 or 11.5 per cent.	21 or 13.3 per cent.
Third Class— Not 1st attack, and within 12 months on admission...	149 or 20.4 per cent.	105 or 70.4 per cent.	22 or 14.7 per cent.	10 or 6.7 per cent.	12 or 8.1 per cent.
Fourth Class— 1st attack or not, but of more than 12 months on admission	79 or 10.8 per cent.	30 or 37.9 per cent.	23 or 29.1 per cent.	12 or 15.2 per cent.	14 or 17.7 per cent.
Total ...	730	423 or 57.9 per cent.	146 or 20 per cent.	85 or 11.6 per cent.	76 or 10.4 per cent.

Nearly half of all the cases admitted fell under the first class, and in little more than one-tenth of the cases was the disease of longer than a year's standing on admission.

With regard to the recoveries, the most favourable from this point of view have been relapsed cases brought to the asylum within a year from the onset of the attack; no fewer than 70·4 per cent. of the cases in the third class terminated in recovery. The next highest recovery-rate was obtained in cases of the first-class; this was a little above the general recovery-rate of all the cases combined, and 4 per cent. above the rate in the second class. Only 37·9 per cent. of the cases of more than a year's standing on admission recovered. The general facts to be deduced thus are that the shorter time the patient has been insane before being brought to the asylum the greater are the prospects of recovery; and the recovery-rate in relapsed cases of short duration is higher than the rate in first cases of corresponding duration. In relation also to the death-rate, the classes come in the same order; the lowest proportion of deaths occurred in the third class, and the highest in the fourth class. The unfavourable results in the cases that had been of long duration before admission are also shown in the large proportion of them which have become chronic; 32·9 per cent. of the cases in the fourth class were either discharged unrecovered or remained under treatment at the end of 1892, as compared with the proportion of 14·7 per cent. of such cases in the third class, 21·4 per cent. in the first class, and 24·7 per cent. in the second class.

Duration of treatment or residence in those that recovered and in those that died :

Length of Residence.	Recovered.	Died.
Under one month	1	10
1 month and under 3 months ...	42	14
3 months " 6 " ...	157	14
6 " " 9 " ...	82	8
9 " " 12 " ...	26	8
1 year and under 2 years ...	60	21
2 years " 5 " ...	42	37
5 " " 10 " ...	10	21
10 " " 15 " ...	1	9
15 " " 20 " ...	2	3
20 " " 25 " ...	0	1
Above 25 years	0	0
Total	423	146

I. *Recoveries*.—The period in the above table during which the largest proportion of individuals was discharged recovered was from three to six months after admission, when 37·1 per cent. of the total number who recovered were discharged. The duration of the attack in those that recovered varied greatly, and in some instances was very prolonged; in two of the cases recovery took place after more than 15 years' residence in the asylum. This constitutes a hopeful feature of melancholia, that however long the disease may go on, so long as it remains a case of pure melancholia, there is always a chance of recovery. Of the cases of melancholia that terminated in recovery, 10·1 per cent. were discharged within three months, 47·2 per cent. within six months, 66·5 per cent. within nine months, 72·8 per cent. within twelve months; 87 per cent. recovered within two years, leaving 13 per cent. who took more than two years to get over the attack.

II. *Deaths*.—Of the cases that terminated in death, 6·8 per cent. died within a month of admission; several of these were in an extremely exhausted and almost moribund condition when brought to the asylum; 16·4 per cent. died within three months of admission, 26 per cent. within six months, 37 per cent. within twelve months, 51·4 per cent. within two years, 76·7 per cent. within five years, and 23·3 per cent. after more than five years' residence.

Relapses.—The following table shows the proportion of relapsed cases of insanity in the 730 cases of melancholia under consideration :—

	Males.	Females.	Total.
First attack	262	308	570
Not first attack ... }	72 or 21·5 per cent.	88 or 22·2 per cent.	160 or 21·9 per cent.
Total cases... ..	334	396	730

There was thus a slight excess in the proportion of female as compared with male relapsed cases.

Amongst the total cases of melancholia there were 29 men and 30 women, 59 persons in all, who were admitted into

Garlands Asylum more than once in the course of these 27 years suffering from melancholia; of these there were 21 men and 24 women who had two attacks of melancholia treated here; seven men and four women had three attacks; two women had four, and one man five attacks. The readmissions, therefore, amount to 77, 39 male and 38 female; deducting these from the total number of *cases* admitted, the number of *persons* under treatment for melancholia is found to have been 295 men, 358 women, in all 653 persons. In addition to the readmissions just mentioned there were 16 men and 20 women, 36 persons, who, although they were only admitted once suffering from melancholia, had their attack of melancholia preceded by an attack of mania for which they had undergone treatment in this asylum. In the remainder of the relapsed cases the attack of melancholia treated here had been preceded by one or more attacks of insanity treated elsewhere, either at home or in another asylum.

Influence of hereditary predisposition.—Hereditary predisposition was ascertained to exist in the following proportion of the cases of melancholia:—

	Males.	Females.	Total.
Total cases	334	396	730
Cases with H.P. ... {	141 or 42·2 per cent.	138 or 34·8 per cent.	279 or 38·2 per cent.

Probably hereditary predisposition to insanity existed in a considerably greater proportion of the cases than is shown above; the friends from mistaken ideas of shame often conceal the fact of hereditary mental taint, and in other cases there is not sufficient information obtainable about the family history of pauper patients. The hereditary nature of melancholia has been recognized from the oldest times. Burton * gives quotations from many ancient authors on this point; "I need not, therefore" (he says), "make any doubt of melancholy but that it is an hereditary disease." Dr. Hugh Grainger Stewart in an admirable paper † discussed fully the subject of hereditary insanity. His examination of

* "Anatomy of Melancholy," p. 137.

† "Journal Ment. Science," Vol. x., p. 50.

the cases admitted into the Crichton Institution, Dumfries, showed that hereditary predisposition existed in 57.7 per cent. of the cases of melancholia treated there, and that, excluding dipsomania, melancholia was the most frequent form of hereditary insanity. A similar conclusion was arrived at by Esquirol; * 48.6 per cent. of his cases of melancholia showed hereditary predisposition as compared with 24.9 per cent. of his cases of mania. The female sex was stated by Grainger Stewart (confirmed by statistics of Hood, Guislain, and Thurnam) to be more liable to attacks of hereditary insanity, but this is not corroborated by the statistics of these cases of melancholia; hereditary predisposition was ascertained in 42.2 per cent. of the male and only in 34.8 per cent. of the female cases. As regards the effects of hereditary predisposition on the age at which the attack of melancholia comes on, the following table shows in decennial periods the numbers admitted at different ages with the percentage proportion admitted in each age-period:—

Age-periods.	10-20	20-30	30-40	40-50	50-60	60-70	70-80	Total,
Hereditary cases admitted	7	49	54	68	63	30	8	279
Percentage proportions	2.5	17.6	19.4	24.3	22.6	10.7	2.9	100
Non-hereditary cases admitted ...	11	61	107	92	97	66	17	451
Percentage proportions	2.5	13.5	23.7	20.4	21.5	14.6	3.8	100

The above figures show that on the whole the hereditary cases are apt to suffer earlier in life than the non-hereditary; 20.1 per cent. of the hereditary cases admitted were below thirty years of age as compared with 16 per cent. of the non-hereditary; 13.6 per cent. of the hereditary cases admitted were above sixty years of age, as compared with 18.4 of the non-hereditary.

* "Des Maladies Mentales," Vol. ii., p. 144.

Considering next the number of attacks in hereditary as compared with non-hereditary cases, the following are the results:—

	Hereditary.	Non-hereditary.
First attack ...	215 or 77 per cent.	355 or 78·7 per cent.
Not first attack	64 or 23 per cent.	96 or 21·3 per cent.

There was thus a somewhat greater proportion of relapsed cases amongst those with hereditary predisposition. This greater tendency of hereditary cases to relapse is much more strikingly shown in the statistics given by Dr. Grainger Stewart of cases admitted into the Crichton Institution, the proportions there having been as follows:—

	Hereditary.	Non-hereditary.
First attack ...	284 or 64·69 per cent.	192 or 80 per cent.
Not first attack	155 or 35·33 per cent.	48 or 20 per cent.

Turning now to the proportion of recoveries and deaths in the hereditary as compared with the non-hereditary cases, the following results have been ascertained:—

	Hereditary.	Non-hereditary.
Total cases ...	279	451
Recovered ...	168 or 60·2 per cent.	255 or 56·5 per cent.
Died ...	50 or 17·9 per cent.	96 or 21·3 per cent.

The recovery-rate was thus higher and the death-rate lower in the hereditary than in the non-hereditary cases.

Causation of melancholia.—Leaving out of consideration hereditary predisposition and previous attacks, the cause of the attack of melancholia was found in a marked prepon-

derance of cases to be of a physical nature; in over 400 of the 730 cases there was ascertained to be some such cause at work in originating the mental depression. Intemperance in drink was assigned as a cause in 84 cases (11·5 per cent. of the total), pregnancy in 7 cases, parturition and the puerperal state in 20 cases, lactation in 23 cases, accident or injury in 22 cases, privation and starvation in 28 cases, and in a large number of other cases there was some kind of physical disorder preceding the melancholia. In about 250 cases the mental depression was assigned to some moral cause; even in some of these cases, however, there was also some physical cause at work. Business anxieties constituted the most common moral cause amongst the men, domestic affliction amongst the women.

Treatment of melancholia.—The general treatment of the cases of melancholia here has been directed towards building up the bodily strength. One of the leading symptoms in many of the cases has been loss of appetite, frequently going on to refusal of food; this has to be combated by the administration of abundance of nourishment of a digestible kind, along with plenty of open air exercise, attention to the state of the bowels, tonics, and stimulants when necessary. In 59 of the cases, owing to the patient absolutely refusing all food, artificial feeding with the stomach-tube had to be resorted to for a longer or shorter period. Sleeplessness is often a distressing feature of the case. Paraldehyde has been the chief hypnotic used in Garlands Asylum of late years, and its results have been very satisfactory. Suicide has, of course, to be guarded against by careful watching. At the same time efforts have to be made to get the patients to occupy themselves with suitable work of some kind, and to render their surroundings as bright and cheerful as possible.

Summary.—From the foregoing statistics, the following general statements with regard to melancholia may be deduced.

1. Melancholia is roughly about half as frequent as mania in the cases of insanity sent to an asylum.
2. Fluctuations in the state of trade, “strikes,” and “lock-outs;” the prevalence of some epidemic disease, such as influenza; or the presence of some other factor which affects the general health of the community exercise some influence on the amount of melancholia in a district.
3. Melancholia in the counties of Cumberland and West-

morland seems more frequently to attack the female than the male sex.

4. The recovery-rate in the cases of melancholia treated in Garlands Asylum has been higher amongst the males than the females, and the total recovery-rate has been considerably higher than in the cases of mania admitted during the same period.

5. In the majority of cases the mental depression is sooner or later accompanied by the presence of delusion; the simple cases of depression without delusion are the most favourable as regards prospects of recovery.

6. The suicidal impulse was present in over 65 per cent. of the Garlands cases; and in more than half of the suicidal cases an actual attempt at self-destruction was made at some time.

7. In a considerable number of cases the mental depression is associated with some distinct organic physical disease; phthisis has been the most frequent of such concomitants in the Garlands cases.

8. The death-rate has been slightly higher in the male than in the female cases of melancholia. The commonest cause of death has been phthisis pulmonalis, the next most frequent being exhaustion from melancholia.

9. Melancholia is most apt to occur between the ages of thirty and sixty years; it is proportionately less frequent in the earlier periods of life than mania, and more frequent at an advanced age. The prospect of recovery is greatest when melancholia comes on in early life, and as a general rule the chance of recovery diminishes as the age on attack increases; but recovery may take place even in advanced life.

10. The duration of the attack of melancholia before the patient is brought to the asylum has a most important effect on the ultimate result of the case; the sooner the patient is brought to the asylum the greater is the chance of recovery. The recovery-rate in relapsed cases of short duration is higher than the rate in first attacks of corresponding duration.

11. The duration of treatment in the asylum varies greatly; in a large proportion of cases recovery takes place within a few months. On the other hand cases of melancholia may recover after many years' residence in the asylum.

12. Of those who were discharged, 15 per cent. were re-admitted suffering from melancholia.

13. Melancholia is a form of insanity in which hereditary predisposition is most strongly manifested; in hereditary cases the disease is apt to come on earlier in life, relapses are more frequent, the recovery-rate is higher, and the death-rate lower than in non-hereditary cases.

14. The cause of an attack of melancholia is most frequently of a physical nature, less commonly it is of a moral or mental character.

15. The treatment consists essentially in the promotion of a healthy state of body, along with the endeavour to substitute a normal train of thought for those morbid imaginations which render the life of the sufferer a burden to himself.

*Current Opinion on Medico-Psychological Questions in Germany, as represented by Professor Ludwig Meyer, of Göttingen.** By A. R. URQUHART, M.D.

It was my fortune to spend a week at Göttingen in the month of May of this year, and the following notes of conversations and extracts from the published writings of Professor Meyer† may be taken as representing the opinion of the best German school of psychiatry at the present time. Professor Meyer's career has been long and distinguished. Educated at Berlin, imbued with an enthusiasm that impelled him to teaching there as early as 1858, he was in due course appointed to the Hamburg Asylum, whence he was transferred to Göttingen more than a quarter of a century ago. His name is familiar as an authority on mental diseases, and his present position is indicated by his having been selected to report upon "Psychiatry," in the volume descriptive of the German Universities prepared for the Chicago Exhibition.

It is manifestly impossible to survey the whole field of psychological medicine within the limits assigned to this paper; but one or two questions of special interest may be discussed with advantage.

The asylum at Göttingen was built with the definite purpose of providing clinical instruction for the students of the university; and, as the further development of that fundamental idea continues dominant in Professor Meyer's pro-

* Paper read at the Annual Meeting of the British Medical Association at Newcastle-on-Tyne.

† Honorary Member of the Medico-Psychological Association, 1867.