

REPORT ON ONE HUNDRED FEMALE PATIENTS TREATED BY
PREFRONTAL LEUCOTOMY.

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THIS report concerns 100 patients treated by prefrontal leucotomy. The technique employed has followed that of Freeman and Watts.

In the case of the 47 manic-depressive patients treated the prognosis without operation was considered very poor. The majority (34/44) had failed to respond to electric convulsive therapy, which was contra-indicated in the remainder by reason of physical health. Seven out of these 47 cases had been in hospital under two years, but there was a history of many years' poor social adaptation or recurrent mental illness. The average duration of illness in the recovered cases of this manic-depressive group was 31 months. That of the failures 45 months.

Of the 47 cases of this group 41 were melancholics, of whom two died as a result of operation, one of haemorrhage into the site of section, one a senile patient with marked arteriosclerosis, in whom some bleeding had tracked above the corpus callosum (these represent the two deaths of the series of 100 cases).

This leaves 39 melancholics in whom the effect of the leucotomy on their mental state could be assessed. Thirty of these recovered, 3 relapsing up to date. One of these relapsed patients remains well in hospital, but cannot manage at home. She was previously one of the most acutely agitated and suicidal patients in the hospital.

Of the 9 melancholics who failed, 2 were senile and in one other the mental symptoms were probably associated with organic heart disease.

Even in the failed cases the depression, anxiety and restlessness were removed or relieved. One of these who had a second leucotomy became manic, another was relieved entirely of her depression, but was too noisy and abusive to relatives (though well behaved to friends) to remain at home.

Of the remaining 6 of the 47 manic-depressive cases, 3 showed episodic attacks of mental instability. Of these 3, one had classically alternating phases of mania and melancholia, one had periodic manic phases, with normal periods of some length.

The third was of particular interest, as she had been in hospital some ten years, during which she had every three weeks, periods of acute manic excitement, lasting about six weeks. Since leucotomy nearly twelve months ago, she has had no further attacks. She has been put on parole, and is making good progress towards complete recovery. The other 2 cases have both been discharged.

The remaining 3 of the 47 manic-depressive cases never showed melancholic features, and were operated on in the manic state. They remained unchanged.

It may thus be said that in 44 cases of manic-depressive psychosis, the operation of leucotomy apparently removed or relieved the symptoms of depression, agitation and restlessness almost without exception.

Thirty-three cases of schizophrenia were treated. Ten of these recovered, 3 relapsing. Three of these recoveries had affective tainting to their psychosis. The 10 recoveries were made up of 3 paranoid, 3 catatonic, 4 hebephrenic. The 23 failures included 3 paranoid, 14 catatonic, 6 hebephrenic. Amongst this group were two patients who, every few weeks, had periods of acute excitement, during which they were violent and impulsive. Since operation nearly twelve months ago, neither have had such outbursts, and they have become usefully employable. One is already on parole and the other is likely to be paroled soon.

The average duration of illness in the recovered schizophrenics was 25 months and in the failed cases 85 months. In a few of the other failed cases of this group there was certainly some improvement, but the majority showed no change.

Nineteen cases of paranoia and paraphrenia were operated upon. Five cases recovered, two of whom soon relapsed. Two of those still well were cases who had considerable depression attached to their persecutory ideas. In general most of these patients became less suspicious and rather more pleasant individuals than before operation. The delusional ideas have, however, persisted, though in most cases, appearing to concern the patients less than before the operation. The average duration of illness in recoveries in this group is 35 months and in the failures 62 months. This indicates that the early cases respond better.

The final case which makes up the 100 of this series, was a chronic hysteric who had for ten years been in and out of different mental hospitals. Her symptoms took the form of suicidal attempts, narrowly missing real success. No form of treatment anywhere had been successful in curing her illness. After leucotomy she appeared more stable and has been home twelve months. She still develops minor hysterical symptoms, which gain her attention. There has so far been no recurrence of the suicidal episodes or of the wanderings from home, formerly a great trial to her parents.

The personality changes in the recovered cases of all types have been similar to those described by Freeman and others, namely, a tendency to consider less the effect of their remarks and to say what they think—a tendency to be placid and inclined to laziness. These changes have not been usually very marked or unsatisfactory in degree.

Foresight is not necessarily lost, and insight is often profound. One patient, a paranoid schizophrenic, before leucotomy had for years a male friend who wished to marry her. She was, however, more ideally attracted to another, who was not particularly interested in her. After leucotomy she decided to marry the nice but not so romantic partner. On her own decision she wanted twelve months between recovery and marriage, to feel sure she was well. She

said she thought her fiancé a very brave man to take her on in view of her illness. She was concerned as to whether it was advisable for her to have children in view of her illness. The marriage is so far very happy.

The recovered patients are usually very conscious of the relief they have obtained and very grateful for it.

Apart from the two operative deaths, there have been no serious complications after operation. Epileptiform seizures are fairly common in the first 24 hours, but we have had no reports of permanent epilepsy.

One case who had a second operation became manic, but her present condition is probably preferable, both to herself and others, than her previous acute misery.

Dr. E. R. A. Cooper, of Manchester, kindly examined four brains from patients who had had prefrontal leucotomy. Two of these were operative deaths, one dying a few hours after operation, the other dying five days after operation. The other two patients died some months after operation of natural causes. Dr. Cooper has sent a preliminary report as below :

Here is report of A. K—, lived five days after leucotomy.

Left hemisphere.—A large blood clot 1 in. by 1 in. was found in the white matter of frontal lobe. Another clot in supra callosal region compressing the corpus callosum. The pial veins were all congested.

The tissue all around the massive frontal blood clot was necrosed and limited and demarcated from the healthy white matter by a line of glial activity—it resembled an infarct.

Examination of all regions of the corpus striatum, thalamus and internal capsule did not reveal anything abnormal. I examined also the subthalamus, but found it normal.

Right hemisphere.—A cavity filled with blood clot was found in the frontal lobe and an area of haemorrhagic infiltration surrounded it and penetrated into the frontal lobe. There was haemorrhage into the lateral ventricle and above the corpus callosum as on the left side.

Sections through the corpus striatum, thalamus and internal capsule have not revealed any degeneration or gliosis.

I have been carefully through all the cases, but cannot add anything. In each case there was a cavity resulting from the leucotomy. This was surrounded by a prolific area of neuroglia ; microglia (scavengers) clearing away debris and large-sized astrocytes in the nervous tissue around. I have not detected any change in the neurones of the thalamus or corpus striatum ; nor can I trace any degenerating fibres.

As far as I could tell, there did not appear to be much change in the cells of the frontal cortex.

I suggest that any further specimens would be best cut serially and examined by Weigert Pal right through to the brain stem. Those I did do did not show any response.

It will be noticed that degeneration of the thalamus as reported by Freeman was not observed in these cases.

SUMMARY.

1. Experience of 100 cases of prefrontal leucotomy has shown that symptoms of true melancholia can be removed by the operation in an extremely high percentage of cases, even in old standing cases and after failure of other methods.

2. In schizophrenia, paranoia and paraphrenia it is doubtful whether leucotomy is more efficacious than other methods of treatment.

3. Personality changes after operation are less gross than might be feared, and the personality may even be improved. It is thus possible that if more serious effects of the operation do not develop after some years it may be considered advisable to employ it earlier and before other methods of treatment in cases where there has been a long history of poor social adaptation.

One of the most important questions we wish to know about prefrontal leucotomy is to what extent it leaves the patients suitable persons to take their place in society. For practical purposes the opinion of relatives and friends gives us useful information. With this in view, relatives of discharged patients with whom we were not otherwise in contact, were written to. Below are the replies received.

Reference to the question letter sent out will explain the replies where they answer the question letter point by point.

The following letter was sent to the relatives of patients operated on.

COUNTY MENTAL HOSPITAL,
WHITTINGHAM,
PRESTON.

Re LEUCOTOMY OPERATION.

Patient's name.....

DEAR SIR (MADAM),

We are very interested to know how the above-named patient is now. We would be glad if you would kindly reply to the following :

1. An account in your own words as to how the patient has been since discharge.
2. Very particularly, in what way if any, is she occupying herself, either at home or on outside employment.
3. Can you describe her personality compared with how she used to be before she became ill.

I enclose a stamped addressed envelope for your reply.

Yours faithfully,
A. R. GRANT,
Medical Superintendent.

1. D. H—, aged 41. Operation : 8.x.44. Letter : 21.iii.46. Discharged : 24. xii. 44.

History.—Admitted 20.ix.40. Always "highly strung." No confidence when mother died. Feared the future. Alcoholic hereditary. Duration of illness : 4 years 1 month.

Report before operation.—Depressed ; anxiety ; hallucinated—voices told her she was a burden. Ideas of unworthiness.

DEAR SIR,—

I am writing to you as regards my sister, D. H—. I am her youngest brother and she came to live with me when she came out, and not with my brother F. She seems to be getting along quite well, she stayed with us for about 4 months and then decided to get a little house of her own, and she seems to enjoy it better because it keeps her busy. She has not started work yet, but she goes out a lot and seems to take plenty of interest in everything she does. I cannot thank you enough for all you have done for her, she has not been back to see her employers at Ballon Street, because I don't think she would like to go back there, she seems

to want to get a job nearer home. I thought she would have written to you to thank you for all you did for her, but she does not seem to be good at writing. Also she has got out of the habit of thinking everybody is talking about her and I think she is more interested in the life of other people than she ever was before.

3. S. H—, aged 49. Operation: 25.vi.44. Letter: 8.iii.46. Discharged: 28.viii.44.

History.—Admitted 30.ix.43. Illness commenced prior to 1942. She had electric convulsive therapy and improved for a time, then relapsed. She failed to improve after a second course of E.C.T. Duration of illness: 2 years.

Report before operation.—Very depressed, restless and agitated. Believes she is unwanted and God has forsaken her. Says her head is empty, she has no brain. Reiterates this continually.

DEAR SIR,—

Re S. H—.

She was discharged August 28, 1944, and until December, 1944, was perfectly normal, then a relapse occurred, she went away to her sister's for 3 weeks and then came home much better for another 3 or 4 months, then she complained of a queer feeling in her head, when she awoke each morning, although she had slept all night she was still tired and did not want to get up. This feeling persisted, and she has eventually turned lazy, her excuse being that she is tired, the peculiar thing of this is, she must and can go and talk with someone (no matter who) until this feeling leaves her. At first in about 2 hrs., now it lasts nearly all day, when evening comes she is more often than not normal.

There has been a return of delusions during the last 8 wks, the main ones taking the line that she has no brain (due to operation) and she can't think or do any work. I have been at home ill, and a fortnight ago she came downstairs undressed, she could not dress herself properly, putting her corsets on after her skirt, she got all mixed up and I had to show her what to do, when she was dressed she said "Come on T., we are going to be late for work." I asked her where she was going, and she mentioned a place she worked at when we were first married 24 yrs. ago. She became normal in about half an hour and did her housework better than she had done for months past. Since then she has just been as she was before the attack.

Question 2. She is really trying to occupy herself in housework and says she "wants to do it but can't." She is very afraid of having to come back to hospital and will not see a doctor.

Question 3. From a nice peaceable disposition to a nagging and worrying one.

She is just saying "Oh dear, I don't want to go back to *that* place, whatever has made me go like this." "I have never been spoiled, I have always had to do work when I was young."

By the way her weight has kept increasing. She is now 15 stone dressed, height about 5' 3".

4. E. H—, aged 51. Operation: 10.ix.44. Letter (undated). Discharged: 29.xi.44.

History.—Admitted 17.v.39. Patient has always been highly strung and nervous. Was first in mental hospital sixteen years ago. Never been well since. Admitted here in 1939. Duration of present attack: 5 years 4 months.

Report before operation.—Depressed, agitated, ideas of unworthiness. She believes she is unclean and not fit to mix with others. Very apprehensive. Hallucinated.

DEAR SIR,—

Re E. H—.

Since she was discharged there is certainly an improvement but she is very unbalanced. She has spells of depression and nothing we can say or do makes any difference. Then after a month or so of being perfectly normal, she will suddenly decide that she owns the house. She expects us to ask if we may go out and tells us what time to come in. In short she thinks we are school-children again. Then she works herself up and she will decide to pack her things and go.

About a month since she started insulting my husband and friends, and when told about it she packed her things and stayed with some friends who keep a boarding house. The charge was 7s. 6d. a night. When I went for her she told them she would send the money on. She has her 10s. pension and she thinks it is a fortune. After that spell she was all right for about a fortnight then she got very depressed, worrying about how we would manage, money, food, coal, etc.

When in a balanced state she is very active, doing household jobs and helping with the children, going to a variety or cinema or going for a walk. When depressed she will *muddle* through for a day or two then retire to bed and stay there for days on end. "It would take a fire to move her."

The worst state is when she is on the top waves (as we call it). She spends her time being as awkward as she possibly can be. I have asked relations and friends their opinion of her and they consider her true self is when she is what I called her balanced state.

She was never given to be insulting and awkward, but always pleasant, obliging and generous.

5. M. W—, aged 47. Operation: 9.vii.44. Letter: 7.iii.46. Discharged: 28.viii.44.

History.—Admitted 18.v.43. Illness is said to date from ten years prior to admission here. During this time she has been morbidly obsessed with ideas of bodily disorders.

Report before operation.—Miserable, depressed, fretful, never smiled. Her sole interest ideas of various bodily illnesses for which no organic cause could be found.

Strangely enough she has had true organic illness since discharge, and was in the General Hospital under the surgeon who performed the leucotomy. She was said to be a model patient, and have only a normal interest in her physical health.

DEAR SIR,—

In reply to your questions on other side, I have to state that:

1. Since discharge she has been much improved mentally. Though not in the best of health physically, she is much better in her mind.
2. At home she busies herself about the house and although not able to walk much, I think she does very well, considering how long she has been ill.
3. Compared with what she was before she was ill, she is much brighter and though she does get depressed occasionally, I think she is much better.

6. D. A. H—, aged 47. Operation: 10.ix.44. Letter: 21.ii.46. Discharged: 11.i.45.

History.—Admitted 26.v.42. Duration of illness: 2 years 4 months. Mother said to have died in mental hospital.

Before operation.—Patient lay in melancholic stupor for months. She refused to converse. She was sensitive and required everything to be done for her.

Within a few days of operation she began to speak spontaneously and rapidly improved.

DEAR SIR,—

I may say that I am working again at Bacup Shoe on my old job in the warehouse. Slippers and shoes, cleaning them.

I may say I am feeling very well at present. I only work from nine to four.

7. P. E—, aged 54. Operation: Jan., 1943. Letter: 21.ii.46. Discharged: 17.vi.43.

History.—Admitted 2.viii.39. Illness commenced four years prior to operation, when patient was a missionary in Burma. She was over conscientious and greatly over-worked for the climate.

Report before operation.—She was acutely depressed and agitated. She believed herself the wickedest person in the world, and that nothing could ever alter her.

DEAR SIR,—

In answer to your enquiry about my sister P. E—. It is rather difficult to say just how she has been, on the whole I should say it is just marvellous how different

she is. She is happy and enjoys everything, plays the piano a lot, reads good literature which she gets for herself at the Free Library, goes to Church regularly, and enjoys the services, but still will not take Communion. We play bridge most evenings and she can play quite a good game with the exception of over-bidding which she was always inclined to do.

She eats exceedingly well and everything seems to digest and she is now 10 stones in weight and looks well and bonny.

Now about work, she just won't do any kind of work at all, neither household or sewing or knitting, the only help I get from her is shopping and she can do that quite well, she will do anything she likes doing, but one cannot persuade her to do what she does not like.

Personally, she is much as she was as a little girl, very erratic only more exaggerated, flares up if anyone disagrees with her on any subject so we try to avoid argument, and on the whole we live quite happily with her.

She could not take any responsibility of any kind, but is all right living with me and my elder sister.

8. C. F—, aged 45. Operation: 6.v.45. Letter: 20.ii.46. Discharged: 30.vi.45.

History.—Admitted 9.xi.44. There is a history of recurrent attacks of mental illness since 1923. She is said to have been always strange in manner and always anxious.

Report before operation.—She was depressed, anxious and fretful. She talked incessantly in a fretful manner. She was restless and interfering. Periods of elation.

DEAR SIR,—

1. Very good, eats and sleeps well, health good.
2. At home, doing all household duties.
3. Quite herself in every way. Normal, would not think she had ever been ill.

9. R. C—, aged 35. Operation: 25.iii.45. Letter: 19.ii.46. Discharged: 28.v.45.

History.—Admitted 30.i.45. She was first in a mental hospital in 1940. Except for short periods she has been in such hospitals since. Present admission August, 1944.

Report before operation.—Continually weeping and moaning, with short periods of laughing and singing. Says God has forsaken her. Hallucinated, voices praying for her.

DEAR SIR,—

1. Very fit and well.
2. At home doing household duties.
3. Better in every way.

10. A. G—, aged 19. Operation: 22.iv.45. Letter: 20.ii.46. Discharged: 28.vi.45.

History.—Admitted 20.iii.44. First nervous breakdown aged 8. Wandered the streets at night. Been odd in her manner ever since and always solitary. Was violent prior to admission.

Report before operation.—Very shy, solitary and retarded. Has continually changing ideas of being gifted for great accomplishments.

DEAR SIR,—

1. Very well.
2. Domestic at home.
3. More normal.

11. D. M. R—, aged 46. Operation: 25.ii.45. Letter: 21.ii.46. Discharged: 20.vii.45.

History.—Admitted 17.xii.43. Said to have been always "highly strung" and to have had frequent attacks of uncontrollable temper. Present illness commenced five years ago with ideas against her husband.

Report before operation.—Extremely suspicious, retarded and solitary. Appears depressed. Accuses her husband of persecuting her and trying to do away with her.

DEAR SIR,—

I received your letter this morning, I am sorry to say that I am unable to give you any definite facts as to the condition of my wife, Mrs. D. M. R—, who, from the moment of her release from the hospital, refused to live with me. I of course make her an allowance which I send her every week and I receive an acknowledgment which is sometimes very bitter and mentions the supposed things I have done, which makes me believe that the operation wasn't quite the success I had hoped.

Mrs. R— is working and as far as I can make out is happy enough, for which I am thankful. My youngest daughter is living with her mother and I believe is also happy. The last time I saw my wife, she started to quarrel with me and I could see it would do no good for me to argue with her so I left, since then I have purposely kept away rather than excite her in any way. I am making discrete enquiries as to what she is like and hope as the years go by her attitude towards me may change for the better.

I should be deeply grateful if you could advise me in any particular way, that I may, in time effect a reconciliation, until that time I am prepared to wait even if it may take some years. If I hear anything which means an improvement I shall be only too pleased to let you know.

12. G. S—, aged 61. Operation: 11.vi.44. Letter: 24.ii.46. Discharged: 24.vii.44.

History.—Admitted 2.v.41. Duration of illness: 3 years 1 month. Thought to be due to air raids and rationing worries. Electric convulsive therapy not given because of physical health.

Report before operation.—Very miserable, depressed and extremely retarded. Solitary. Troublesome with food. Idle.

DEAR SIR,—

I am replying to your letter, on behalf of my father Mr. E. S—. With regard to my mother Mrs. G. S—, you will be pleased to know that she is just as she was before she was taken ill. When she came home from hospital, my sister-in-law and her child aged three, were living with us. So mother had company during the day, and thus gradually adjusted herself to the changed shopping conditions of war-time. The first week at home she went visiting her friends, at first with someone. Before her illness she belonged to a Chapel, and used to attend an afternoon meeting during the week. She commenced going again by herself.

My brother returned from overseas in January, so his wife and child left us to go to their own home. Since then mother has done the housework, shopping, etc., on her own, prepared meals for an adult family of 4 including herself. As you will judge, she is leading a normal healthy life. The only change in her personality, is that she doesn't worry to the extent she did previous to her illness. Her friends and neighbours say "she is just the same Mrs. S." The members of her family will never cease to be grateful to you for making it possible for mother to have the operation.

My brother said the biggest thrill he had when in Italy was the first letter he received from mother at home. As you will know, when mother was ill, she had no desire to write. In fact she didn't write once the whole time she was ill. The first letter she wrote was about 3 weeks after the leucotomy operation. She has also been to the theatre and pictures.

To the members of her family the operation was wonderful, and we will never forget.

13. A. C—, aged 52. Operation: 4.vi.44. Letter: 23.ii.46. Discharged: 24.vii.44.

History.—Admitted 3.xii.42. Duration of illness: 12 years.

Report before operation.—Extremely miserable, depressed, agitated, and said life not worth living. No confidence. Idle.

DEAR SIR,—

The writer is very pleased indeed to be in a position to give you an excellent report of his sister's condition.

1. A. has given no trouble at all since her discharge.
2. She is carrying out household duties, and needle-work, mostly floral designs on table-covers, etc., and will soon be carrying out clerical work in the writer's office.
3. Her personality is similar to as she was before her illness, maybe that she speaks a little more quickly, and a trifle excitedly.

14. E. P—, aged 29. Operation: 3.vi.45. Letter: 21.ii.46. Discharged: 27.viii.45.

History.—Admitted 14.v.45. Illness said to have dated from head injury nine years ago.

Report before operation.—Silly and childish in manner. Laughed and grinned foolishly. Hallucinated. At times elated and at other times depressed. Restless, idle and untidy.

DEAR SIR,—

I beg to inform you that our daughter E. has greatly improved since her discharge. She has returned to her own trade of Printing and Bookbinding.

Her personality is more outstanding, she does not allow trifling matters to upset her, she has a different outlook on life in general.

15. A. C. L—, aged 41. Operation: 20.v.45. Letter: 21.ii.46. Discharged: 23.vii.45.

History.—Admitted 1.iii.45. Illness dated from three years prior to admission here, with history of previous attacks of "mental disturbance."

Report before operation.—Very hallucinated (voices) and also troubled by electric waves which are being played upon her and which she can see running down the mirror.

DEAR SIR,—

In reply to your letter of the 19th inst., *re* my wife, Mrs. A. C. L—, I am happy to say that the operation appears to have been a complete success, as mentally she has been perfectly normal since her return home.

Physically also she has kept reasonably well excepting for a persistent catarrh, with suppuration of the ears, during the winter, for which she has had treatment from her own doctor, and also a susceptibility to tiredness after exertion with some pain in the right side of the head and spots before the right eye.

These latter I presume to be natural for the time being at any rate.

Mrs. L— carries out her home duties including shopping, etc., but has been able to obtain home help for the heavier housework. In addition, as formerly, she does sewing, knitting and fancy needlework.

Regarding personality I would say that there is little change from the time prior to her illness, she is perfectly happy in her home and amongst her friends. Her own doctor seems to be perfectly satisfied with her and describes her as a marvel.

16. P. V—, aged 33. Operation: 8.i.45. Letter (undated). Discharged 10.v.45.

History.—Admitted 25.x.44. Duration of illness: 5 years.

Report before operation.—She is depressed, retarded and solitary. She believes she is being turned into a dog, and that a man has transmitted heart disease to her.

DEAR SIR,—

In answer to your enquiry about our daughter P. V—, when she came home at first she used to sit about and cry at times. But I am pleased to say she is improving now but not following any outside employment. She helps her mother in the house, but tires soon and does not seem to have the energy to keep it up for long.

As regards her personality before she became ill she was very quiet and reserved, but is now very irritable at times and uses swear words which she never did before, but is all right afterwards, she calms down immediately afterwards.

17. B. S—, aged 60. Operation: 25.iii.45. Letter: 23.ii.46. Discharged: 16.vi.45.

History.—Admitted 9.ix.42. Duration of present attack: 2 years 5 months. Previously in mental hospital in 1930.

Report before operation.—Very miserable, depressed, retarded and solitary. Idle. Very troublesome with food.

DEAR SIR,—

In answer to your letter I received dated February 19, 1946, regarding my wife, patient name, Mrs. B. S—.

1. An account in my own words, she is much better since her discharge.
2. She is occupying herself on home duties. Never worked for a long time owing to sickness.
3. Very proud and independent and also takes pride in her home.

18. E. J—, aged 26. Operation: 9.ix.45. Letter: 21.ii.46. Discharged: 26.xi.45.

History.—Admitted 1.xii.43. Illness commenced during pregnancy, 2½ years prior to operation. Her illness was considered to be schizophrenic.

Report before operation.—Dull, retarded and refused to converse. Hallucinated and violently impulsive at times. Mistakes identity. Often excited and mischievous. Faulty in habits, idle and untidy.

DEAR SIR,—

In answer to your letter regarding my wife. She has lived up to expectations even more than I had ever hoped for, considering the present conditions of house-keeping, and baby to look after, not to mention the rationing, she has proved to be more capable than before she took ill.

At the moment she occupies her time with house work, and is a regular book-worm, she desires to go back to her former job at the Co-operative Laundry, but that will come after we have had a holiday.

The only thing that has troubled her since her discharge is the spots on her body, and occasional bouts of biliousness. This, however, is rapidly disappearing.

Apart from the above mentioned, my wife is well and happy.

19. E. A. W—, aged 59. Operation: 20.viii.44. Letter: 22.ii.46. Discharged: 28.xi.44.

History.—Admitted 3.ix.40. She is said to have never been happy for a great many years. First breakdown was in 1906 after first baby. Duration of present attack: 4 years.

Report before operation.—Very miserable, depressed, apprehensive and agitated. Ideas of unworthiness. Solitary and idle.

DEAR SIR,—

1. The above my mother has been in the best of health since her discharge and on no account has it been found necessary for her to see a doctor. She is always cheerful and does not worry on any account, in fact to me her health, etc., is far better than I have known for some years and does not give me the least cause to fear that her old complaint may return.

2. On her return home in November, 1944, my sister lived with her until Easter, 1945, but since that date she has been living on her own and she is quite happy, doing all her housework, washing and shopping, and considering that she had not had any, dealings with rations, points, and all ration short-comings, since early 1940, to me she has quickly picked these up. She spends her time sewing and mending and in the last six months she has commenced to attend Chapel, go to Mothers' Class Meetings, and Social events, also visiting the pictures. She does not go out to work, but nurses my sister's 2-year-old son two or three half days per week, and

visits my home quite regularly, although I live two miles away, and this means she must use two buses.

3. There has been a considerable change in my mother personally, she always had a tendency to worry over very small things, and was depressed on not being able to do her housework due to sickness. Since her return she looks on things quite differently and does not worry and she is always cheerful in all circumstances.

To give one instance whilst my sister was living with her, due to unforeseen circumstances, the chimney caught fire and was followed by a fall of soot whilst they were in bed. On seeing this on arising, my sister called my mother, who seeing the mess, just said, well I am having my breakfast first and will deal with that afterwards.

By this action you will understand the change which has taken place, and she just proceeds happily along.

She has been placed in charge of all her own affairs once more, and attends to all rates, taxes, etc., in the same regular and efficient manner without any assistance from me in any shape or form.

20. M. E. S—, aged 54. Operation : 19.xi.44. Letter : 25.ii.46. Discharged 26.ii.45.

History.—Admitted 14.vii.41. Duration of illness : 3 years 5 months. Worried about husband, who is blind.

Report before operation.—Acutely miserable, depressed and agitated. Very self-absorbed by ideas of bodily ailments. Solitary.

DEAR SIR,—

Mr. W. S—, one of our blind employees, has passed on to me your letter of the 19th instant, and asked me to reply on his behalf.

He reports that his wife is looking after the home quite satisfactorily, and does all her own shopping. In the mornings she is employed by us as a cleaner, and seems to be quite happy in her work. Mr. S— is at present working at home, so that she has his company in the afternoon. She appears to have no difficulty in going about by herself, and acts quite normally.

Mr. S— states that she is more cheerful now than she was before she was admitted to hospital. The only trouble is that she appears to be somewhat over-sensitive, and he has to be careful what he says to her, or he finds that she has been upset by something he has said without any intention of offending.

21. B. S—, aged 53. Operation : 8.x.44. Letter : 23.ii.46. Discharged : 10.v.45.

History.—Admitted 25.ii.43. Duration of illness : 9 years. After menopause began to worry over numerous things. This culminated in suicidal attempt three years ago.

Report before operation.—She was acutely miserable, depressed and agitated to such degree that she was considerably confused and at times rambled incoherently in depressed manner. Her habits were faulty and she was extremely troublesome with food.

DEAR SIR,—

I thank you for your inquiry of Mrs. S—, and glad and grateful for all you have done, thank you.

1. Mrs. S— now seems to be improving wonderfully, she is more understanding and helpful, will do little things for herself. For a few weeks we had Dr. L— from P— as she wanted some medicine to help her, complained of being hot and electric pains all through her, but now we never have the word mentioned.

2. Rests most of the day, but is more helpful in the house.

3. Not as she used to be, but has improved a lot lately.

22. M. M—, aged 51. Operation : 5.xi.44. Letter : 12.xii.45. Discharged : 19.xii.44.

History.—Admitted 5.i.44. There is a several years' history of recurrent breakdowns. She was several times in mental hospitals in Belgium.

Report before operation.—She was miserable, depressed, dull and retarded. Restless, resistive and troublesome with food. Lacking interest.

DEAR SIR,—

Do you remember the Belgium lady Miss M. M— that you have given treatment last year, and who has been operated on last December. I hope you will remember. Well I am glad to tell you that I am still in the best of health and that I am running our shop in Ostend.

Since I left the hospital I have never more seen a doctor, and my weight is now 9 stone. I do write you to thank you for the good treatment I have got in the hospital, and beg you to remember me to all the nurses who were in the same ward, especially to Nurse F—

23. E. J. C—, aged 22. Operation: 17.vi.45. Letter: 25.ii.46. Discharged: 29.viii.45.

History.—Admitted 7.v.45. The history of this case goes back into early childhood, originating in domestic difficulties between parents. For many years there have been repeated hysterical episodes with treatment in other mental hospitals.

DEAR SIR,—

Re your letter to hand for which I thank you regarding my daughter E. J. C—, and thanks ever so much, for your interest on her behalf.

She has not been very much different up to the present, I am sorry to say, for any length of time. However, this last couple of weeks, she has not been quite so unruly, so may be there may be hopes yet of an improvement.

She did, however, start working as a clerk, in October but she only worked 7 weeks, then came home and said she had got her notice, as she refused to work over-time. I did not believe this, as I had already got a note from her doctor here to say he did not advise her working long hours. She only worked 5 days per week, from 9 a.m. to 5.30 p.m. I went unknown to E. to see what had happened as I was so sorry she had to leave as she seemed to like her work. And was told they were quite satisfied with her work, and she was popular with the other girls only she had been acting strangely, and they thought it best to discharge her for their own sakes, but they were sorry to have to do this, and they were very pleased I had gone to see about things.

At home she is very nasty at times, she will not assist with any little household duties and she gets into tempers at the slightest thing. The only difference she has not attempted to run away, when I have had any words with her, as she has in the past. Whether this is because I had told her if she goes again, I will never have her back, I do not know.

24. E. M—, aged 52. Operation: 9.ix.45. Letter (undated). Discharged: 26.xi.45.

History.—Admitted 12.vii.44. Duration of present attack: 14 months. Said to have commenced as result of blitz in Liverpool. Previously said to have been always an anxious and worrying type of person.

Report before operation.—Very depressed and agitated. Restless and strips herself. Confused, due to her agitation. Crawled along the floor in her restlessness. Very troublesome with food.

DEAR SIR,—

In reply to your letter about my wife E. M—, I am pleased to say she is doing very well, she is doing her household duties just the same before she went to hospital, she goes about as if nothing had happened to her. She has plenty of things to occupy her mind, she still attends her doctor, the only thing I can account for her sickness was worry, but she has got over that, she does not sleep too well at night.

25. H. D. R—, aged 53. Operation: 11.ii.45. Letter: 2.iii.46. Discharged: 17.vii.45.

History.—Admitted 22.v.42. History of onset deficient. Interval between admission and leucotomy 33 months.

Report before operation.—She was very miserable and depressed, and troubled by ideas of persecution. Resistive. Retarded.

DEAR SIR,—

I wish to point out that I reside in the Isle of Man, and therefore very rarely see my sister.

1. I have visited her on three occasions since she was discharged from the hospital, and I have come to the conclusion that she is still mental, but probably not sufficiently so to be certifiable. She is living with two elderly women, one is 80 years of age, and the other is 77 years of age. The elder of the two has been with our family for over sixty years and during my sister's absence she has kept a home together for my sister to return to. But my sister shows very little gratitude for this service, she is domineering and rude to both these old people, and makes life very hard for them.

2. With regard to occupation she carries on with her household duties and occupies herself with knitting and sewing, etc. She also does a fair amount of reading, generally light fiction.

3. Since her return home she has put on a lot of flesh, I should think that she must be two stones heavier than when she was discharged from hospital. I visited her in the second week in Feb., and I was surprised to see how stout she had grown. This is probably due to the fact that she is eating a lot of starchy foods such as bread and potatoes. She eats voraciously and her table manners are bad. She is more aggressive than she used to be, and takes offence very easily in most cases at remarks that are not intended to be offensive. She is also self-conversational, generally when she is by herself, though occasionally she does lapse into this style when in company. I think this is about all that I can tell you, as I have had few opportunities of studying my sister. I should say that she is quite able to look after herself, and in my opinion, there are plenty of people at liberty, who are much worse than she is.

26. M. O. W—, aged 28. Operation: 3.xii.44. Letter: 5.iii.46. Discharged: 31.iii.45.

History.—Admitted 23.i.41. Duration of illness: 6 years. No known cause.

Report before operation.—Emotionally unstable. She listened and spoke to imaginary voices. She misconstrued actions and conversation of others as referring unpleasantly to herself.

DEAR SIR,—

In reply to your enquiry regarding your late patient, M. O. W— (my daughter).

I am happy and most grateful to say she is 100% normal in every way. Since her discharge she has adapted herself to her everyday life with all her old self-assurance and ability, doing everything and going everywhere on her own and using her own discretion with very gratifying results.

After three weeks at home she went to Labour Exchange with her first interview started work as a Hand Packer at a large Tobacco Firm. She does alternate shift work, fortnight days and fortnight nights. Her pay envelope always contains efficiency pay.

I must add that she is punctual, trustworthy and confident in her undertakings.

It might interest you to know that she had her hair permed in October and everything went off satisfactorily. She never complains of headaches.

27. M. J. P—, aged 49. Operation: 14.i.45. Letter: 27.ii.46. Discharged: 12.iv.45.

History.—Admitted 13.ix.44. Duration of illness: 4 years, following shock of a friend's accident.

Report before operation.—Extremely restless, agitated and depressed. Had ideas that she was "dirty" because she had been interfered with. Unable to concentrate on anything. Continually repeating incidents of her past life.

DEAR SIR,—

My sister M. J. P— is very well. She has improved all the time since she came home last April. At first she had spasms of temper and would not be controlled, usually through someone passing some remark that vexed her, however we let her have it out, then she was all right again. It is only very rare she is like that now.

She responds to encouragement.

She is not going out to business, but does nearly all the home duties and shopping, which we think is very good. Providing you do not interfere and let her have her own way she does things very well indeed, but she will not be dictated to (those are her words). She goes out quite a lot and is a good walker, which is wonderful for when she came to you, she would scarcely move her feet at all, of course that was during her illness, she walked all right before.

Her personality is very much like it was before she was ill. She always had a temper and if anyone upset her they knew about it, but she never sulked afterwards. I would say she is very much like herself, but much better in health, she has gained 2 stone and never complains of any pain, in fact she says she is 100% well. Friends are amazed to see how well she is, and to us it is a miracle. I would like to add our doctor is very interested and keeps asking her to call and see him, so that he can see if she retains the progress which he says is marvellous.

We cannot express our gratitude enough for what you have done for us and others.

DEAR SIR,—I think it is just about six months since I left the hospital and I feel that I would like to tell you how I am.

I am very well indeed, I think one hundred per cent. fit. I can do my work with pleasure and lead a normal, happy life like I did before. I have waited this length of time before telling you, to see whether I still maintained it, and I am glad to say that I am quite well and putting on weight.

I would like to thank you and the surgeon and all the members of your staff who helped me to regain my health. My hair has grown quite nicely.

I enjoyed a nice holiday in the summer and I can go to all the nice places as I used to do. I may come along soon to see some of the girls that I liked.

28. D. P—, aged 52. Operation: 23.vii.44. Letter: 8.iii.46. Discharged: 30.ix.44.

History.—Admitted 21.i.42. Duration: 2 years 6 months, after death of employer, which caused her great grief.

Report before operation.—Very miserable and depressed. Believed herself wicked and unworthy. Very solitary and retarded.

DEAR SIR,—

I am pleased to tell you that my sister is much improved in every way since her discharge. She is quite happy, and more like her old self, a big trouble with her is her lack of confidence, but she has always been given a little that way.

She is not following any occupation, but is always very busy about the house, she washes dishes, makes the beds, sweeps and dusts, and irons clothes, but she cannot do any kneeling because of rheumatism, which is very bad indeed.

She does not do any cooking, or take on anything with any responsibility and worries over little things.

As regards her personality I should say she was very much the same as she has always been. One thing I have noticed, she does not always grasp things, she seems just a little dull sometimes, but as I have said before, she is very much better in every way.

29. M. W—, aged 37. Operation: 22.viii.45. Letter: 5.vii.46. Discharged: 15.ii.46.

History.—Admitted 16.vi.41. Duration of illness: 4 years 3 months. Onset said to have followed being kissed by a strange man. She had worries in connection with her cleft palate, and also about her sister's death.

Report before operation.—She was mildly depressed, sullen, suspicious and retarded. Irritable and quarrelsome, and aggressive. Ideas that people persecute her in some way, causing her to lose her arms and legs. She is hallucinated.

DEAR SIR,—

1. On her arrival home she was rather highly strung at times and talked to herself, when alone; but in a month or so this got less but has not altogether stopped. Her health has been good. She retires at 7 p.m., sleeps well, getting up at 8 a.m.

Her appetite is excellent, eating I think rather faster than she should. You will be surprised to know she now weighs 11 stone.4 pounds. I get her out as much as possible and she goes herself and does the shopping, and with me to the pictures. Unfortunately I cannot persuade her to call and see her doctor in reference to her insurance certificate, and as she was slightly behind with her employment stamps she has been penalized because she has been ill and is now disqualified for sick benefit if necessary at any time.

2. On account of having a cleft palate her talking is bad to understand and she is therefore unable to take up any employment at present but she is doing most of the housework in a satisfactory manner, she is also interested in the garden and does it willingly.

3. At present she is quite normal in her ideas and appears to be quite happy and content, always speaking very highly of the treatment she received under your care. I think this is all that I can tell you at present, hoping this will meet your requirements.

I should like to thank :

Dr. A. R. Grant, Medical Superintendent, County Mental Hospital, Whittingham, for his advice and encouragement at a time when the justification for prefrontal leucotomy was by no means certain.

Mr. McKerrow, Hon. Consulting Surgeon to Preston Royal Infirmary, who performed the operations.

Dr. A. J. Gray, Anaesthetist, Preston Royal Infirmary, whose excellent technique contributed, I am sure, to the low mortality.

Dr. E. R. A. Cooper, Lecturer in Histology, Manchester University, for her histological report.