are so numerous and variable that any one element, such as that we are considering, cannot show itself unless it be very pronounced. The high death rate of 1875 and the large number of recoveries in 1876, is the only unequivocal instance occurring during the period under review.

The Prognosis in Insanity. By D. G. THOMSON, M.D.

The subject of the Prognosis in Insanity is a most interesting and important one. The prognosis—prospect of recovery or the reverse in any disease—is the one point around which the hopes and fears of our patients and their friends centre, but perhaps this is more true of insanity than any other ill that flesh is heir to; the interests, as a rule, are great and far-reaching. This is at once apparent when we consider that besides the ordinary domestic relationships at stake such as obtain in all other diseases, the liberty of the subject, administration of the patient's affairs and property by legal inquisition while he is yet alive, and the great question of responsibility, social or criminal, add grave importance to the question at issue.

Now where are we to find the materials to assist in forming opinions and laying down rules for the Prognosis in Insanity? Firstly and chiefly, in the records of experience gained by observation and comparison of symptoms in individual cases or groups of cases throughout their course to their termination; secondly, by statistics. These, although useful to the economist and to the profession generally, are not of much avail when the physician is brought face to face with a case, and are, as will be shown hereafter, unless examined and analysed from every point of view, highly fallacious. Besides, when we have to pronounce upon any individual case, it does not assist us much to know that 38·0068 of such cases recover, or even supposing a recovery rate to be 95 per cent., yet this brings us but little nearer the point, which rather is how are we to know if our case belongs to the doomed five which remain chronic and die, or to the ninety-five which will recover.

I believe it advisable in considering this subject to divide the forms of mental disease for our present purpose into two great classes: 1st, those mental diseases depending on mere functional disturbance; and 2ndly, those forms of insanity

depending on organic disease of the nervous system. I claim no special merit for such a division, which is based on a doubtful hypothesis, for is it not questionable if any disease be really due to functional causes alone without some organic mischief being also present? In connection with this subject, it may be mentioned that Dr. Moxon, in a recent lecture on "The Influence of the Circulation on the Nervous System," raises suggestive and honest doubts as to the existence of what we should regard as so purely functional a disease as congestion of the brain, which he appears to maintain is rather due to some unknown morbid organic changes in the nerve-cells themselves. Yet it is convenient and well adapted to the present state of knowledge. A classification is always an unsatisfactory matter, and here as elsewhere we have exceptions and anomalies at the outset of the one I have adopted, for do not similar forms of insanity depend in one case on altered circulation, defect or excess of nervous power or energy, or in other manner which we are accustomed to regard as purely functional, and in another case the same symptoms may be due to appreciable physical or organic changes going on in the nerve elements? Again, is it not equally true that there is no definite boundary between the functional and the organic? Do not functional changes soon merge into and give rise to organic changes?

It appears to me that this division, arbitrary as it may be, is peculiarly suited to the consideration of the prognosis in mental disease, because here purely abstract or moral, and we may assume functional causes induce diseases of the mind to a far greater extent than they may be said to do diseases of other organs, and thus is established, in our consideration of the question at issue, a relationship between the cause and prognosis of the disease.

Before, however, entering on the special forms of insanity, let us first glance at some general conditions or states which modify or influence the prognosis in mental disease generally. These are the following, and will be referred to briefly in order:—

1. External circumstances and surroundings; 2. Heredity; 3. Sex; 4. Age and certain periods of life, such as puberty and the menopause; 5. Previous history, with type of mind; 6. Causation of the attack; 7. Duration and number of attacks; 8. Co-existing bodily states and diseases, such as pregnancy and the puerperal state, paralysis, epilepsy, apoplexy, etc.

External circumstances.—The chief item under this heading which at once suggests itself is the influence of treatment on the proportion of recoveries, that is to say, in cases which are not treated at all or cases which are, and of these latter the different results of early and late treatment. As regards the proportion of recoveries, this has been discussed by abler pens than mine, notably by Dr. Thurnam in his treatise on the influence of treatment on the statistics of insanity; also by Dr. Blandford in his book, "Insanity and its Treatment," pages 97 and 375. Therefore I need not dwell longer on this point than to state their opinion that, generally speaking, the recovery chances are much greater when the case is actively treated and combated, and under the head of "Duration" it will be shown how important that if there is to be good result from treatment it must be prompt and early.

As regards the surroundings, the general concensus of opinion is that the chance of recovery is much greater if the patient be entirely removed from the causes and associations of the onset of the attack and placed in a good asylum, where discipline, enforced open-air exercise, and above all novelty from change of scene and faces, stimulate lethargy or calm excitement, or at all events lessen the gradient in the down-hill course of incurable dementia or general paralysis by skilled nursing and hygiene.

Influence of Heredity.—It is a commonly conceived opinion that the prognosis in any given case is rendered much more grave where there is strong hereditary taint than where no such taint exists. This, *primâ facie*, appears a mere truism, and yet, when we look below the surface of the question, it is a doubtful matter whether hereditary predisposition renders grave the prognosis of the case in question.

Blandford (page 139) states that in his experience that "those affected by hereditary insanity recover at any rate in the first attack quite as often as others; being unstable by nature and constitution, they are easily thrown off their balance by something trifling and removable, or there may be no assignable cause, so by dint of seclusion and quiet they regain their former equilibrium, probably again to break down at some future time. Such people, as may be readily conceived, recover more surely than those who have *acquired* insanity by years of alcoholism, syphilis, or sexual excess."

There is unquestionably a tendency to subsequent recurrence of the malady, but this obtains in all who have been

insane, whatever may have been their condition as to heredity.

In my own experience I have seen cases with the strongest hereditary tendency recover. One case out of many I may cite. F. C., a lady aged 40, was admitted into the Camberwell House Asylum suffering from acute mania. Her mother and maternal grandmother were insane, and the former died in Camberwell House.

F. C., on admission here, was extremely violent, noisy, dirty, and destructive; added to this a wretched constitution, suffering as she was from partial paraplegia and chronic bronchitis. Yet after four months she gradually improved, became tidy, tranquil, and industrious, and is now apparently quite well.

Such an opinion is difficult to prove by statistics, the true family history being in many cases not obtainable, and so we must be content with the opinions formed from the observation of some well-marked cases which, as far as my reading and experience go, tend to the belief that hereditary defect most certainly strongly predisposes to insanity, but that when the insanity has supervened, the particular case on that ground at any rate is not one whit more unfavourable as regards prospect of recovery than a similar case where no hereditary taint exists.

Influence of Sex.—Sex does not materially influence the prognosis from a general point of view. At first, when we regard the total number of cases in, say, any county asylum, we invariably find the number of female inmates to exceed the male, and might infer therefrom that either insanity in the female has a greater tendency to remain chronic, or that more females than males go insane. As regards the latter, there is some doubt. Dr. Jarvis maintains that, on examination of a large number of statistics, that males are somewhat more liable than females to insanity. On the other hand, in Bucknill and Tuke's "Psychological Medicine," the opinion is set down that "it is clearly proved that in general fewer men than women become insane, even admitting the greater number of the female population at the ages most liable to insanity," so that this alone would not account for the great preponderance of females over males in asylums generally. And thus, if this were the only factor in the case, we should have to believe that the general prognosis of insanity in women is worse than in men. But then the question of mortality presents itself here, for the

finding of more females than males in asylums might be due to a higher mortality in the male cases, and this is probably the solution of this matter, for it is every-day experience that men suffer from the more fatal forms of insanity, such as insanity with general paralysis, acute mania, acute maniacal delirium, and from syphilitic diseases of the brain, while women suffer more from chronic mental alienation, such as subacute mania, insanity with epilepsy, or with other neuroses, some of which are attributable to states of the organs of generation.

This is not a paper on the liability of the two sexes to insanity; therefore more need not be said as to the influence of sex on the prognosis in general, but may be more conveniently referred to under special forms of insanity.

Age and Periods of Life.—Insanity in the very young cannot be regarded hopefully, whether it manifests itself as congenital defect or associated with epilepsy, chorea, or other neuroses, and in estimating the prognosis and probable course of insanity in the very young, Bucknill and Tuke (*op. cit.*) point out that we must not lose sight of that congenital defect of the brain, apart from hereditary insanity, which, as the mind develops, betrays itself, and is known by the term Insane Diathesis. This, whether hereditary or not, must be regarded as the *fons et origo mali*, and is no more mysterious than the tendency in one person to gout and in another to consumption, as it cannot be expected that this predisposing susceptibility will be removed by any acute outbreak. A well-marked insane diathesis must make much more serious the prognosis and the probability of relapse in such cases.

The statistics of Bethlem Hospital go to show that three-fifths of those admitted under 25 years of age recover, between 30 and 60 about one-half, and above this age from a sixth to an eighth recover. These statistics, however, do not aid us much in the prognosis of an individual case, for they only prove what is already well known, that the most acute and curable forms of insanity occur in early adult life, added to which is the fact that Bethlem Hospital rejects the admission of insanity with epilepsy and general paralysis. In this connection Blandford states that according to the time of life, variations in the nature of the insanity are observable; that in childhood the mental symptoms are not those of the fully developed mind, as delusions, etc., but perverted sensations, hatred of relatives, wanton cruelty, destructiveness, and hallucinations of the senses. After puberty we may find

more of the ordinary insanity of adult life, this generally attended by violence and maniacal excitement rather than by depression; then between the ages of twenty and forty we meet with more acute forms of mania and delirium. Later on, in the time of waning strength and declining vigour bodily and mental, we find melancholia prevails, but exceptions to this are not wanting; we may find melancholia in early youth and manhood, or acute mania after the climacteric periods, and when we do the prognosis is generally bad, in the latter case especially. I have found melancholia in the young far more difficult to remove than mania.

Melancholia in young mothers after parturition is often extremely obstinate, and yields to remedies with difficulty.

Insanity supervening at puberty during the first changes which take place, and cause such disturbance in the constitution of some individuals, notably females, is very hopeful, unless masturbation or other vicious habit be contracted at the same time. At the menopause we must not forget the frequent resort of some women, notably childless ones, to habits of intemperance, the insanity resulting from which is always recovered from, but the craving and desire for drink remaining. Here as elsewhere accurate diagnosis is essential to correct prognosis, as the symptoms of such alcoholic insanity are similar to varieties of paralytic insanity.

When senility is arrived at the gravity of prognosis is much increased. The recuperative powers of body and mind are feeble, and the insanity, it scarcely matters of what variety, is rarely recovered from; either it becomes worse or merges into hopeless dementia. More on this subject will be afterwards referred to, and exceptions given.

Previous History.—Of course, in forming the prognosis of a case, the previous history would not escape our earnest attention, and this, coupled with an account of the patient's type of mind and degree of education, from an intelligent relative, would be, perhaps, the surest ground of any on which to base our calculation for the future. I do not think it necessary to state here that with a history of long refusal of food, progressive loss of weight, together with a steady downward progress of the various symptoms, without a lucid interval, or display of any power of the patient's animal nature to combat the onset and progress of the disease, we should be led, after a diagnosis of grave melancholia, to form a most unfavourable prognosis, or in a history of the insidious perversion of the moral character, theft, larceny,

extravagance, and debauchery, leading together with certain well-known physical symptoms to a diagnosis of general paralysis, that such histories would at once determine our prognosis. I will rather speak of the type of mind as an important factor in forming judgment as to the probability of recovery or otherwise of the patient.

Esquirol relates that one of his patients said to him, "I know what I ought to do, and would do it, but give me the power, the ability which is wanting, and I will do it, and you will have cured me." Now, in considering such a remark as this, we are led to ask ourselves, Is it not likely that if our patient's previous history tell us that he is a person of great resolution and determination, that the prognosis in his case will be more promising than in a person afflicted, it may be, with the very same disease, but whose mind was originally of an unsettled, vacillating type, the extreme of which is typified in the person of a ne'er-do-weel? Unfortunately it is not at the moment when the rousing of the will and exercise of it is required that the resolution to "make the effort" is forthcoming. The child must have been trained to self-control and discipline, the brain must have been made flexible, and habitually obedient to the dictates of the rational will, ere it can be depended upon as able to resist the waxing or waning of delusions of the senses and other manifestations of mental disturbance occurring more particularly in partial, intellectual insanity, delusional and emotional.

I am firmly of opinion that a great deal of insanity is due, or I should rather say its continuance after it has occurred is due, to a disordered state of the inhibitory, controlling, or restraining power of the will on intellectual or volitional acts, and there are many cases on record showing that in the old days of whip and punishment, or even later in the days of heroic "treatment," by actual cautery, shower-baths, etc., except in cases where the structural disease is so extensive as to deprive the patient of all power connecting cause and effect, it, viz., the rousing and stimulation of the will, has been sufficient to curb violence, tranquillize the patient, or even render him rational. M. Foville quotes a case in point, in the article on "Alienation Mentale," in the "Dictionnaire de Mêdecine et Chirurgie Pratiques:—

"I have seen the preparations for this application (actual cautery to the neck) cause extreme terror to a young maniac who until then had not shown a moment's consciousness of her surroundings; when she felt herself touched by the red-

hot iron she made such efforts to escape that she eluded the grasp of her attendants; for five minutes she enjoyed all her reason, asked what they wanted with her, and implored them to spare her. M. Esquirol told her that he would defer the actual cautery if she would set to work and employ herself. She promised, and kept her word. She was soon transferred to the convalescent ward, where her recovery became complete. She avowed when recovered that the red-hot iron and the terror at the sight of it had done more than anything else to render her rational and give her back her reason."

The author adds that the actual cautery had no effect where the pain was not felt, so that it is evident that in the cases where it succeeded the success was owing to the stimulation it gave to the will of the patient, which till then had been too dormant to exert its full power over the lower faculties of the mind.

Thus, then, may we not look with more hope on cases where the history informs us that our patient is possessed of considerable strength of mind, power of will, force of character, or by whatever name it may be called, however dormant that will may seem to be? Esquirol believed, and probably with reason, that two-thirds of the cases are due to moral causes, and therefore in the prognosis we must ever keep in mind that moral treatment may bear good fruit, especially in those cases where we have a well-educated, methodical mind to deal with, and a history of a strong, determined will which may only be in abeyance and only requires rousing to "quit itself like a man," and sweep all the delusions and perverted emotions from the mind. Indeed, the cases recorded, especially by the older writers, in which a strongly excited will has vanquished the insane illusions which probably affect lower cerebral areas than the will, are so numerous as to leave no doubt that where no organic lesion exists the cure is at least possible, and its probability only limited by the original mental calibre of the patient.

Ætiology.—The influence of the cause of the alienation on the chance of recovery is of course great, but to avoid repetition, and as the exciting causes of insanity are identified with the varieties of mental disease, this question will be best considered under each particular form of insanity; sufficient to say that speaking generally, the prognosis is less grave where the causes are what are at present known as moral causes, than where we have unmistakable evidence of physical causes, such as long-continued alcoholism or

epilepsy, or affections of the head and spine, or sexual vice, or syphilis; I am not forgetting that even moral causes, such as intense study, religious excitement, domestic trouble, etc., may produce actual physical changes in the encephalon with which we may be but slightly, if at all acquainted.

Duration.—The question of duration is held to be of cardinal importance in prognosis; its importance is fully recognised by the Medico-psychological Association in the table they recommend to asylum officers for use in tabulating recovery and death rates; dividing cases into four classes.

1st class, first attack of not more than three months' duration.

2nd class, second attack of above three months' duration, but within twelve months.

3rd class, not first attack, and within twelve months' duration.

4th class, first attack or not exceeding twelve months.

It is with the first two classes that I have now to deal. If we look at any asylum report, we will see that by far the largest recovery rate is to be found in the first of the above classes, viz., where it is the first attack, and that attack of less than three months' standing. Of 633 patients of the first class admitted during the last ten years into the Derby County Asylum, 345, or considerably over one-half, recovered. The percentage recovery rate of recent cases at the York Retreat is considerably higher than this, viz., 72 per cent. of the admissions. However, mere statistics are misleading, and it would appear that lunacy statistics are particularly so. In an able paper on the curability of insanity, Dr. Pliny Earle draws earnest attention to the fallacies beneath recovery rate tables, prominent among which is the non-distinction between *persons* and *cases*. "A person," he goes on to say, "may be admitted more than once into a hospital, and hence make as many cases as the number of his admissions. As a case, he may recover several times, and his history furnishes to statistics of insanity several recoveries of a case, but not one permanent recovery of a person. Thus at the State Hospital, Northampton, Massachusetts, U.S.A., a man was discharged 'recovered,' seven times and improved once in the course of nine years, and subsequently committed suicide at home. Another man has been discharged recovered six times on the same number of admissions in fifteen years. One woman was discharged recovered eight times on eight admissions in eleven years. Another admitted six times

in the course of nine years, discharged recovered every time. Another admitted six times within a period of eight years was likewise discharged recovered every time. These five persons have as cases recovered 33 times, yet it is not probable that in one of them a *person* recovered permanently." Dr. Worthing, superintendent of the Friends' Asylum, Pennsylvania, states "that 87 persons have contributed 274 recoveries to the statistics, an average of more than three to each person. One patient recovered 15 times, another 13, and a third 9, a fourth 8, and a fifth 7. Thus statistics are indebted to these 5 persons for 52 recoveries, or an average of 10 to each person," so as Dr. Earle shows that while the uninformed reader believes that 52 persons recover, the truth of the matter is, that no less than three of the 5 *persons,* not 52 *cases,* died insane in the asylum, so that the cures, if any, could not have exceeded two. This point has also been strongly insisted on in this country by Dr. Hack Tuke.* Another fallacy underlying these tables is this. Different forms of insanity exert an influence as to the early or late sending of the patient to an asylum. For example, the most curable form of insanity, acute mania, demands the removal of the patient to an asylum at a very early stage of the disease, whereas in more incurable forms of insanity, general paralysis, dementia, etc., the early stages are so insidious and obscure, that the malady is often far advanced before admission to an asylum is sought for. Indeed, in the former variety, the patient if he be a pauper, has generally to drag out many months' imprisonment until the disease which is at the bottom of the strange conduct, immorality or criminality, becomes so apparent, that even a prison surgeon recognises the case as one of insanity. I mean no reflections on prison surgeons, but several notable blunders of this kind came under my notice in Derbyshire and make me insert the word "*even.*"

The same applies to dementia; it is only in the later stages of primary and organic dementia, when the patient becomes dirty and troublesome, that he is sent to an asylum.

I believe myself in the great power that habit exerts over our modes of thought and action, and Bastian in his recent work, the "Brain as an Organ of Mind," gives in different parts of the book a very clear account of what are the probable pathways of various afferent and efferent and commissural sensory and volitional nerve impressions and acts, and

* *Vide* Paper in JOURNAL OF MENTAL SCIENCE, for Oct., 1880.

how these intermingle and anastomose, and that the more definite and the more frequently traversed the nerve paths are, the easier will it be for stimuli and impressions to flow along such channels when next occasion arises, and thus we can well imagine that when the mind once gets into the habit of thinking in a perverted manner, probably through different routes or channels, from what it does in health, perhaps omitting to pass through the pathways in the higher and more intellectual and reasoning areas of the brain, that the longer this goes on, the more indelible will the habit become, so that I may sum up the effect of duration of the malady on the prognosis by quoting Blandford, page 97; "If there is one fact ascertained beyond all others in the prognosis of insanity, it is that the disorder, if recoverable from, should be treated early. If it exists for a length of time (under treatment or not), the chances of recovery are small, the reason being that the undue production of textural changes, brought about by stimulation and hyperæmia of months and years, over-activity of the brain centres, implies a removal of textural elements of a lower type, an overgrowth of less complex, and less highly organized material."

In one form of insanity, and in one alone, so far as I am aware, recovery may take place after years of aberration, this form being melancholia. Here the pathological condition is frequently one where hyperæmia, if it existed at all, has existed only a short time. There has been a checking of the functions of the parts rather than a stimulation, with undue metamorphosis; and when the functional activity is again raised to its normal level, the patient is sane as before.

The influence of *co-existing bodily states*, such as pregnancy and the puerperal state, and of diseases, such as Bronchocele, chorea, epilepsy, and syphilis, will be best considered under the special headings of the separate forms of mental disease with which they are usually associated. In considering the prognosis in special forms of insanity, I shall discuss them in the order given in the following table, which table I have constructed solely for this purpose, and not in any way as an attempt at a new system of classification of insanity; it is based on the one given in the class of Mental Diseases at the Edinburgh University by Dr. Clouston:

I. Insanity dependent on what, in our present state of knowledge, is called *Functional Disorder*.

(*a*) Mental Depression—Melancholia.

(*b*) Mental exaltation—Mania.
(*c*) Alternations of the above—Recurrent Insanity.
(*d*) Delusional Insanity—Delusions, Hallucinations, and Illusions.
(*e*) Mental Enfeeblement—Primary and Secondary Dementia.
(*f*) Insufficiency of Inhibitory Power—Impulsive states.
(*g*) Insanity *accompanying* normal or pathological states of the generative system—Pubescent, Gestational, Puerperal, Lactational, Hysterical (Ovarian), and Uterine Insanity.

II. Insanity dependent on physical *Organic Disease* of the nervous system.
(*a*) General Paralysis.
(*b*) Organic Dementia.
(*c*) Syphilitic Insanity.
(*d*) Toxic Insanity (Alcohol, Opium, Lead, etc.)
(*e*) Epileptic Insanity.
(*f*) Rheumatic, Choreic, and Gouty Insanity.
(*g*) Adolescent, Climacteric, and Senile Insanity.
(*h*) Phthisical Insanity.
(*i*) Insanity arising from organic defect of the brain, infantile or congenital (Idiocy, Cretinism, etc.).

(*a*) Mental depression.

By mental depression, I mean that state of mind known as melancholia, looking at it as a disease *per se*, and not as the transitory condition which often obtains in the development of mania or other forms of insanity, for according to Guislain there is in the genesis of all, or nearly all, cases of mental alienation a period—it may be extremely short, but still it exists—of mental depression.

Melancholia is said to be the most frequent and the most hopeful of all forms of insanity, and the consideration of statistics and personal observation fully confirm this opinion. In melancholia we have reason to believe that there is no real lesion or organic change present. Its pathology is described as a diminution in the quantity or quality of the blood supply to the brain, inducing defective nutrition, exhaustion, or poisoning of the brain cells. Looking at the matter broadly then, one can well imagine that, provided this malnutrition can be rectified, a good result may be expected. The prognosis depends certainly, as already mentioned, on the general conditions, such as age, history, cause, etc., but to a much greater extent on the symptoms of the

particular case in question. Now, are there any definite signs which will lead us to form a fairly accurate opinion in a given case as to its prognosis?

The age, in the first place, is an important guide, although I have met with well-marked exceptions. Melancholia in the aged is unfavourable, because in the later periods of life the improvement of the nutrition, exercise and employment of body and mind, on which we mainly rely for treatment, are not easily obtained, seeing that degenerative changes preponderate over regenerative changes in the decline of life, and the concomitant age and infirmity so often preclude plenty of vigorous bodily exercise. Yet I have notes of two cases in which both of the patients (females) were above seventy-five years of age. They were admitted into the Derby County Asylum in 1879 suffering from simple melancholia with suicidal tendencies (first attack), great depression, aversion to, but not determined refusal of food, and sleeplessness; both cases recovered in less than two months, although an unfavourable prognosis was entertained by the medical officers on admission. These patients, however, for their years, had very healthy viscera, there being no tendency to lung diseases, from which melancholics often sink. One, it may be mentioned, showed by the "arcus senilis" and inclastic pulse that her vessels were atheromatous, probably the cause of the ill-nourished brain. Blandford, in his work on insanity, page 214, states that in his experience almost every case of melancholia, if it does not run on to panic-stricken frenzy, with desperate determinations to resist food and total loss of sleep, progresses to a favourable termination in a longer or shorter time, whether in or out of an asylum. He also states that the influence of the duration of the disease has less bearing on the prognosis in melancholia than in any other form of insanity. He quotes three cases to this effect: one a gentleman who recovered after five years of profound melancholy, and two ladies who recovered one after nine and the other after thirteen years. Such cases are extremely rare, for the tendency in cases of melancholia of long standing is to pass into imbecility or secondary dementia, or occasionally to merge into a maniacal state which may alternate with the depressed condition and continue chronic. A sign of approaching changes for the worse of this kind is the improvement of the bodily health, nutrition, etc., without mental improvement.

Dr. Conolly states that in his experience great numbers of

melancholiacs became demented, but this I believe to be due to an error in the diagnosis, or rather nomenclature, seeing that formerly alienations, which we now recognise as different forms of dementia, were then included under melancholia.

Dr. Hack Tuke states that of 48 patients dying in the York Retreat, who had been admitted suffering from melancholia, only four died in a condition of dementia.

Among the unfavourable forms of depression may be cited acute melancholia characterised by exhausting restlessness, strong suicidal tendencies, and obstinate refusal of food, as in acute mania, there is great tissue waste, evidence of overfilling of the cerebral vessels, hot head, high temperature, rapid pulse, total sleeplessness, and a tendency to the development of typhoid symptoms, pneumonia, or gangrene of the lungs, and fatal collapse. In such cases then, especially in the aged, the prognosis is hopelessly bad. Digitalis, sedatives and concentrated nutriment rather seem to aggravate than ameliorate the rapid circulation, insomnia, and exhaustion, which soon carry off the patient.

Besides the aged, this form may also occur after the puerperal state, and that generally in primiparæ (as in several cases which have come under my notice at the Derby County Asylum, and Camberwell House Asylum, London), that is to say, it may also occur in persons predisposed to insanity, either debilitated by age, or on whose constitutions there has been a severe drain previous to the attack.

In a simple case of melancholia then we have, let us suppose, given a favourable prognosis. What are the earliest signs that would lead us to suppose we had pronounced aright?

Firstly, there is generally an improved state of the digestive organs, as shown by a clear tongue and regular bowels, then sleep increasing in amount and sufficiently refreshing to prevent the morning exacerbations of the depression and suicidal tendencies, gradual increase in weight, even before any apparent exhilaration or disappearance of the depression begins. Dr. Sankey points out, in his lectures on mental diseases, that *generally* the progress towards recovery is very gradual; the mental improvement may be said to begin by an abnegation of self, that self which has been so absorbing in the early stages. "When I saw," says he, "a patient walk with another in the pleasure ground at Hanwell, or listen to another's tale, I used to view it as a promise of recovery." Amongst other signs of convalescence

he gives alteration in their appearance, tidiness in dress, that is, the expression of a desire for the approbation of others. Then a natural expression of features, "for," he adds, "even with those who have no claims to good looks the return of their own natural expression is an important sign. Another is a desire for occupation, and when recovery is almost complete (this applies to all forms of insanity) the best sign of it is a gradual awakening of the patient to the fact, and admission of the fact, that he or she has been insane." I do not think the importance of the increase in weight as a sign of improvement has been sufficiently insisted on by our text-book authors. Dr. Clouston in his lectures, and Dr. Murray-Lindsay in practice, strongly emphasize this point. Undoubtedly if increase of weight takes place, one of two things must happen—recovery or secondary dementia, and no difficulty need exist in deciding which it is to be if the above signs are duly considered.

The question may be asked, What is the probable duration of the disease progressing to recovery? This depends to such an extent on the constitution and age of the patient that it is impossible to give rules, but in a person without visceral disease and in fair health, simple melancholia should be recovered from in from six to twelve weeks. But this is by no means invariable, as the three cases quoted above will show.

Relapses after melancholia are by no means infrequent, but a comparison of statistics shows the tendency to relapse is less in states of mental depression than in exaltation, as in mania, etc.

To summarize then, we may lay down that simple melancholia is always recovered from except in the very aged or in those who may be aged in constitution if not in years. It is, however, unfavourable where the symptoms, although not of an acute character, show an obstinate refusal of food, due probably to one fixed delusion (not necessarily resistance to its administration by others through the tube). I fed a young man for nine months, four times a day, without any resistance on his part on account of simple delusional melancholia, with refusal of all food. In spite of an excellent constitution and no hereditary taint, he gradually emaciated, and sank from inanition. That in acute melancholia our prognosis must be unfavourable if we find that our forced alimentation and keeping up the animal heat, does not keep pace with the rapid exhaustion and great tissue waste which is going on. On the

other hand, if such a case survive a month, and the alimentation difficulty be by this time got over, we may regard the case as quite coming within the probability of recovery.

(*To be continued.*)

CLINICAL NOTES AND CASES.

Case of Idiocy with Paralysis and Congenital Aphasia; Atrophy of Convolutions. (With lithographs.) By James Shaw, M.D., Haydock Lodge Asylum.

G. L. was admitted for the second time on the 1st March, 1880, aged 18 years.

First admission, Feb. 19th, 1877; he was then described as having both legs flexed, and the right arm flexed and useless. Could feed himself with left arm. Unable to express himself except by screams and howls. Very passionate. A month afterwards was said to be easily amused, and generally happy.

The first record of an epileptic seizure occurs about the beginning of July, 1877.

On the 11th March, 1878, he was transferred to Whittingham Asylum, not improved.

In the medical certificate on which he was readmitted, March 1st, 1880, he is said to have been very noisy, frequently shouting and yelling, and also dirty and destructive in his habits. Condition within a week after admission: he is small for his age, and deformed, with both lower extremities paralysed and contracted, and his right arm in a similar condition. Circumference of head 20 inches.

Pupils dilated but equal. Makes an inarticulate noise, but cannot speak. Took food reluctantly at first, but takes it well now after having had an enema. Knows his name, and when asked where the "baby" is, beats his deformed right hand with his left. Responds to the name of "Georgie" by facial expression and inarticulate sounds.

July 2nd.—Has gained flesh, and is more cheerful in expression. Takes notice of surrounding objects, and is jealous of another idiot boy who has been removed to the hospital.

April 2nd, 1881.—Is much thinner and more haggard, and has symptoms of acute phthisis, but no cough, expectoration, diaphoresis, or diarrhœa. Taking extra diet, tonics, and cod liver oil. Cries, and moves his head from side to side when annoyed.

June 17th.—Further description. Eyes large, and affected at times with movements resembling nystagmus. Both legs contracted; thighs flexed on abdomen, legs flexed on thighs, feet normally placed