An Address

ON THE

DIAGNOSIS IN STATES OF DEPRESSION.*

BY

BEDFORD PIERCE, M.D.LOND., F.R.C.P.LOND.,

MEDICAL SUPERINTENDENT OF THE RETREAT, YORK;
LECTURER ON MENTAL DISEASES AT THE UNIVERSITY OF LEEDS.

My subject—diagnosis in states of depression—has been selected on account of the frequency with which melancholy in its various forms occurs in medical practice.

Mental depression is so widespread and is due to such multifarious causes that any discussion of the subject, if not strictly limited in scope, would result in a treatise dealing with humanity in all its relations—in fact, a new and enlarged edition of Robert Burton's *Anatomy of Melancholy*.

The principal feature of the states of depression which I propose to consider is a mental anguish or pain out of proportion to any reasonable cause, and I necessarily exclude distress of mind arising in the ordinary course of human affairs. The natural consequences of bereavement or misfortune, the agony of remorse, the "pangs of despised love," are outside my subject. Depression, moreover, so often attends bodily diseases that it is necessary to confine attention to cases exhibiting mental pain as the prominent or cardinal symptom.

When severe, mental depression is perhaps the most distressing of all human afflictions. Not only may the anguish be fully as great as if the painful ideas and fears were completely justified, but in addition there is not infrequently an inarticulate nameless agony independent of any delusions that may have developed. As Dr. Savage has aptly said, the delusions crystallize out of a saturated solution of misery.

An attempt to discuss the diagnosis of mental disorders necessarily raises the question of their classification, and it must be admitted that we cannot satisfactorily differentiate the various forms of insanity. Pathology does not help in the great majority of cases, and we are unable to speak of mental diseases with the same confidence that we speak of bodily diseases. Even when the clinical picture is sufficiently clear and distinct, we not rarely discover that the symptoms observed may be due to widely different causes; and on the other hand, physical conditions apparently identical may produce mental disturbances by no means uniform in character.

A common illustration of this variability is the effect of alcohol in different subjects: in one the mental consequences of indulgence are exhilaration and talkativeness; in another dullness and stupidity; in a third unreasoning impulsiveness.

Poisons developed within the body have likewise diverse effects; the poison of general paralysis, for instance, produces in one person the characteristic delusions of grandeur, in another depression with painful hypochondriacal ideas. Similarly, influenza and other fevers, when followed by mental disorder, give no clearly defined train of symptoms, and the insanity dependent upon childbirth may exhibit either excitement, depression, or confusion.

It may, therefore, be contended that the forms of mental disorder which we describe are not diseases at all, but they merely indicate the various ways in which the mind reacts when the body is exposed to stress.

In making a diagnosis most of us arrive at a conclusion by a process of exclusion. The conditions that may produce the symptoms are considered one by one; the unlikely ones are successively eliminated until that disease which most nearly fulfils the requirements is reached. I therefore enumerate the more common disorders which may lead to mental depression, namely: alcoholism, general paralysis of the insane, psychasthenic states, dementia praecox, and melancholia, divided into four groups—confusional, inhibitory, intrinsic, involutional.

As our means of classification is imperfect, we find there are a number of cases which are not readily allocated. These fall into two classes: (1) Those due to recognized diseases which need not be described separately—for example, myxoedema, Graves's disease, epilepsy, diabetes, acute suppuration, etc.; (2) the peculiar and irregular cases for which no place can be found.

The 200 cases which have been reviewed for the purpose of this paper are consecutive cases observed between the years 1898–1908. Patients seen in consultation are included with those that have been placed under care at the Retreat. Of these 200 cases, 9 per cent. were unclassified for the reasons stated.

ALCOHOLISM AND DRUG HABIT.

In the great majority of cases of insanity due to intemperance or drug addiction the history will be sufficiently clear to leave no doubt as to the nature of the disorder.

It is not, therefore, necessary to follow up this subject further than to say that some of the patients are very depressed, many of them have delusions of suspicion, accompanied by hallucinations of hearing. In many cases there is a tendency to suicidal impulses.

In the absence of any history it is, however, frequently impossible to distinguish the insanity due to alcohol from other forms of mental disturbance.

GENERAL PARALYSIS OF THE INSANE.

The next group illustrates forcibly the dictum which my old chief at St. Bartholomew's, Dr. James Andrew, used to impress upon us: "Never make a diagnosis until you have completed your examination."

The following case will serve as an example:

A brick manufacturer, aged 38, was sent under care with the following history: His father and one brother had been intemperate, but no other evidence of hereditary weakness could be elicited. He was a bachelor and successful in business. There had been no previous attack. His mother stated that he had been depressed and unable to do his work for some three months; six weeks previously he had barricaded himself in a granary and laid himself down to die. He had attempted his life in several ways, tried to cut his throat and to hang himself.

The medical certificate states: "He is in a state of intense depression; his life is ruined; there is no hope for him; he is too wicked to live, and he has brought himself to this by his evil deeds; he must go to the workhouse as he possesses no money, and so forth."

So far, the history and the symptoms do not suffice to distinguish this case from an ordinary one of melancholia, and if the nervous system had not been examined, in all probability a favourable prognosis might have been given. But a routine examination disclosed that, although equal in size, the pupils were not quite circular in outline; they reacted to accommodation, but not to light; the tongue was tremulous; the knee-jerks were delayed and uncertain, and only with difficulty elicited, and the plantar reflex was slight. These symptoms indicated some tabetic condition, and there was little difficulty in concluding that the case was one of general paralysis.

Just as the occurrence of a fit for the first time at about 40 years of age is of grave omen, so is an attack of depression appearing without obvious cause at the prime of life. Melancholia usually begins in early life, or at the climacteric, unless it be due to some toxic condition or special disturbance.

Although the mental symptoms in general paralysis may be of almost any kind, which is to be expected in a disease accompanied by diffuse cortical degeneration, it is usually possible to distinguish the depression from that occurring in other conditions. In general paralysis we expect some sign of mental enfeeblement. In most cases of melancholia we find little disturbance of the general intelligence, but in the graver condition there is much greater mental reduction. Thus, in the case quoted, the patient said he had never had a happy day in his life, that he was dying, and had only a few days to live, although his general health appeared good.

Modern clinical pathology now enables a diagnosis to be made with some approach to certainty. The Wassermann reaction is found to give a positive result in 90 per cent. of cases, and the cytological examination of the cerebro-spinal fluid also gives valuable assistance in the

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diagnosis of this disease and of *tabes dorsalis*. Modern research seems to have finally established the essential unity of *tabes* and general paralysis.

If we can be sure that the Wassermann reaction invariably indicates antecedent syphilis, the evidence strongly supports the proposition, "No syphilis, no general paralysis."

DEMENTIA PRAECOX.

The next group of cases are included under the term "dementia praecox." As Kraepelin's conception of this symptom-complex has greatly modified the classification of mental diseases, a few words in explanation may be permitted.

A generation ago it was commonly taught that any severe attack of mental disease, whether of depression or excitement, was liable to end in permanent mental enfeeblement, and a large proportion of the unrecovered patients in our asylums were consequently looked upon as cases of secondary dementia. I well remember this term giving me some trouble, as I could not find from the histories of many of these patients that they ever had suffered from acute mental disorder. It did not seem satisfactory to assume that there had been such an attack, in the same way as we are apt to assume a patient has had scarlet fever when we find peeling.

The new conception throws light upon this difficulty by the suggestion that the greater number of these secondary dementias are in reality in the terminal stage of a definite mental disorder, which can generally be recognized early in its course, and which is entirely different in its symptomatology from typical cases of mania and melancholia.

Although some English authorities hesitate to accept Kraepelin's far-reaching generalizations in relation to dementia praecox, I have myself no doubt as to the great value of his conception, and consider it makes a great advance in psychiatry.

I will try in a few words to give the leading features of this disorder, although I am aware verbal descriptions will very imperfectly create the clinical picture.

In the first place we find the mental powers are unequally attacked, and as a rule in the early stages there is no lack of understanding, no failure of perception, no loss of memory. The patient, therefore, grasps what is said, does not mistake his surroundings, remembers what has happened. But in a strange unaccountable way he loses interest in the affairs of life, does not seem to care what happens, and is irresponsible and apathetic. This emotional indifference is one of the most constant symptoms. The claims of the family are unheeded, he no longer cares for his old pursuits, nor does ambition or a sense of duty spur him to effort, even the passion of love moves him not.

The gravity of the case becomes evident when the conduct is affected. Strange impulsive actions are apt to appear, for example, uncalled-for laughter, senseless weeping, grimaces, strange postures or antics, and in many cases there is sudden, unexplained refusal of food, or obstinate disinclination to speak, and perhaps general resistiveness. Sometimes a sudden suicidal impulse startles the relatives, and the gravity of the case is recognized.

The peculiar feature of these outward signs of a disordered mind is the inability of the patient to explain his conduct. Careful inquiry will discover no motive, or at best a totally inadequate one. In most varieties of insanity strange actions are the logical consequences of false premisses; for example, a man shoots another because he believes his own life to be in danger, or he commits suicide because he fears an exposure of his guilt.

In dementia praecox we may fail to elicit any reasonable train of thought, the action appears to be purposeless.

Similarly the ideas of the patient are bizarre, and there may be grotesque delusions. Thus, a medical student without the slightest reason wired to his mother to say his uncle was dead; an intelligent young lady told me she had been talking to the "Holy Viper," but could not say what this was; a youth, by no means uneducated, said he had air in his veins, and that he wanted "serum injected in order to make the ventricles go round." In the early stages hallucinations are common, but neither these nor the delusions are persistent, and as the disease advances they generally disappear.

Dementia praecox implies a dissociation of the mental faculties: the powers of perception are frequently not affected until late in the disease, thinking and judgement are affected early, and actions may be senseless and automatic. A dulling of the emotions is one of the earliest and most constant symptoms.

In the majority of cases there is little real depression, but as in some emotional storms occur, it is therefore easy to confuse this disorder with other states of depression. Kraepelin¹ says, "Somewhat more rarely the commencement of the disease is characterized by a well-marked state of depression. The patient becomes dejected, dispirited, anxious, mistrustful, is home-sick, stares into vacancy, and indulges in thoughts of death and may make a sudden attempt at suicide in a peculiar manner. . . . As a rule there is a certain mistrust of those about them, and a feeling of being observed, slighted, badly treated and made fun of. With all this, the apathy and lack of true emotion with which the morbid ideas are expressed and defended is most striking."

In the cases of dementia praecox in which there is marked periodicity there may be difficulty in distinguishing it from manic-depressive insanity, but in the latter disorder signs of dementia are long delayed, there is decided emotional disturbance, and rarely the indifference and dullness found in the former.

In certain cases, however, it is necessary to defer making a diagnosis until some of the more characteristic symptoms have appeared.

M. A. J. until 24 was quiet, shy, reserved, but possessed of average ability. Her family history was bad, her parents were first cousins, and a brother had been insane.

After a stupid love affair she became depressed, refused food, sat for hours weeping, and she would not get up in the mornings, and there was some fear of self-injury. Under advice she went from home and improved, but a few months later the depression returned. On one occasion she said she was afraid to sleep alone because her will was so weak. One day she complained of sore throat and it was noticed that her mouth was black; it was subsequently ascertained that she had drunk some marking ink.

Four days later she threw herself from her bedroom window and fell 30 ft. and fractured both femurs. In the weeks of anxiety which followed she had a fixed idea to end her life, and she said it must come sooner or later; she had sinned and could never be forgiven, and it was no use to try to live a Christian life. So far the case resembles melancholia, but a month or two later extraordinary delusions appeared, and she stated that she must marry the son of the matron in the nursing home, a boy of 5½, and that she would like to go to school with him, and she said she was sure her mother would approve if asked. At the present time these ideas appear to have vanished, but she does not repudiate them with any degree of emphasis. She remembers the accident and says she was not depressed at the time, and she did not intend to kill herself. She can give no reason for throwing herself out of the window, except that she saw no other course of action and that "it would save time." She seems quite unconcerned at all the anxiety she has given her relatives. In spite of this she can write an intelligent and descriptive letter.

This case illustrates well the selective nature of the mental deterioration, the grotesque delusions, the impulsive tendencies, and the emotional indifference which characterize dementia praecox.

PSYCHASTHENIC STATES.

In the next group of cases, the depression is secondary to conscious mental disability. The patient, harassed by obsessions or haunting doubts, finds life difficult. In these cases the depression is perhaps not the cardinal symptom, but as such patients are frequently very unhappy and complain of suicidal impulses, they demand consideration.

Although psychasthenic patients often say that life is not worth living and talk of suicide, they rarely make any serious attempt. In only two instances have I known such patients take their own lives. In one, the patient was persistently worried by obscene thoughts which distressed him beyond endurance; in the other case, severe pains of apparently hypochondriacal nature had lasted for years, the best advice gave no relief and suicide was deliberately committed.

Cases of psychasthenia with depression are very common. Those which concern our present inquiry may present obsessional impulses to kill, to commit suicide; fears of disease and of going mad; or doubts and hesitations which interfere with the daily duties. In almost all of these there is little difficulty in diagnosis.

In not a few patients the thought suddenly springs into the mind that they are becoming insane, which almost reaches a delusion that incurable madness is their certain lot. The imperative idea cannot be got rid of: they cannot sleep, and, haunted by this, they work themselves into a state of terror. It is usually possible to satisfy oneself that any depression which is present depends upon and is secondary to the morbid intrusive thought. Sometimes a patient can be reassured at a single interview, especially when the underlying cause of the fear can be elicited.

It would lead me too far from my subject to discuss Freud's hypothesis of the causation of psychasthenic states. Suffice it to say that my experience confirms his views of the importance of the sexual element. The physician will in not a few cases succeed in clearing up difficulties arising from past experiences of this kind and so remove a chronic source of mental irritation, with the result that the patient is permanently relieved and the obsessions and the imperative ideas disappear. The following case will serve to illustrate this:

The patient was an active, intelligent man 25 years of age, with a fairly good family history. At school and for some time after there had been masturbation, but none recently. He had been worried over an engagement which had to be broken off. Being depressed, he took a long holiday and was no better. His general health was good. For some time he had been haunted with the idea that he might commit suicide; he was much distressed at this, and was sure he was going insane. The thought constantly came into his mind, "it would be better if he were dead," but he did not at all want to die. He never made any attempt to injure himself.

The diagnosis was not difficult as it was clear there was no weight of depression; he could brighten up on occasion, could do his work well, and the central difficulty was the recurring imperative suicidal thought. It was also extremely probable that these were in turn dependent upon the memories of sexual irregularities.

The case did well. A plain talk, accompanied by advice in the use of spare time and the pursuit of some hobby, seemed to start him on better lines; the morbid ideas quickly disappeared, and he recovered his peace of mind, although in all probability a constitutional psychasthenic state remains.

The following case was more serious, and required asylum care:

A solicitor's clerk, aged 32, presented the following history:

The first attack of mental disturbance was ten years ago, and the second three years since. Both attacks closely resembled the present one. Recovery was stated to have been complete. The patient was a temperate, hard-working man, but for fully twenty-five years he had had a peculiar dislike to dogs. This idiosyncrasy was always worse when he was somewhat depressed. There was no evidence of inherited predisposition. The present attack began six weeks before admission, and no definite cause could be ascertained. The certificates stated he had great depression of spirits and an insane dread of cutting his throat and fear of being left alone. His wife told Dr. Barrs, who signed the second certificate, that her husband had homicidal impulses to murder his children, and on one occasion she arrived just in time to prevent him doing so.

On admission he was found to be thin and worn, but beyond a somewhat high palate no sign of physical disability could be discovered. He said he had hitherto successfully resisted the impulse to injure himself and his children, but on certain occasions he had only restrained himself with great difficulty. He gave the impression that there had been serious risk in that direction. He was very depressed and miserable, and did not feel safe. The institution proved a real asylum for him, and he obtained the needful rest and protection.

He steadily gained weight, his confidence in himself slowly returned, and in three months he was discharged recovered. The patient remained well for a considerable time, but he has not been heard of recently.

In this case also the patient did not wish to die, and certainly begged to be restrained from injuring his children. The obsessions were clearly the cause of the depression. It would have been an interesting case for Freud's psycho-analysis, as in all probability the cause of the strange dislike of dogs could have been discovered and the chance of a future relapse greatly reduced.

Unfortunately this method of investigation was not generally known when this patient was under care.

MELANCHOLIA.

We have now reached the most difficult part of our subject. Almost every author subdivides melancholic states differently, and the want of unanimity is in itself evidence that the data for classification are insecure.

Kraepelin has thrown considerable light upon the affective psychoses. He divides them into two divisions: a large one, manic-depressive insanity, and a much smaller

one, to which he would restrict the term "melancholia." The latter he considers exclusively a disorder of declining years, and I have applied to it the term "involutional."

Manic-depressive insanity is virtually an extension of the older term "*folie circulaire*," and Kraepelin asserts that single attacks of mania, or melancholia, are, in the vast majority of cases, imperfect cases of the same disorder. The tendency to relapse that distinguishes those maladies apart from any definite periodicity strongly confirms this view.

A man whom I knew had eight attacks of mania, each following almost identical lines, exhibiting the same delusions and strange habits in the same order in the recurring attacks. The case was typical of recurrent mania. But the ninth attack was altogether different. He was silent, depressed, apathetic, he refused food and had to be forcibly fed. Another patient, a lady, had many characteristic maniacal attacks, but once when she relapsed she became depressed and resistive; instead of being jocular and hilarious she was irritable, morose, and obstinate.

Cases such as these seem clearly to indicate that there is something common to both mania and melancholia in spite of their outward dissimilarity.

The essential unity of dejection and elation is, however, no modern notion. The word "melancholy" was used to describe both states. I trust I may be excused in quoting a few stanzas showing how Burton seemed to have known all about this.² They come from the preface to his book.

Methinks I hear, methinks I see,
Sweet music, wondrous melody,
Towns, palaces, and cities fine;
Here now, then there; the world is mine.
Rare beauties, gallant ladies shine,
Whate'er is lovely or divine.
All other joys to this are folly,
None so sweet as melancholy.

Methinks I hear, methinks I see
Ghosts, goblins, fiends; my fantasy
Presents a thousand ugly shapes,
Headless bears, black men, and apes,
Doleful outcries, and fearful sights,
My sad and dismal soul affrights.
All my griefs to this are jolly,
None so damn'd as melancholy.

I'll not change life with any King,
I ravisht am: can the world bring
More joy, than still to laugh and smile,
In pleasant toys time to beguile?
Do not, O do not trouble me,
So sweet content I feel and see.
All my joys to this are folly,
None so divine as melancholy.

I'll change my state with any wretch,
Thou canst from gaol or dunhill fetch;
My pain's past cure, another hell,
I may not in this torment dwell!
Now desperate I hate my life,
Send me a halter or a knife;
All my griefs to this are jolly,
Naught so damn'd as melancholy.

There is, however, ground for the opinion that many patients suffering from depression are not rightly included in the group of manic-depressives. Tanzi,³ Bianchi,⁴ Lugaro,⁵ all incline to the opinion that there is a melancholia apart from Kraepelin's syndrome. Dr. Lewis Bruce⁶ also describes an acute and an excited melancholia separately from manic-depressive insanity. He presents much evidence to show that in the group called by him "acute melancholia" there is a metabolic toxæmia, and in that called "excited melancholia" there is a bacterial toxæmia, accompanied by hyperleucocytosis, the presence of agglutinins in the serum, and a deficient excretion of chlorides. Dr. Colin McDowall⁷ has also done valuable work upon the same lines, and shows that in "melancholia with excitement" there is a distinct increase of leucocytes in the blood, especially in the early stages of the disorder.

As so many names are now in use—agitated, resistive, simple, delusional, acute, stuporose, pure, hypochondriacal—all varieties of melancholia, it may seem presumptuous in me to suggest fresh ones.

I have ventured to do so, nevertheless, because it seems to me we are justified in going a step further in the

differentiation of melancholic states. The varieties I suggest are:

1. *Confusional*, constituting a part of the syndrome, acute confusional insanity
2. *Inhibitory*, marked by thought hindrance, a part of manic-depressive insanity.
3. *Intrinsic*, with acute misery and without either confusion or hindrance to thought.
4. *Involuntal*, generally marked by apprehensiveness and anxiety, melancholia in Kraepelin's restricted sense.

THE CONFUSIONAL GROUP.

In this group I have placed those cases of acute confusional insanity in which depression is a prominent feature. Many of these cases were formerly termed "acute melancholia," just as the exalted and excited confusional patients were described under the head of "acute mania."

Acute confusional insanity, sometimes called in Germany and in America, "amentia," is a fairly well-defined disorder, and is distinguished by confusion and disorientation—a failure to recognize surroundings, vivid, fleeting hallucinations, and an inability to recollect the incidents of the illness after recovery. Signs of digestive disturbance are common; there is often refusal of food and deficiency of the gastric secretions. Sometimes there is a rise of temperature. Sleeplessness and restlessness are usually present. At the outset of the attack there is a marked increase of leucocytes in the blood.

Inherited predisposition is not so important a factor in causation as in other forms of insanity. Frequently some definite bodily illness appears to be the cause of the attack. In women, a considerable number of cases are dependent upon childbirth, and Dr. Menzies⁸ has shown that 65 per cent. of the cases of puerperal insanity are melancholic in type.

I have found these confusional cases some of the most satisfactory I have had. The disorder is so obvious that relatives realize its gravity at once; consequently effective treatment is adopted early, and the recovery rate is high. Out of 17 cases only 3 failed to recover, and of these one died of phthisis, another improved but relapsed, and the third was lost sight of.

Dr. Colin McDowall⁹ considers the leucocyte count of considerable assistance in prognosis; if the percentage keeps moderately high there is always hope of recovery.

In some few cases there may be difficulty in distinguishing this disorder from those cases of dementia praecox which begin acutely. In the course of a few weeks the nature of the case will probably become clear. It is rare for patients with dementia praecox to be confused; they usually understand their surroundings; whilst in acute confusional insanity there is evidence of some degree of disorientation.

We are, I believe, justified in the opinion that when these confusional cases recover there is comparatively little danger of relapse. We may further consider it an acquired disease, not specially dependent upon inherited weakness, and not likely to be transmitted to children.

A. B., aged 29, had been confined two months before admission of her first child; parturition severe, no febrile disturbance; family history good. The past history disclosed nothing noteworthy. Five days after the birth of the child she became depressed, confused, suicidal. It was stated in the certificates that she wanted to put her head in a bucket of water, that her memory was bad, and that there was an absence of intelligent ideas. On admission she was quiet but depressed. She appeared confused, spoke only in whispers, and then only a word or two, not completing a sentence. During the first week the notes state she is restless, thinks she has been in York a month. Says things are fighting and going round in her head. Leucocytes, 23,000; red-cells, under 4,000,000. She takes food badly, is tube fed; impulsively springs out of bed, does not seem to feel prick of a pin; there is marked dermatographia. The report a week after admission says she is in a confused state and cannot properly understand her surroundings and is unable to reply to questions. She cannot express her ideas. She does not appear to know the names of those about her. She is pale, otherwise in good health, and no evidence of visceral or uterine disease.

Six months later: Does not make progress, childish in talk, apt to be depressed, says she wishes she were dead. Menstruation resumed. Is destructive at times, suddenly ripping her clothes. She then slowly began to improve, but was liable to be depressed; complained of pain in head, feelings like as though little red men were walking about in her head.

She left on trial twelve months after the onset of the symptoms, and was discharged recovered. I recently heard that she keeps well.

C. D., aged 28, officer's wife. She was confined three months before admission, and afterwards had an abscess in the breast. The family history is not good; she comes of an excitable family, and one sister had an attack of insanity lasting a year. The certificates bring out the depressed mental tone. She stated she was too wicked to live, is doomed to a horrible death, she has implored her husband to kill her to save her from it, and that she has gone over to the devil.

On admission was flushed, agitated, confused, dishevelled in appearance. She refused food; pulse 120; a presystolic cardiac murmur and thrill were detected; there was albuminuria, but no rise of temperature.

Next day it was reported she constantly hears "voices," especially her husband's voice at night. She was resistive and troublesome about food, and practises bad habits. A week later the "voices" continue, and she is a good deal troubled with the many things she hears. She does not know where she is, and took the ward sister for a certain major. (It transpired later that there was a certain facial resemblance between them.) She has an idea that things are distorted, much bigger than they ought to be. She was also in doubt as to her own identity. She was nursed in bed. A month after admission she had hallucinations of smell. An examination of the blood showed some increase in leucocytes, but no other abnormality.

Five months after admission she began to convalesce. The albuminuria cleared up, and, what was more remarkable, the cardiac murmur disappeared, the thrill vanished, and the pulse-rate became 72 before she left.

In this last case there was clearly some septic condition, which appeared to have caused the kidney disease, the heart trouble, and the mental disturbance. It is possible this was due to the infection which produced the mammary abscess.

THE INHIBITORY GROUP.

This form of melancholia has not, I believe, been described under this name, and as a rule authors do not attempt to separate it from the next group to be mentioned. The clinical picture is, however, a familiar one. The leading characteristic is a general slowing of mental processes, to which the Germans give the expressive name of *Denkhemmung*, or thought-hindrance. These cases would be included by Kraepelin in manic-depressive insanity.

A patient suffering from the inhibitory form of depression looks at first sight depressed and dejected, the face loses its natural expression, and it is frequently of a bluish-grey colour, indicating some interference with the circulation. The patient cannot give effective expression to his feelings; when asked a question he gives no response or replies in an undertone or an almost inarticulate whisper. There is often considerable delay in replying to questions, and it not uncommonly happens that just when the patience of the inquirer is exhausted, and at the very moment when the question is repeated, a faint murmur of reply is heard, or perhaps a movement of the lips is observed. This retardation applies to all actions; he moves slowly, hesitates over everything, and appears to think slowly. He often stands about idle, apparently not heeding anything; but upon close observation it is ascertained that he is not inattentive. This slowness and hesitation, however, is not incompatible with sudden impulsive actions, especially suicidal attempts. Melancholic stupor and melancholia attonita—the thunderstruck depression—may be considered an extreme form of this condition, and such patients are generally resistive, and actively oppose anything they may be required to do.

Such patients frequently take food badly, and they rapidly lose weight. The inactivity of mental process appears to extend to the bodily functions. Digestion seems to be delayed, there is deficient peristalsis, and constipation is almost invariably present. Often urine is retained for a long time, but the catheter is rarely needed. The total excretion of urine is diminished in quantity. Owing to the imperfect powers of expression it may be difficult to ascertain what the patient is thinking about; in most cases, however, it will be found that there are strange delusions or obsessions in the form of altogether unreasonable fears. In my experience hallucinations are extremely uncommon. Some trivial question, such as matters connected with clothing, or some unpaid bill or unwritten letter, are magnified into matters of vast importance, and entirely wrong notions of personal danger may haunt the mind.

It will be noted that the mental state I have described is almost the complete antithesis to mania, in which we find restless activity of mind, an apparent acceleration of the association of ideas, with exaltation.

It will be found that in the majority of cases the family history is not good; indeed, this form of insanity is more distinctly hereditary than any other.

The tendency to relapse is strong, and though we may with confidence expect almost every patient to recover from any particular attack, it is not possible to foresee how long the attack will last. There is little probability of dementia supervening. In not a few instances in which the number of attacks has been considerable there is little enfeeblement of mind even in old age.

Among my own cases there were 29 men and 16 women who suffered from the inhibitory form of melancholia. Of these 45 cases nearly all recovered from the attack, but at least 19 had more than one attack, and in 17 the family history was bad. It is hardly correct to use the word "recovery" in reference to this disorder; the patient gets sufficiently well to resume ordinary duties, but the instability remains.

The following is a verbatim account of the conversation of a lady suffering from the inhibitory form of melancholia. She had had several previous attacks, and her family history was bad. The attack in question had lasted about three weeks and appeared to be provoked by the worry of moving house. It will be seen that the remarks turn largely on this subject. In the intervals there were long delays and many inarticulate groans.

There isn't . . . is there? . . . No. . . . It's the boxes upstairs that I wanted. . . . Well, you see, it's only a dream. . . . There's none of us here, no one to open the door. . . . You see I cannot get to you. . . . I can't get out of the door. . . . (Why can't you get out?) Because there's trunks. I wish you could see it all. . . . I shall be left all alone. . . . There's everything. . . . What am I to do? . . . Because I can't get to my things . . . and . . . well, you see, there's . . . well, it's all upstairs . . . in different flights. . . . I've got no keys. . . . You . . . Well, I shall . . . I don't know what to do . . . 'cause I can't. . . . You find me. I'm all in different bits. . . . (How's that?) Well, 'tis . . . (I still do not understand.) . . . Well, it's the . . . it is so . . . the case, you know . . . of course, it means there's nothing at all. . . . Well, that's the . . . different floors, you see. . . . Oh, doctor . . . what am I to do? . . . There're . . . you want me, do you, upstairs? . . . There's nothing for us, etc.

It will be observed there is no disorientation, no real incoherence, but a strange impediment in consecutive thought; the imperfectly-formed ideas cannot be expressed.

E. F. had been a civil servant and had managed 200 women clerks. She had been twice depressed before the attack now described. After the last one she had been mildly excited.

I closely noted the development of her malady, the gradual change in expression, the blue, congested colour, and the growing inability to converse. In the course of a month her depression was severe, and she made two suicidal attempts, and was certified.

The certificates stated: "She is profoundly depressed, staring fixedly in front of her, with a most dejected, unhappy expression. She will not answer any question, and is rather resistive in her movements. She gives no sign that she hears anything. On admission it is noted that she would not speak, but will put out her tongue. Cerebration is slow, for she does these things after lapse of time. There is troublesome constipation. When her sister visited her she told her sister in a scrappy fashion that she was a wicked woman and ought to be killed. She is totally unoccupied and troublesome with food."

She recovered in nine months, and I believe keeps well.

THE INTRINSIC GROUP.

I have found it difficult to find a name for the next variety of melancholia. The word "intrinsic" has been selected because it conveys the idea that the disorder is inherent and genuine and is not a part of some other disorder.

The clinical features are intense misery and mental pain, usually associated with feelings of unworthiness and frequently accompanied by delusions of sinfulness. Patients suffering from intrinsic variety of melancholia can give a lucid account of their unhappy state; they are well able to express themselves, and they generally resent the suggestion that they are ill or in any way mentally affected. They are intelligent and able to answer questions accurately, and may make shrewd remarks upon what goes on around them. Many say they have lost all natural affection and do not love their nearest relatives, and they frequently believe they have sinned beyond all hope of forgiveness. Such patients are generally actively suicidal, and numbers succeed in ending their lives. Owing to the slight intellectual disturbance relatives are apt to refuse to accept the suggestion

that they are of unsound mind, and so the needful precautions are not taken. In its milder forms this condition would be included under the term "simple melancholia" as used by many authors; in its more severe forms, when the distress of mind is extreme and there is much restlessness, the disorder closely corresponds with Dr. Lewis Bruce's use of the term "excited melancholia."¹⁰

The bodily health does not suffer so much as in the confusional or inhibitory forms; many of the patients are in very fair health, except that they are badly nourished and below their normal weight. Dr. Lewis Bruce has satisfied himself that excited melancholia is due to bacteria toxaemia. He gives a somewhat less favourable prognosis than I consider is justified in the group now described.

I have not found *intrinsic* melancholia associated with a bad family history so frequently as the inhibitory form, nor is there the same tendency to relapse.

I have notes of 42 cases, 18 males and 24 women. In 6 there was either a previous attack or subsequent relapse; in 12 the family history was not good. Of the 42 patients, 29 recovered, 3 committed suicide, and the remainder when last heard of were still depressed.

I consider we may look upon the intrinsic form of melancholia as an independent form of mental disorder, it being marked off from the inhibitory form by the striking difference in the clinical symptoms, and by the comparative absence of inherited predisposition. In none of my cases were there any maniacal symptoms either before or after the attack of depression.

The prognosis is not so favourable, as regards the immediate attack, as the inhibitory form, but after recovery there is decidedly less tendency to relapse. The unrecovered cases spend the rest of their lives in misery; dementia is slow to appear, and though in chronic melancholia the complaints become more automatic and do not depend on great intensity of feeling, the long-drawn-out suffering constitutes the saddest spectacle of asylum life. Happily, nearly 70 per cent. of cases recover satisfactorily.

I have not thought it necessary to give the notes of a case of intrinsic melancholia, as the disorder is common.

INVOLUTIONAL.

The last group which merits special mention is involutional melancholia, and in dealing with it I shall closely follow Kraepelin's description.

As the name implies, it appears in the declining years of life, in women at or after the menopause, in men somewhat later. In the great majority of cases there has been no previous attack of mental disorder.

The characteristic symptom is anxiety, apprehensiveness, with fear of impending calamity. Delusions are common, but hallucinations are rare. The nature of the fears are very varied, such as fear of exposure of an imagined falsification of accounts, fear of ruin and poverty, and the delusions include many altogether unjust self-accusations. Not a few patients say they have no clothes, are destitute, and must be sent to the workhouse.

It is a sad feature of many of these cases that hard-working men and women who have struggled successfully to provide for their old age, should in the autumn of their lives be harassed so frequently by the very fears that they might reasonably have expected to escape.

But the disorder, though a tedious one, is not so hopeless as one would anticipate. Kraepelin states that about one-third of the cases recover. Out of 27 cases taken consecutively, I found 11 recovered, but 2 subsequently relapsed, 5 died, and the remainder joined the unhappy group of chronic melancholiacs.

The following analysis of my 200 cases shows the relative frequency of occurrence of the various mental disorders which I have endeavoured to differentiate: General paralysis, 8; dementia praecox, 19; psychasthenia, 26; the confusional group, 17; inhibitory, 45; intrinsic, 42; involutional, 27; and unclassified, 18.

Few of us in any degree familiar with the subject will be able to say with the poet Fletcher¹¹:

There's nought in this life sweet,
If man were wise to see't,
But only melancholy;
O sweetest melancholy!

Nothing's so dainty-sweet as lovely melancholy.

Nevertheless, I do not think a study of this malady will leave us as dejected as the subject matter would indicate. In only two of the forms dealt with is the prognosis really bad, and in these Nature mercifully dulls the faculties, and the suffering is quickly lessened. In the other forms, we may in the great majority of instances confidently look forward to recovery.

Tanzi¹² has graphically described the joys of recovery from this disorder, and with two sentences of his I conclude this paper:

"When the melancholic patient has passed through convalescence, and has been able to assure himself that his terrible infirmity is really ended, there are no bounds to his joy. . . . If melancholia is the most painful of all diseases, its disappearance is the most delightful of all recoveries."

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THE RIGHTWARD EDGE OF CARDIAC DULLNESS.

By W. GORDON, M.A., M.D., F.R.C.P.,

PHYSICIAN, ROYAL DEVON AND EXETER HOSPITAL, AND WEST OF ENGLAND EYE INFIRMARY.

THERE is nothing more curious in the subject of cardiac physical signs than the failure of the profession to perceive how posture modifies the cardiac percussion dullness. I can find no adequate reference, if indeed any, to this point in any English textbook. When the change in the normal dullness produced by change of posture was described by me in 1905, at a meeting of the Royal Medical and Chirurgical Society, it was a new fact, and had to be verified.¹

In cases of cardiac disease, as I then pointed out, the change in the dullness on change of position is even more considerable than in the case of the normal heart, and when we consider how very important these changes appear to be, how necessary it seems, both in diagnosis and prognosis, to be acquainted with them, one cannot but wonder that they have so long escaped the general observation of the profession. That they have escaped general observation is beyond doubt. The only reference to them which I could find, when I looked for it five years ago, was in Dr. Alexander Morison's work on *Cardiac Failure*. Dr. Morison gave a figure² illustrating the change in the dullness in a case of mitral disease, and added the following good advice:

Whatever method be pursued in determining the dimensions of the heart by percussion, it is of the first importance that the posture of the patient should, so far as possible, be exactly the same on successive occasions when this point is under observation.

His book was published in 1897—thirteen years ago—yet, for all the effect his words have produced on current teaching, they might almost as well not have been written. In 1907, in a paper dealing generally with the changes produced by change of posture on cardiac physical signs,³ I again drew attention to these changes in the dullness. But I, too, might almost as well have saved myself the trouble. Why? At one time I could not imagine that phenomena so obvious could have been generally overlooked. Now I am forced to think otherwise. I can only suppose that the common incapacity to percuss clearly is the cause of the oversight—that our words have fallen, so to speak, not so much on deaf ears as on dumb fingers.

My present purpose is not to re-enunciate what I have already sufficiently emphasized, but to carry the subject on to a somewhat further stage by indicating the area in which the change of dullness is generally most pronounced, and, whilst suggesting a cause for one peculiarity of the change, to furnish more precise reasons for paying attention to it.

If the figure illustrating the usual change produced in the normal cardiac dullness by changing from the recumbent to the erect position (Fig. 1) be inspected, it will be seen that the alteration in the lateral edges of the dullness is considerably greater at the right edge of the dullness than at the left; for whilst in the healthy adult the leftward edge usually moves leftwards about $\frac{1}{4}$ to $\frac{1}{2}$ in., the rightward edge generally moves rightwards nearly $\frac{1}{2}$ to $\frac{3}{4}$ in.—practically double the distance. How can this difference in the movements of the two edges of dullness be accounted for?

If we examine transverse sections of a human body frozen in the recumbent position, taken at the levels of the fifth costal cartilage and the third intercostal space respectively, as shown in Plates XII and XIII of Braun's *Atlas of Topographical Anatomy*, we see that the right auricle does not lie nearly so close to the anterior chest wall as does the right ventricle, and that a considerable part of the right ventricle falls back from the chest wall towards the right. Thus a great deal of the right heart is seen to be well removed from contact with the front of the chest. On the other hand, it is seen that the leftward border of the heart, at about the level of the fifth costal cartilage, lies only a little way beyond the leftward limit of that part of the heart's surface which is close to the anterior chest wall. We can therefore understand how it is that, in the recumbent position, more of the right side of the heart than of its left side is, so to speak, percussorally invisible.

It must be remembered, of course, that, in the dead body, distension of the intestines and retraction of the lungs do something to disturb the natural relations of the parts we are speaking of. But these sources of error do not, I think, invalidate the truth of what I am pointing out.

A comparison of an orthodiagram of the normal heart, such as the drawing (Fig. 2), reproduced from a paper by Drs. Clayton and Merrill,⁴ with my percussion dullness diagram (Fig. 1) leads to the same conclusion—namely, that whilst in the recumbent posture, the leftward edge of dullness almost reaches the leftward limits of the heart, the rightward edge of dullness, bounded, as it generally is, by the midline of the sternum, is very far from corresponding with the heart's rightward limits.

When, however, the erect posture is assumed and gravity no longer tends to pull the heart away from the anterior chest wall, the heart as a whole comes more fully into contact with the sternum and the rib cartilages, as is shown by two skiagrams taken by Dr. Cummings of Toronto, and published in an interesting paper by Professor Rudolf in the *BRITISH MEDICAL JOURNAL* of 1906.⁵

Under these circumstances this rightward region of the heart which in recumbency is percussorally invisible, might, be reasonably expected to come more fully into view. That this is actually the case a comparison of the diagram (Fig. 1) of the normal heart dullness in the erect position with Fig. 2, the orthodiagram from Drs. Clayton and Merrill's paper, and with the heart itself, as shown in the frozen sections, makes evident. It becomes clear that the

Fig. 1.

Fig. 2.—Orthodiagram of the normal heart, modified slightly from the figure in Drs. Clayton and Merrill's paper. V, Curve of the great vessels. RA, Curve of the right auricle. A, Curve of the aorta. P, Curve of the pulmonary artery. LA, Curve of the left auricle. LV, Curve of the left ventricle. MW, Width to right of the midline. ML, Width to left of the midline. TW, Total width—that is, MR + ML.