and leave the labor to take care of itself;" and Schroeder said: "Especially no kind of obstetric manipulation is required for the safety of the mother," but he admitted that it is sometimes advisable to hasten the labor to insure the safety of the child.

In cases in which the convulsions come on during labor, the pains are often strong and regular, the labor progresses satisfactorily, and no interference is needful. In others we cannot but feel that emptying the uterus would be decidedly beneficial. We have to reflect, however, that any active interference might, of itself, prove very irritating and excite fresh attacks. The influence of uterine irritation is apparent by the frequency with which the paroxysms recur with the pains. If, therefore, the os be undilated and labor have not begun, no active means to induce it should be adopted, although the membranes may be ruptured with advantage, since that procedure produces no irritation. Forcible dilatation of the os, and especially turning, are strongly contra-indicated.

The rule laid down by Tyler Smith seems that which is most advisable to follow—that we should adopt the course which seems least likely to prove a source of irritation to the mother. Thus, if the fits seem evidently induced and kept up by the pressure of the fœtus, and the head be within reach, the forceps may be resorted to. But if, on the other hand, there be reason to think that the operation necessary to complete delivery is likely *per se* to prove a greater source of irritation than leaving the case to Nature, then we should not interfere.

[If called to a case of convulsions followed by coma in a primipara near term, but not in labor, draw off a little urine and examine it, as the patient may be far advanced in Bright's disease and the coma purely uræmic. In such a case little can be gained by bringing on labor and delivering the fœtus.

Eclampsia is sometimes purely reflex, and not at all dangerous, although it may be alarming. The convulsive movements may arise from nerve-disturbance due to the fœtal head distending the cervix in the last stage of dilatation in primiparæ. When the head begins to distend the perineum the convulsive seizure often ceases. Such patients are safer without the forceps.—ED.]

CHAPTER IV.

PUERPERAL INSANITY.

Classification.—Under the head of "Puerperal Mania," writers on obstetrics have indiscriminately classed all cases of mental disease connected with pregnancy and parturition. The result has been unfortunate, for the distinction between the various types of mental disorder has, in consequence, been very generally lost sight of. But little study of the subject suffices to show that the term puerperal mania is wrong in more ways than one, for we find that a large number of cases are not cases of "mania" at all, but of melancholia; while a considerable number are not, strictly speaking, "puerperal," as they either come on during pregnancy, or long after the immediate risks of the puerperal period are over, being in the latter case associated with anæmia produced by over-lactation. For the sake of brevity the generic term, "puerperal insanity," may be employed to cover all cases of mental disorders connected with gestation, which may be further conveniently subdivided into three classes, each having its special characteristics, viz.:

I. *The insanity of pregnancy.*
II. *Puerperal insanity*, properly so called; that is, insanity coming on within a limited period after delivery.
III. *The insanity of lactation.*

This division is a strictly natural one, and includes all the cases likely to come under observation. The relative proportion these classes bear to each other can only be determined by accurate statistical observations on a large scale, but these materials we do not possess. The returns from large asylums are obviously open to objection, for only the worst and most confirmed cases find their way into these institutions, while by far the greater proportion, both before and after labor, are treated in their own homes.

Proportion of these forms of insanity. Taking such returns as only approximate, we find from Dr. Batty Tuke[1] that in the Edinburgh Asylum, out of 155 cases of puerperal insanity, 28 occurred before delivery, 73 during the puerperal period, and 54 during lactation. The relative proportions of each per hundred are as follows:

Insanity of pregnancy	18.06 per cent.
Puerperal insanity	47.09 "
Insanity of lactation	34.83 "

Marcé[2] collects together several series of cases from various authorities, amounting to 310 in all, and the results are not very different from those of the Edinburgh Asylum, except in the relatively smaller number of cases occurring before delivery. The percentage is calculated from his figures:

Insanity of pregnancy	8.06 per cent.
Puerperal insanity	58.06 "
Insanity of lactation	30.30 "

As each of these classes differs in various important respects from the others, it will be better to consider each separately.

The Insanity of Pregnancy is, without doubt, the least common of the three forms. The intense mental depression which in many women accompanies pregnancy, and causes the patient to take a despondent view of her condition, and to look forward to the result of her labor with the most gloomy apprehension, seems to be often

[1] Edin. Med. Journ., vol. x.
[2] Traité de la Folie des Femmes enceintes.

only a lesser degree of the actual mental derangement which is occasionally met with. The relation between the two states is further borne out by the fact that a large majority of cases of insanity during pregnancy are well-marked types of melancholia; out of 28 cases recorded by Tuke, 15 were examples of pure melancholia, and 5 of dementia with melancholia. In many of these the attack could be traced as developing itself out of the ordinary hypochondriasis of pregnancy. In others the symptoms came on at a later period of pregnancy, the earlier months of which had not been marked by any unusual lowness of spirits. The age of the patient seems to have some influence, the proportion of cases between thirty and forty years of age being much larger than in younger women. A larger proportion of cases occurs in primiparæ than in multiparæ, a fact that no doubt depends on the greater dread and apprehension experienced by women who are pregnant for the first time, especially if not very young. Hereditary disposition plays an important part, as in all forms of puerperal insanity. It is not always easy to ascertain the fact of an hereditary taint, since it is often studiously concealed by the friends. Tuke, however, found distinct evidence of it in no less than 12 out of 28 cases. Fürstner[1] believes that other neuroses have an important influence in the production of the disease. Out of 32 cases he found direct hereditary taint in 9, but in 11 more there was a family history of epilepsy, drunkenness, or hysteria.

Period of pregnancy at which it occurs. The period of pregnancy at which mental derangement most commonly shows itself varies. Most generally, perhaps, it is at the end of the third or the beginning of the fourth month. It may, however, begin with conception, and even return with every impregnation. Montgomery relates an instance in which it recurred in three successive pregnancies. Marcé distinguishes between true insanity coming on during pregnancy and aggravated hypochondriasis, by the fact that the latter usually lessens after the third month, while the former most commonly begins after that date. It is unquestionable that in many cases no such distinction can be made, and that the two are often very intimately associated.

The form of insanity does not differ from ordinary melancholia. The suicidal tendency is generally very strongly developed. Should the mental disorder continue after delivery, the patient may very probably experience a strong impulse to kill her child. Moral perversions have not been uncommonly observed. Tuke especially mentions a tendency to dipsomania in the early months, even in women who have not shown any disposition to excess at other times. He suggests that this may be an exaggeration of the depraved appetite or morbid craving so commonly observed in pregnant women, just as melancholia may be a further development of lowness of spirits. Laycock mentions a disposition to "kleptomania" as very characteristic of the disease. Casper[2] relates a curious case where this occurred in a pregnant lady of rank, and the influence of pregnancy in devel-

[1] Archiv für Psychiatrie, Band v. Heft 2.
[2] Casper's Forensic Medicine, New Syd. Soc., vol. iv. p. 308.

oping an irresistible tendency was pleaded in a criminal trial in which one of her petty thefts had involved her.

The prognosis may be said to be, on the whole, favorable. Out of Dr. Tuke's twenty-eight cases, nineteen recovered within six months. There is little hope of a cure until after the termination of the pregnancy, as out of nineteen cases recorded by Marcé, in only two did the insanity disappear before delivery.

Transient Mania during Delivery.—There is a peculiar form of mental derangement sometimes observed during labor, which is by some talked of as a temporary insanity. It may, perhaps, be more accurately described as a kind of acute delirium, produced, in the latter stage of labor, by the intensity of the suffering caused by the pains. According to Montgomery, it is most apt to occur as the head is passing through the os uteri, or at a later period, during the expulsion of the child. It may consist of merely a loss of control over the mind, during which the patient, unless carefully watched, might, in her agony, seriously injure herself or her child. Sometimes it produces actual hallucination, as in the case described by Tarnier, in which the patient fancied she saw a spectre standing at the foot of her bed, which she made violent effort to drive away. This kind of mania, if it may be so called, is merely transitory in its character, and disappears as soon as the labor is over. From a medico-legal point of view it may be of importance, as it has been held by some that in certain cases of infanticide the mother has destroyed the child when in this state of transient frenzy, and when she was irresponsible for her acts. In the treatment of this variety of delirium we must, of course, try to lessen the intensity of the suffering, and it is in such cases that chloroform will find one of its most valuable applications.

True Puerperal Insanity has always attracted much attention from obstetricians, often to the exclusion of other forms of mental disturbance connected with the puerperal state. We may define it to be that form of insanity which comes on within a limited period after delivery, and which is probably intimately connected with that process. Out of seventy-three examples of the disease tabulated by Dr. Tuke, only two came on later than a month after delivery, and in these there were other causes present, which might possibly remove them from this class.

Although a large number of these cases assume the character of acute mania, that is by no means the only kind of insanity which is observed, a not inconsiderable number being well-marked examples of melancholia. The distinction between them was long ago pointed out by Gooch, whose admirable monograph on the disease contains one of the most graphic and accurate accounts of puerperal insanity that has yet been written.

There are also some peculiarities as to the period at which these varieties of insanity show themselves, which, taken in connection with certain facts in their etiology, may eventually justify us in drawing a stronger line of demarcation between them than has been usual. It appears that cases of acute mania are apt to come on at a period much nearer delivery than melancholia. Thus Tuke found that all the

cases of mania came on within sixteen days after delivery, and that all cases of melancholia developed themselves after that period. We shall presently see that one of the most recent theories as to the cause of the disease attributes it to some morbid condition of the blood. Should further investigation confirm this supposition, inasmuch as septic conditions of the blood are most likely to occur a short time after labor, it would not be an improbable hypothesis that cases of acute mania, occurring within a short time after labor, may depend on such septic causes, while melancholia is more likely to arise from general conditions favoring the development of mental disease. This must, however, be regarded as a mere speculation, requiring further investigation.

Causes.—Hereditary predisposition is very frequently met with, and a careful inquiry into the patient's history will generally show that other members of the family have suffered from mental derangement. Reid found that out of 111 cases in Bethlehem Hospital, there was clear evidence of hereditary taint in 45. Tuke made the same observation in 22 out of his 73 cases; and, indeed, it is pretty generally admitted by all alienist physicians that hereditary tendencies form one of the strongest predisposing causes of mental disturbance in the puerperal state. In a large proportion of cases circumstances producing debility and exhaustion, or mental depression, have preceded the attack. Thus it is often found that patients attacked with it have had post-partum hemorrhage or have suffered from some other conditions producing exhaustion, such as severe and complicated labor; or they may have been weakened by over-frequent pregnancies, or by lactation during the early months of pregnancy. Indeed, anæmia is always well marked in this disease. Mental conditions also are frequently traceable in connection with its production. Morbid dread during pregnancy, insufficient to produce insanity before delivery, may develop into mental derangement after it. Shame and fear of exposure in unmarried women not unfrequently lead to it, as is evidenced by the fact that out of 2281 cases gathered from the reports of various asylums, above 64 per cent. were unmarried.[1] Sudden moral shocks or vivid mental impressions may be the determining cause in predisposed persons. Gooch narrated an example of this in a lady who was attacked immediately after a fright produced by a fire close to her house, the hallucinations in this case being all connected with light; and Tyler Smith that of another whose illness dated from the sudden death of a relative. The age of the patient has some influence, and there seems to be a decidedly greater liability at advanced ages, especially when such women are pregnant for the first time.

The possibility of the acute form of puerperal insanity coming on shortly after delivery being dependent on some form of septicæmia, is one which deserves careful consideration. The idea originated with Sir James Simpson, who found albumin in the urine of four patients. He suggested that this might probably indicate the presence in the

[1] Journ. of Mental Science, 1870-71, p. 159.

blood of certain urinary constituents which might have determined the attack much in the same way as in eclampsia. Dr. Donkin subsequently wrote an important paper,[1] in which he warmly supported this theory, and arrived at the conclusion "that the acute dangerous class of cases are examples of uræmic blood-poisoning, of which the mania, rapid pulse, and other constitutional symptoms are merely the phenomena;" and that the affection, therefore, ought to be termed uræmic or renal puerperal mania, in contradistinction to the other form of disease. He also suggests that the immediate poison may be carbonate of ammonia, resulting from the decomposition of urea retained in the blood. It will be observed, therefore, that the pathological condition producing puerperal mania would, supposing this theory to be correct, be precisely the same as that which at other times is supposed to give rise to puerperal eclampsia. There can be no doubt that the patient, immediately after delivery, is in a condition rendering her peculiarly liable to various forms of septic disease; and it must be admitted that there is no inherent improbability in the supposition that some morbid material circulating in the blood may be the effective cause of the attack in a person otherwise predisposed to it. It is also certain, as I have already pointed out, that there are two distinct classes of cases, differing according to the period after delivery at which the attack comes on. Whether this difference depends on the presence in the blood of some septic matter—especially urinary excreta—is a question which our knowledge by no means justifies us in answering; it is, however, one which well merits further careful study.

It is only fair to point out some difficulties which appear to militate against the view which Dr. Donkin maintains. In the first place, the albuminuria is merely transient, while its supposed effects last for weeks or months. Sir James Simpson said, with regard to his cases: "I have seen all traces of albuminuria in puerperal insanity disappear from the urine within fifty hours of the access of the malady. The general rapidity of its disappearance is, perhaps, the principal or, indeed, the only reason why this complication has escaped the notice of those physicians among us who devote themselves with such ardor and zeal to the treatment of insanity in our public asylums." This apparent anomaly Simpson attempted to explain by the hypothesis that, when once the uræmic poisoning has done its work and set the disease in progress, the mania progresses of itself. This, however, is pure speculation; and, in the supposed analogous case of eclampsia, the albuminuria certainly lasts as long as its effects. It is not easy to understand, also, why uræmic poisoning should in one case give rise to insanity and in another to convulsions. For all we know to the contrary, transient albuminuria may be much more common after delivery than has been generally supposed, and further investigation on this point is required. Albumin is by no means unfrequently observed in the urine for a short time in various conditions of the body, without any serious consequences, as, for example, after bathing; and we

[1] Edin. Med. Journ., vol. vii.

may too readily draw an unjustifiable conclusion from its detection in a few cases of mania. There are, however, many other kinds of blood-poisoning besides uræmia which may have an influence in the production of the disease, and it is to be hoped that future observations may enable us to speak with more certainty on this point.

The prognosis of puerperal insanity is a point which will always deeply interest those who have to deal with so distressing a malady. It may resolve itself into a consideration of the immediate risk to life and of the chances of ultimate restoration of the mental faculties. It is an old aphorism of Gooch's, and one the correctness of which is justified by modern experience, that "mania is more dangerous to life, melancholia to reason." It has very generally been supposed that the immediate risk to life in puerperal mania is not great, and on the whole this may be taken as correct. Tuke found that death took place, from all causes, in 10.9 per cent. of the cases under observation; these, however, were all women who had been admitted into asylums and in whom the attack may be assumed to have been exceptionally severe. Great stress was laid by Hunter and Gooch on extreme rapidity of the pulse as indicating a fatal tendency. There can be no doubt that it is a symptom of great gravity, but by no means one which need lead us to despair of our patient's recovery. The most dangerous class of cases are those attended with some inflammatory complication; and if there be marked elevation of temperature, indicating the presence of some such concomitant state, our prognosis must be more grave than when there is mere excitement of the circulation.

Post-mortem signs. There are no marked post-mortem signs found in fatal cases to guide us in forming an opinion as to the nature of the disease. "No constant morbid changes," says Tyler Smith, "are found within the head, and most frequently the only condition found in the brain is that of unusual paleness and exsanguinity. Many pathologists have also remarked upon the extremely empty condition of the bloodvessels, particularly the veins.

The duration of the disease varies considerably. Generally speaking, cases of mania do not last so long as melancholia, and recovery takes place within a period of three months, often earlier. Very few of the cases admitted into the Edinburgh Asylum remained there more than six months, and after that time the chances of ultimate recovery greatly lessened. When the patient gets well it often happens that her recollection of the events occurring during her illness is lost; at other times the delusions from which she suffered remain, as, for example, in a case which was under my care, in which the personal antipathies which the patient formed when insane became permanently established.

Insanity of Lactation.—Fifty-four out of the 155 cases collected by Dr. Tuke were examples of the insanity of lactation, which would appear, therefore, to be nearly twice as common as that of pregnancy, but considerably less so than the true puerperal form. Its dependence on causes producing anæmia and exhaustion is obvious and well marked. In the large majority of cases it occurs in multiparæ who have been debilitated by frequent pregnancies and by length of nursing. When occurring in primiparæ it is generally in women who have suffered from post-partum hemorrhage or other causes of exhaustion, or whose constitution was such as should have contra-indicated any attempt at lactation. The "bruit de diable" is almost invariably present in the veins of the neck, indicating the impoverished condition of the blood.

The type is far more frequently melancholic than maniacal, and when the latter form occurs, the attack is much more transient than in true puerperal insanity. The danger to life is not great, especially if the cause producing debility be recognized and at once removed.

There seems, however, to be more risk of the insanity becoming permanent than in the other forms. In twelve out of Dr. Tuke's cases the melancholia degenerated into dementia and the patients became hopelessly insane.

Symptoms.—The symptoms of these various forms of insanity are practically the same as in the non-pregnant state.

Generally in cases of mania there is more or less premonitory indication of mental disturbance, which may pass unperceived. The attack is often preceded by restlessness and loss of sleep, the latter being a very common and well-marked symptom; or if the patient does sleep, her rest is broken and disturbed by dreams. Causeless dislikes to those around her are often observed; the nurse, the husband, the doctor, or the child, becomes the object of suspicion, and unless proper care be taken the child may be seriously injured. As the disease advances the patient becomes incoherent and rambling in her talk, and, in a fully developed case, she is incessantly pouring forth an unconnected jumble of sentences, out of which no meaning can be made. Often some prevalent idea which is dwelling in the patient's mind can be traced running through her ravings, and it has been noticed that this is frequently of a sexual character, causing women of unblemished reputation to use obscene and disgusting language, which it is difficult to understand their even having heard. The tendency of such patients to make accusations impugning their own chastity was specially insisted on by many eminent authorities in a recent celebrated trial, when Sir James Simpson stated that in his experience "the organ diseased gave a type to the insanity, so that with women suffering with affections of the genital organs the delusions would be more likely to be connected with sexual matters." Religious delusions—as a fear of eternal damnation, or of having committed some unpardonable sin—are of frequent occurrence, but perhaps more often in cases which are tending to the melancholic type. There is generally intolerable restlessness, and the patient's whole manner and appearance are those of excessive excitement. She may refuse to remain in bed, may tear off her clothes, or attempt to injure herself. The suicidal tendency is often very marked. In one case under my care the patient made incessant efforts to destroy herself, which were only frustrated by the most careful watching; she endeavored to strangle herself with the bedclothes, to swallow any article she could lay hold of, and even to gouge out her own eyes. Food is generally persistently refused, and the utmost coaxing may fail in inducing the patient to take nourishment. The pulse is rapid and small, and the more violent the excitement and furious the

delirium, the more excited is the circulation. The tongue is coated and furred, the bowels constipated and disorded, and the feces, as well as the urine, are frequently passed involuntarily. The urine is scanty and high-colored, and after the disease has lasted for some time it becomes loaded with phosphates. The lochia and the secretion of milk generally become arrested at the commencement of the disease. The waste of tissue, from the incessant restlessness and movement of the patient, is very great; and if the disease continues for some time she falls into a condition of marasmus, which may be so excessive that she becomes wasted to a shadow of her former size.

When the insanity assumes the form of melancholia, its advent is more gradual. It may commence with depression of spirits, without any adequate cause, associated with insomnia, disturbed digestion, headache, and other indications of bodily derangement. Such symptoms showing themselves in women who have been nursing for a length of time, or in whom any other evident cause of exhaustion exists, should never pass unnoticed. Soon the signs of mental depression increase and positive delusions show themselves. These may vary much in their amount, but they are all more or less of the same type, and very often of a religious character. The amount of constitutional disturbance varies much. In some cases which approach in character those of mania, there is considerable excitement, rapid pulse, furred tongue, and restlessness. Probably cases of acute melancholia, coming on during the puerperal state, most often assume this form. In others, again, there is less of these general symptoms, the patients are profoundly dejected, and sit for hours without speaking or moving, but there is not much excitement, and this is the form most generally characterizing the insanity of lactation. In all cases there is a marked disinclination to food. There is also, almost invariably, a disposition to suicide; and it should never be forgotten in melancholic cases that this may develop itself in an instant, and that a moment's carelessness on the part of the attendants may lead to disastrous results.

Treatment.—Bearing in mind what has been said of the essential character of puerperal insanity, it is obvious that the course of treatment must be mainly directed to maintain the strength of the patient, so as to enable her to pass through the disease without fatal exhaustion of the vital powers, while we endeavor at the same time to calm the excitement and give rest to the disturbed brain. Any over-active measures—for example, bleeding, blistering the shaven scalp, and the like—are distinctly contra-indicated.

There is a general agreement on the part of alienist physicians that in cases of acute mania the two things most needed are a sufficient quantity of suitable food and sleep.

Every endeavor should be made to induce the patient to take plenty of nourishment to remedy the defects of the excessive waste of tissue and support her strength until the disease abates. Dr. Blandford, who has especially insisted on the importance of this, says:[1] "Now with regard to the food, skilful attendants will coax a patient into taking a

[1] Blandford: Insanity and its Treatment.

large quantity, and we can hardly give too much. Messes of minced meat with potato and greens, diluted with beef-tea, bread and milk, rum and milk, arrowroot, and so on, may be got down. Never give mere liquids as long as you can get down solids. As the malady progresses, the tongue and mouth may become so dry and foul that nothing but liquids can be swallowed; but, reserving our beef-tea and brandy, let us give plenty of solid food while we can."

The patient may in mania, as well as in melancholia, perhaps even more in the latter, obstinately refuse to take nourishment at all, and we may be compelled to use force. Various contrivances have been employed for this purpose. One of the simplest is introducing a dessertspoon forcibly between the teeth, the patient being controlled by an adequate number of attendants, and slowly injecting into the mouth suitable nourishment by an India-rubber bottle with an ivory nozzle, such as is sold by all chemists. Care must be taken not to inject more than an ounce at a time, and to allow the patient to breathe between each deglutition. So extreme a measure will seldom be required if the patient have experienced attendants who can overcome her resistance to food by gentler means; but it may be essential, and it is far better to employ it than to allow the patient to become exhausted from want of nourishment. In one case I had to feed a patient in this way three times a day for several weeks, and used for the purpose a contrivance known in asylums as Paley's feeding-bottle, which reduced the difficulty of the process to a minimum. Beef-tea or strong soup, mixed with some farinaceous material, such as Revalenta Arabica or wheaten flour, or milk, forms the best mess for this purpose.

In the early stages the patient is probably better without stimulants, which seem only to increase the excitement. As the disease progresses and exhaustion becomes marked, it may be necessary to have recourse to them. In melancholia they seem to be more useful, and may be administered with greater freedom.

The state of the bowels requires especial attention. They are almost always disordered, the evacuations being dark and offensive in odor. In the early stages of the disease the prompt clearing of the bowels by a suitable purgative sometimes has the effect of cutting short an impending attack. A curious example of this is recorded by Gooch, in which the patient's recovery seemed to date from the free evacuation of the bowels. A few grains of calomel, or a dose of compound jalap powder, or of castor oil, may generally be readily given. During the continuance of the illness the state of the primæ viæ should be attended to, and occasional aperients will be useful, but strong and repeated purgation is hurtful from the debility it produces.

One of the most important points of treatment is to procure sleep. For this purpose there is no drug so valuable as the hydrate of choral, either alone or in combination with bromide of potassium, which has a distinct effect in increasing its hypnotic action. Given in a full dose at bedtime, say from fifteen grains to half a drachm, it rarely fails in procuring at least some sleep, and in an early stage of acute mania this may be followed by the best effects. It may be necessary to

repeat this draught night after night, during the acute stage of the malady. If we cannot induce the patient to swallow the medicine it may be given in the form of enema.

It is generally admitted that in mania, preparations of opium, formerly much relied on in the treatment of the disease, are apt to do more harm than good. Dr. Blandford gives a strong opinion on this point. He says: "In prolonged delirious mania I believe opium never does good, and may do great harm. We shall see the effects of narcotic poisoning if it be pushed, but none that are beneficial. This applies equally to opium given by the mouth and by subcutaneous injection. The latter, as it is more certain and effectual in producing good results, is also more deadly when it acts as a narcotic poison. After the administration of a dose of morphia by the subcutaneous method, the patient will probably at once fall asleep, and we congratulate ourselves that our long-wished-for object is attained. But after half an hour or so the sleep suddenly terminates, and the mania and excitement are worse than before. Here you may possibly think that, had the dose been larger, instead of half an hour's sleep you would have obtained one of longer duration, and you may administer more, but with a like result. Large doses of morphia not merely fail to produce refreshing sleep; they poison the patient, and produce, if not the symptoms of actual narcotic poisoning, at any rate that typhoid condition which indicates prostration and approaching collapse. I believe there is no drug the use of which more often becomes abused than that of opium." It is otherwise in cases of melancholia, especially in the more chronic forms. In these, opiates in moderate doses, not pushed to excess, may be given with great advantage. The subcutaneous injection of morphia is by far the best means of exhibiting the drug, from its rapidity of action and facility of administration.

There are other methods of calming the excitement of the patient besides the use of medicines. The prolonged use of the warm bath, the patient being immersed in water at a temperature of 90° or 92° for at least half an hour, is highly recommended by some as a sedative. The wet pack serves the same purpose, and is more readily applied in refractory subjects.

Judicious nursing is of primary importance. The patient should be kept in a cool, well-ventilated, and somewhat darkened room. If possible she should remain in bed, or, at least, endeavors should be made to restrain the excessive restless motion which has so much effect in promoting exhaustion. The presence of relatives and friends, especially the husband, has generally a prejudicial and exciting effect; and it is advisable to place the patient under the care of nurses experienced in the management of the insane, who, as strangers, are likely to have more control over her. It is not too much to say that much of the success in treatment must depend on the manner in which this indication is met. Rough, unskilled nurses, who do not know how to use gentleness combined with firmness, will certainly aggravate and prolong the disorder. Inasmuch as no patient should be left unwatched by day or night, more than one nurse is essential.

The question of the removal of the patient to an asylum is one which will give rise to anxious consideration. As the fact of having been under such restraint of necessity fixes a certain lasting stigma upon a patient, this is a step which everyone would wish to avoid if possible. In cases of acute mania, which will probably last a comparatively short time, home treatment can generally be efficiently carried out. Much must depend on the circumstances of the patient. If these be of a nature which preclude the possibility of her obtaining thoroughly efficient nursing and treatment in her own home, it is advisable to remove her to a place where these essentials can be obtained, even at the cost of some subsequent annoyance. In cases of chronic melancholia, the management of which is on the whole more difficult, the necessity for such a measure is more likely to arise, and should not be postponed too late. Many examples of incurable dementia arising out of puerperal melancholia can be traced to unnecessary delay in placing the patients under the most favorable conditions for recovery.

Treatment during Convalescence.—When convalescence is commencing, change of air and scene will often be found of great value. Removal to some quiet country place, where the patient can enjoy abundance of air and exercise, in the company of her nurses, without the excitement of seeing many people, is especially to be recommended. Great caution must be used in admitting the visits of relatives and friends. In two cases under my own care the patients relapsed, when apparently progressing favorably, because the husbands insisted, contrary to advice, on seeing them. On the other hand, Gooch has pointed out that when the patient is not recovering, when month after month has been passed in seclusion without any improvement, the visit of a friend or relative may produce a favorable moral impression and inaugurate a change for the better. It is probably in cases of melancholia, rather than in mania, that this is likely to happen. The experiment may, under such circumstances, be worth trying; but it is one the result of which we must contemplate with some anxiety.

CHAPTER V.

PUERPERAL SEPTICÆMIA.

Difference of Opinion as to Puerperal Fever.—There is no subject in the whole range of obstetrics which has caused so much discussion and difference of opinion as that to which this chapter is devoted. Under the name of *puerperal fever*, the disease we have to consider has given rise to endless controversy. One writer after another has stated his view of the nature of the affection with dogmatic precision, often on no other grounds than his own preconceived notions and an erroneous interpretation of some of the post-mortem appearances.