

*On the Mental Disorders of Pregnancy and Child-
bed.* By FLEETWOOD CHURCHILL, M. D., M. R. I. A., Hon.
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&c. &c.

I HAVE no intention, in the present Essay, of entering upon the subject of insanity generally, or the inquiry as to whether it is owing to bodily derangement alone, as some have maintained, or whether the mind itself may not, in some instances, be disordered. Without attempting the solution of the problem, it is sufficient that we admit that man is a compound being, with the inter-dependance of mind and matter so finely adjusted, that, so long as the balance is preserved, the action of the machine is as perfect in its nature as wonderful in its results.

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But the very nicety of this balance, the very intimate and accurate relation between the body, or especially the brain, and the mental development, appears occasionally to lead to the disturbance of the latter. The cords are so fine and so tense that an excess of vibration in the one extremity induces discord in the other.

If this be the case with men, who are possessed naturally of a firm and vigorous constitution,—if a very slight deviation from bodily health distorts or upturns their mental operations, how much more exposed must women be to such disturbances, who, in addition to the causes common to both, possess a more delicate organization, more refined sensibilities, more exquisite perceptions, and are, moreover, the subjects of repeated constitutional changes and developments of a magnitude and importance unknown to the other sex.

These functions are, menstruation, conception and pregnancy, parturition and childbed, and lactation. That functions of such great consequence, involving changes so enormous in their results, and yet so delicate in their minute details, should exert an influence upon the mind of the female, cannot be a matter of surprise, and a little inquiry will show us that the mental condition does correspond to these changes by an increased sensitiveness and by a greater liability to disturbance; and further, that this disturbance may amount to incoherent action or insanity.

Contrast for a moment the mind of a young girl before and after puberty. Previously to that event, it is the mind of a child, merry, thoughtless, volatile; occupied with childish trifles, delighted with toys; playing with her brothers, and differing from them mainly in some little feminine tastes, and in being less boisterous.

After menstruation, a great and rapid change is evident; womanly tastes and womanly feelings have sprung into existence; thought, feeling, and reflection are substituted for her former levity; her expressions are more refined, more reserved,

and indicating deeper sentiment; her affections are warmer yet more finely tempered; her pursuits are more elevated, her tone of mind more serious. Occasionally she is sad without cause, and her sympathy for sorrow and distress is more deep and earnest; even her joy, though less buoyant, is more intense, and her tastes are finer and more delicate. In short, under the influence of bodily development, her mind has expanded, and, from a lively merry girl, she has been transformed into a woman(a).

Now, from this susceptibility of the nervous system, this mental sensitiveness, the step to morbid excess of it is but slight, and the gradations very easily traced. The pensiveness may degenerate into sadness and melancholy, especially under the influence of any moral cause; or a disturbance of the bodily functions may itself excite the morbid mental condition. Hysteria and analogous nervous affections are nearly allied to more serious mental disorders(b).

Dr. Haslam observes: "Insanity and epilepsy are often connected with menstruation, and suffer an exacerbation of their paroxysms, at the period when the discharge happens or ought to happen;" and he gives a case, of which he says that "the insanity of M. M. was connected with her menstruation; after its cessation she recovered, although she had been confined for more than sixteen years"(c).

Dr. Spurzheim remarks: "Many delicate premature females, of lively disposition, at the period of menstruation, or soon after, by imperceptible degrees, lose the manifestations of the mind; they become inactive, and neglect those objects and pursuits which formerly were to them sources of instruction and delight. They do not show the same attachment to their parents or friends; they are careless of reproof, and unfeeling to kindness; they are negligent in their dress, inattentive to

(a) Raciborski, *De la Puberté*, p. 103.

(b) Laycock on *Nervous Diseases of Women*, p. 551.

(c) On *Madness and Melancholy*, pp. 215, 232.

personal cleanliness, and finish with a general apathy and idiotism"(a).

Dr. Burrowes says: "Everybody of the least experience must be sensible of the influence of menstruation upon the operations of the mind. It is, in truth, the moral and physical barometer of the female constitution"(b).

"Some females," observes Dr. Pritchard, "at the period of the catamenia, undergo a considerable degree of nervous excitement; morbid dispositions of mind are displayed by them at these times, a wayward and capricious temper, excitability in the feelings, moroseness in the disposition, a proneness to quarrel with their dearest relatives, and sometimes a dejection of mind approaching to melancholia"(c).

That menstrual disorders, particularly amenorrhœa, are frequently coincident with insanity, is admitted by all writers, some, however, maintaining that they are causes, others that they are effects. Dr. Burrowes takes the latter view, but in one of his cases the reverse was the case. Dr. Pritchard observes: "Sudden suppressions of the catamenia are frequently followed by diseases of the nervous system of various kinds. Females exposed to cold, undergoing powerful excitement, experience a suppression of the catamenia, followed, in some instances, immediately by fits of epilepsy or hysteria, the attacks of which are so sudden as to illustrate the connexion of cause and effect. In attacks of madness the catamenia are, for the most part, wholly or partially suppressed during the early periods, and in many cases it is not easy to say whether the suppression is the effect or the cause of the disease. We have already alluded to the case of a young female, mentioned by M. Esquirol, who suddenly exclaimed that she was cured of her disorder; her catamenia had flowed spontaneously, and her restoration to sanity was the immediate consequence"(d).

(a) *On Insanity*, p. 162.

(b) *Commentaries on Insanity*, p. 146.

(c) *On Insanity*, p. 207.

(d) *Ibid.* p. 207.

The observations of M. Foville fully confirm the statements of Dr. Pritchard^(a), and I find that in a table of 235 cases of dementia by M. Esquirol, fifteen are stated to be from disorders connected with menstruation, and thirty-five connected with the critical age. He has also remarked that madness is more frequent in proportion among women under 20 than above 50.

I saw a case lately illustrating the point in question. It was that of a young lady, aged 17, who had menstruated regularly for a year or thereabouts, but in whom the discharge had been suddenly arrested without apparent cause. She complained of headach for a few days, and then it ceased; her pulse was perfectly natural and her appetite pretty good, but her mind gradually became clouded, and, at length, the prey of the deepest melancholy; she regarded herself as a castaway, spoke of her doom as fixed for ever in misery, and became completely insane. Neither medicine nor change of air and scene did her any good, and her friends were reluctantly obliged to think of placing her in confinement, when the menses suddenly re-appeared, after eight or ten months' absence, and she immediately recovered her mental health.

A curious case came under the observation of Mr. Speedy and myself some time ago. A servant-girl, aged 17 or 18, was sent to live in a lone house near Howth, where the only person she saw was a policeman. She had previously been irregular, and was much depressed. On returning home she was unwell, and talked nonsense, and her mother, supposing that she had fever, sent her to Cork-street hospital; thence she was dismissed as not having fever. On coming out she declared to a clergyman that she was pregnant and going to miscarry. We took her into the Western Lying-in Hospital, but could find no evidence of pregnancy, but enough of congestion, and probably of inflammation of the brain, for which we treated her,

(a) *Dict. Med. et de Chirurg. Prat.*, vol. i. p. 521.

and of which she died. On *post mortem* examination, not only was she not pregnant, but, so far as we could judge from the state of the organs of generation, she was a virgin. Her pregnancy was insanity. The late Dr. Hunt related a similar case to me.

Connected with menstruation and its derangements, as I have already mentioned, is the protean disorder which we call hysteria, and this, as Dr. Burrows observes, will sometimes degenerate into mania: "Nervous, susceptible women, between puberty and thirty years of age, and clearly the single more so than the married, are more frequently visited by hysteria, and such constitutions have always a greater aptitude to strong mental emotions, which on repetition will superinduce mental derangement, and perhaps epilepsy"^(a).

"The critical period," according to the same author, "as it is called, when menstruation ceases, is certainly favourable to the development of mental aberration. The whole economy of the constitution, at that epoch, again undergoes a revolution. The moral character, at the age when the menses naturally cease, is much changed from what it was on their first access; and every care or anxiety produces a more depressing and permanent impression on the mind"^(b). Dr. Haslam refers to several cases of insanity which ceased at the critical period.

I may add that the deviation from mental health in women, even when the intellectual faculties are plainly disordered, is generally caused through the affections or moral qualities, and in this they differ from men under similar circumstances.

No one, I am sure, will suppose that I mean to assert the necessary or frequent connexion between menstruation and insanity, but merely their occasional combination; neither do I pretend to explain it; the fact is as I have stated, and it is of practical importance to remember that the changes of character

(a) *Commentaries on Insanity*, p. 192. (b) *Ibid.* p. 192.

and the mental development are dependent upon the bodily functions called into existence at puberty.

But this inter-dependance of mind and bodily functions is more remarkably exhibited during the next great development in the female economy. The sensibilities expanded by puberty are heightened during pregnancy, and not unfrequently more or less disturbed. The increase of local organic action is accompanied by general nervous irritability, which shows itself in various modes and degrees. Few women are quite as self-possessed, or in as even spirits, during pregnancy as at other times; little things annoy them; trifles depress them; or it may be that they are just as inordinately excited, displaying a degree of caprice or levity foreign to their character. Sometimes the most sweet-tempered become irritable, cross, and quarrelsome. The husband of a patient of mine told me that the earliest symptom of pregnancy in his wife, who was remarkably good-tempered and attached to him, was a disposition to quarrel with himself especially.

Dr. Montgomery mentions the case of a lady who, for the first two or three months of pregnancy was so irritable that, "to use her own words, she was a perfect nuisance in the house." He also relates one of an opposite character. "A gentleman lately informed me that being afflicted with a stepmother, naturally more disposed to practise the *fortiter in re* than to adopt the *suaviter in modo*, he and all the household had learned from experience to hail with joyful anticipations the lady's pregnancy, as a period when clouds and storms were immediately exchanged for sunshine and quietness"^(a).

In a late volume of Guy's Hospital Reports Dr. Lever relates the case of a lady who was two months pregnant, and who, from having been the life of the household, light-hearted and gay, "now sat wherever she was placed, neither turning her head

(a) On the Signs of Pregnancy, &c., pp. 18, 19.

nor her eyes to one side or the other: she was a living automaton; her movements were automatic; there was life, it is true, but there was no mind; her chiselled face seemed cut in alabaster"(a). She recovered after her confinement.

Dr. Burrowes observes, that "whenever mental disturbance occurs during pregnancy, it partakes oftener of an idiopathic character, either in the form of mania or melancholia, than of the delirium which succeeds parturition." "I have seen," he adds, "two cases where hysterical symptoms attended during pregnancy, and the patient almost immediately on delivery became insane"(b).

It is very natural that with a known or unknown amount of suffering before them, and with a certain but unknown degree of danger connected with the termination of pregnancy, women should occasionally at least be subject to depression of spirits, and should take a gloomy view of their prospects. With the majority this state of mind is only occasional, or is dissipated as gestation advances, but it is not always so; with some it increases, and they constantly and steadily anticipate evil, and are either deeply distressed or apathetically despairing.

As Dr. Montgomery has observed, this state of mind is often accompanied, or perhaps caused, by bodily derangement: the stomach and bowels are out of order, the patient complains of headach and nausea, with a foul tongue, quick pulse, and a bilious tinge of the skin. Proper treatment will generally relieve both the bodily disorder and mental depression in these cases. "Sometimes this state appears to depend upon some peculiar condition of the brain, the nature of which we probably cannot appreciate, and which our treatment will but too often fail to correct: in one strongly marked instance of this kind, which was some time ago under my care, the lady

(a) Vol. v. p. 22, second series. (b) Commentaries on Insanity, p. 364.

became maniacal on the fifth day after delivery, and continued deranged for many months"(a).

A similar case is related by Dr. Haslam(b).

Some years ago I attended a lady in her first confinement, who had nursed a relative who died of hemorrhage during labour. This made a deep and fearful impression upon her mind, and from the moment she found herself pregnant, she had settled that she should die of hemorrhage during her labour: she had reconciled her mind to it; dismissed all doubts, and I may say fear also; and, regarding it as certain, she arranged all her affairs and her household, so as to give her husband as little trouble in his affliction as possible, and then when labour commenced she watched every pain for the final issue. The labour terminated favourably, but, before this consummation, her fears had completely overmastered her reason, and she became delirious for about an hour, after which she recovered.

But these inequalities of temper, and temporary depressions of spirits, are but a step towards more serious mental derangement. In more susceptible females the mind is occasionally completely thrown off its balance, and the patient becomes partially or wholly insane.

Esquirol mentions the case of a young woman of a sensitive habit who had an attack of madness in two successive pregnancies, commencing immediately after conception and lasting fifteen days. Several women at La Salpêtrière were there for insanity connected with pregnancy.

Dr. Montgomery states that he knew a lady who was attacked with insanity in eight successive pregnancies, and another who was similarly affected three times soon after conception, and remained so until within a short time of her labour, when she became sane, and remained so until her next pregnancy(c).

(a) Montgomery, *Signs of Pregnancy*, p. 20.

(b) *On Insanity*, p. 235.

(c) *Signs of Pregnancy*, p. 21.

On the other hand, pregnancy occasionally relieves mental derangement. Goubelly gives a remarkable case of a lady who was of sound mind only during gestation; and the well-known case of Mrs. Durant was one of this kind. I lately saw a case of confirmed melancholia in a lady which disappeared entirely on her becoming pregnant.

Generally speaking, these attacks come on gradually, continue for a time, and disappear before or after delivery, without any peculiar danger either from the malady or from the want of rational self-control on the part of the patient. It is not always so, however. Not very long ago a very distressing instance to the contrary occurred. A lady, pregnant but in perfect health, was employed in some household duty, and was talking cheerfully to her husband and sister; suddenly and without any particular reason, she left them and went to her bedroom and instantly destroyed herself. This must have been a sudden attack of insanity, for up to the moment she was cheerful and happy, in good circumstances, and greatly attached to her husband; but other members of her family had been subject to insanity.

In pregnant women there is occasionally a special but very melancholy cause of mental derangement, in addition to the physical condition common to all. I allude to some absorbing mental distress, such, for instance, as a profligate or cruel husband, or, more effective still, an accusing conscience. I may say, with Dr. Montgomery, "how deplorable must be the condition of mind in a woman, who, led astray by the profligate from virtue's paths of pleasantness and peace, and then abandoned, is compelled to consider her pregnancy a curse instead of a blessing, and has, in addition to the ordinary troubles of that state, to bear up against the agony of disappointed hopes, of affections misplaced and cruelly abused, to endure the present scorn of society, and the apprehensions of a still increasing shame, for which she is to

find no 'sweet oblivious antidote' of power 'to pluck from the memory a rooted sorrow,' or, 'raze out the written troubles of the brain'?" (a) How often has such a state of mind been followed by convulsions, or, ending in insanity (b), has armed, with the weapon of suicide the once gentle hand of her, who, to use the words of William Hunter, "might have been an affectionate and faithful wife, a virtuous and honoured mother through a long and happy life; and, probably, that very reflection raised the last pang of despair which hurried her into eternity."

According to Esquirol, the moral causes of insanity, in pregnant and puerperal women, are to the physical as 4 to 1; and of ninety-two cases reported by him, twenty-nine were unmarried women.

Again, it has been remarked by most writers, that women affected with any degree of mental derangement during pregnancy are more disposed than others to puerperal mania. But the serious character of these attacks is even deepened by the fact, abundantly established, that the evil is not limited to the mother. Not only may organic diseases of the body be transmitted to the infant, but a predisposition to insanity, thus multiplying the distress in a most alarming ratio.

I need not say that we have no means of minutely explaining the causes of these attacks; we may say, with Dr. Pritchard, that, "if we consider the frequent changes or disturbances occurring in the balance of the circulation from the varying and quickly succeeding processes which are carried on in the system during and soon after the periods of pregnancy and child-birth, we shall be at no loss to discover the circumstances under which a susceptible constitution is likely to suffer. The conversions or successive changes in the temporary local determinations of blood which the constitution, under such circum-

(a) *Signs of Pregnancy*, p. 22

(b) *Lever*, in *Guy's Hospital Reports*, vol. v. p. 23, second series.

stances, sustains and requires, appear sufficiently to account for the morbid susceptibility of the brain"(a).

But let us now inquire what practical inferences we can draw from the sketch I have here given :

1. We have seen that the mental disturbance may exist in various degrees, from mere caprice or obliquity of temper up to actual insanity, and that the various shades are separated by no very defined line, but run into one another even in the same case. These caprices and melancholy anticipations are not to be treated with ridicule or indifference, still less are variations in temper, however unpleasant, to be met with a similar spirit of irritability; but the patient should be treated with a mixture of reasoning and patient kindness, soothed, and cheered, and strengthened. Nor should higher considerations be omitted; the forebodings of evil and the depression arising from fear are best relieved by a reference to the wisdom and fatherly kindness of Him "in whose hand are the issues of life."

2. This soothing and encouraging kindness is nearly all that we can do in those cases where there is no tangible bodily illness; but where there is any degree of feverishness or head-ach, immediate attention should be paid to the state of the digestive system and the bowels. It is possible that it may be necessary to abstract a little blood, but such cases are rare.

3. With patients suffering even slightly, in the way I have described, great care should be taken to avoid sudden or powerful mental emotion; all frightful or depressing stories should be prohibited, and all tragic representations, &c. Dr. Montgomery has recorded instances in which mischief was done in this way. The evil may be felt by the offspring even if the mother escape. Premature birth, death, or imbecility of the child, may be the result of fright to the mother.

4. Dr. Burrowes observes, that insanity during pregnancy

(a) On Insanity, p. 312

is occasionally owing to adventitious causes, such as the suppression of cutaneous eruptions, discharges and drains of different kinds. In such cases he advises us to use the means most likely to reproduce them.

Great watchfulness must be employed in all such cases, lest the patient should attempt to injure herself, but we must take care that our object is concealed from her.

The next modification of mental disturbance which I shall notice occurs during labour, and had been described by no author until Dr. Montgomery published his paper in this Journal in the year 1834(a). Dr. Burrowes mentions "a temporary delirium often accompanying difficult labours," but that is all he says of the affection, and no allusion is made to it by any previous author.

The delirium in question is very temporary, lasting but a few minutes in some cases, half an hour in others. "It comes on suddenly during perfectly natural and favourable labour," about the time when the dilatation of the os uteri is at its maximum, and the suffering the most severe. "It is not accompanied by any other unpleasant or suspicious symptom, occurring perhaps immediately after the patient has been talking cheerfully, and, having lasted a few minutes, disappears, leaving her perfectly collected, and returns no more, even though the subsequent part of the labour should be slower and more painful. In every instance which came under my observation, the patients were afterwards conscious that they had been wandering, and occasionally apologised for anything they might have said, although they were not aware of what the exact nature of their observations might have been."

I have seen several cases of this kind, and, with one exception, they corresponded very accurately with this description of Dr. Montgomery's. In one case the delirium, which occurred first during the dilatation of the os uteri, returned

(a) First series, vol. v., p. 52.

as the head was passing through the os externum; and this patient informed me that she was conscious of talking nonsense, and had in vain endeavoured to resist it. Dr. Montgomery attributes this momentary incoherence to the suffering attendant upon the forcible distension and dilatation of the cervix, and there can be no doubt, I think, that this is the true explanation.

I shall now proceed to the consideration of *puerperal mania*, or that form of insanity which occurs in childbed soon after delivery, or at the commencement of suckling.

It is a very distressing malady in itself, but doubly so from occurring at a moment ordinarily so joyful; and yet we cannot be surprised at the susceptibility manifested at this particular time, when we remember that "the sexual system in women is a set of organs which are in action only during half the natural life of the individual, and even during this half they are in action only at intervals. During these intervals of action they diffuse an unusual excitement throughout the nervous system: witness the hysteric affections of puberty, the nervous susceptibility which occurs during every menstrual period, the nervous affections of breeding, and the nervous susceptibility of lying-in women"^(a).

Attacks of puerperal insanity are not infrequent. Esquirol states that of 600 women in La Salpêtrière, fifty-two were of this kind; and of 1119 cases admitted in four years, ninety-two were cases of puerperal mania. He found it even more frequent in proportion among the higher ranks, for out of 144 cases of mental derangement in females of opulent families, the attack came on during childbed or lactation in twenty-one.

Dr. Haslam states, that of 1644 females in Bethlem Hospital, eighty-four were cases of this kind; and Dr. Rush mentions five cases in seventy at the Philadelphia Lunatic Asylum.

The attack may, in some few cases, be a continuance or a

(a) Gooch on the more important Diseases of Women, &c., p. 127.

further development of the nervous affections of pregnancy; the nearer the approach to mental derangement during this period, the greater the probability of an attack after delivery.

There are two periods, however, at which patients seem especially obnoxious to it:—1st, immediately after delivery, to which the term *paraphrosyne puerperarum* has been given; and 2ndly, about the fourth or fifth day, when the full secretion of milk is established, and then it has been termed *mania lactea*. Dr. Burrowes adds a third period, about the fourteenth or fifteenth day, and he then attributes it to the effect of cold in checking the secretion of the milk.

I find that of Esquirol's cases sixteen became delirious from the first to the fourth day; twenty-one from the first to the fifteenth day; seventeen from the sixteenth to the sixtieth day; nineteen from the sixtieth day to the twelfth month; and nineteen after forced or voluntary weaning.

Of Dr. Burrowes' cases, in thirty-three the access was before the fourteenth day; in eleven, after the fourteenth and before the twenty-eighth day.

The premonitory symptoms vary a good deal. In one sense hereditary predisposition, or the nervous affections of gestation, are premonitory, but in most cases we shall generally find, previously to an attack, a degree of exhaustion, conjoined with great excitability, headach, and want of sleep: or the attack may accompany or follow convulsions, as I have seen in more than one case. Dr. Haslam remarks: "The first symptoms of the approach of this disease after delivery are, want of sleep, the countenance becomes flushed, a constrictive pain is often felt in the head, the eyes assume a morbid lustre, and wildly glance at objects in rapid succession; the milk is afterwards secreted in less quantity, and when the mind becomes more violently disordered it is totally suppressed."

Writers speak of various species of puerperal insanity, principally of two, however,—those cases in which the form is melancholia or mania, and those in which phrenitis or inflammation

of the membranes of the brain exists; the former is the true puerperal mania, and may be distinguished into two varieties, —those where fever is present, and those in which it is absent.

“Mania,” says Dr. William Hunter, “is not an uncommon appearance in the course of the month, but of that species from which they generally recover. *When out of their senses, attended with fever, like paraphrenitis, they will, in all probability, die;* but when without fever, it is not fatal, though it (i. e. the fever) generally takes place before they get well. I have had several private patients, and have been called in where a great number of stimulating medicines and blisters have been administered; but they have gone on at another time talking nonsense until the disease has gone off, and they have become sensible. It is a species of madness they generally recover from, but I know of nothing of any singular service in it.” “Putting together,” says Dr. Gooch, “this statement of Dr. Hunter, with my own experience, I extract from it the following meaning: that there are two forms of puerperal mania, the one attended by fever, or at least—the most important part of it—a rapid pulse; the other accompanied by a very moderate disturbance of the circulation; that the latter cases, which are by far the most numerous, recover; that the former generally die. This agrees closely with my own experience.”

Dr. Burrowes states that he has not seen any case attended with fever, “except when coincident with the first secretion of the milk, or where inflammation of the breasts or other parts has occurred, or upon forced weaning, where there has been abundance of milk.” But this is far from being generally true. I saw two cases last year in which mania occurred before the secretion of milk, and yet the pulse was very quick, and the skin hot, with thirst, loaded tongue, &c.

In the one variety we find the attack preceded by wakefulness, excitability, headach, and after a while the mind is evidently astray; the patient may be joyous or melancholy, singing and talking incessantly, or obstinately silent, suspicious of every

one, fancying injuries and offences on the part of her husband or friends, and forgetful of her child.

The heat of the body may be slightly increased, that of the head is generally so, with a partial pain and a sense of pressure or tightness, throbbing in the temples, and noises in the ears. The skin is generally relaxed and moist, but discoloured; the face pale, the tongue whitish and loaded; the abdomen soft, and usually free from tenderness; the pulse weak and quiet; there is little, if any, sleep, and but little thirst; the bowels are torpid, and the stools unhealthy, often offensive.

In other cases we find the skin hotter, the pulse quick and small, the face often pale, sometimes flushed, the eyes red and vivid, and a delirium more resembling that of fever, with a brownish dry tongue, and sordes about the teeth.

Dr. Burrowes has described an attack of puerperal mania, somewhat different from the above, and resembling them. "In every instance, this variety has come on before the fourteenth day from delivery; it is preceded by pervigilium; the ideas are at first rapid and confused; images like those of dreams appear, and the delirium is soon confirmed by these illusions being considered as realities, and the speech and actions corresponding with these impressions. The muscular powers are rarely violently exerted, though the patient frequently attempts getting out of bed, without any fixed object; on the contrary, she generally lies supine; the countenance is rather vacant; the eyes are half-closed, or fixed on vacuity, and, when roused, follow some imaginary object; the tunica conjunctiva is often highly injected, and the pupils very little sensible to light; the head is hot; the skin soft and relaxed, and partial sweating about the throat and neck. She continually mutters incoherently; loses consciousness, except when suddenly or strongly urged; if spoken to, answers shortly, and perhaps rationally, but lapses directly into the former state of indifference; the pulse is quick and uncertain; bowels generally easily moved; lochia and secretion of milk suspended.

About the fourth or fifth day the debility is greater; there is more coma; the pulse is quicker, smaller, and more unequal, with slight subsultus; picking at surrounding objects, or the bed-clothes; averse from food or drink; insensible of evacuations; the tongue throughout presents nearly a natural appearance, though sometimes tremulous when protruded. It is usually fatal by the seventh or eight day; and if the patient survive, chronic insanity commonly supervenes, and melancholia oftener than mania" (a).

That active inflammation of the brain or its membranes may occur during childbed is beyond question, but as it is very rare, and does not strictly belong to the question of puerperal mania, I shall not at present enter upon its consideration.

Thus, then, we may have an attack of mania supervening upon delivery, or occurring about the fourth or fourteenth day, with or without precursory symptoms; in two varieties the main distinction appears to be in the pulse,—in one it is quick, in the other natural; the third variety resembles low fever. There are seldom any signs to indicate disease of the uterus, at the time, except that in all, the lochia and milk are diminished or suppressed. In all the varieties the stomach and bowels are much disordered. The character of the mania is not in any way peculiar to childbed.

The progress, duration, and termination, of the attack varies a good deal in different patients. Dr. Burrowes observes, that sometimes the slighter attacks which occur immediately after delivery will disappear under the operation of a smart purgative, and an opiate.

Of the ninety-two cases given by Esquirol fifty-five recovered: four recovered in the first month, seven in the second, six in the third, seven in the fourth, five in the fifth, nine in the sixth, fifteen between the sixth and twenty-fourth, two after two years. Of these thirty-eight recovered in the first

(a) Commentaries on Insanity, p. 371.

six months. Of thirty-seven cases given by Dr. Burrowes thirty-five recovered: nine recovered in the first month, five recovered in the second, five in the third, three in the fourth, two in the fifth, four in the sixth, one in the seventh, two in the eighth, one in the ninth, one in the twelfth, one in the fourteenth; and one in the twenty-fourth month. That is, twenty-eight recovered in the first six months. Of eighty cases by Dr. Haslam fifty recovered.

But it may continue much longer; of the cases described by Esquirol six died: one six months after delivery, one in a year, two after eighteen months, one in three years, and one in five years. In Dr. Burrowes' table, it is stated one recovered after two years, one after three years, two after four years, one after six, and one after seven years; but he states that he never met with one permanently fatuous from puerperal insanity.

Of Esquirol's ninety-two cases, six died, or one in fifteen. Of Dr. Haslam's eighty cases, fifty recovered. Of Dr. Burrowes' fifty-seven cases, ten died, or one in six: "Seven within twelve days of the access of delirium, two within seven weeks, and one after four months. Two of them had active uterine disease, and two others died of relapses after they had recovered from puerperal mania."

Thus we find that the number of cases that recover is very considerable: out of 229, 140 recovered, or more than one-half. Of ninety of those who recovered, sixty-six were cured within six months, and the remainder at irregular intervals up to two years. Some we find continued insane much longer, remaining so for four, five, six, and seven years.

But, on the other hand, a large proportion of deaths has sometimes occurred: one in fifteen at La Salpêtrière, and one in six among Dr. Burrowes' cases.

I do not think, however, that any statistics from a lunatic asylum can be taken as a correct standard of the mortality in puerperal mania, for patients are not sent there until the disease is more or less chronic; now a great number of those who

recover do so within a short time after confinement, as in two cases I witnessed lately, both of which recovered from the delirium within ten days. Among the better classes a patient would not be placed in an asylum until she had recovered from her confinement, and until the ordinary treatment had failed. On the other hand, death occurs in many cases within the month after childbed. "Mania," says Dr. Gooch, "soon after delivery, is more dangerous to life, than melancholia beginning several months afterwards."

Dr. Gooch states that none of his patients with a slow or moderately excited pulse died, whereas in the fatal cases the pulse was very rapid, though some with a rapid pulse recovered. In the two cases I have referred to the pulse was very rapid, yet both recovered.

"Nights passed in sleep, a pulse slower and firmer, even though the mind continue disordered, promise safety to life. On the contrary, incessant sleeplessness, a quick, weak, fluttering pulse, and all the symptoms of increasing exhaustion, portend a fatal termination, even though the condition of mind may be apparently improved. In the cases which I have seen terminate fatally the patient has died with symptoms of exhaustion, not with those of oppressed brain, excepting only one case (a)."

I shall now consider the *causes* of this distressing malady. There seems little doubt that in many cases (Dr. Burrowes says in half the number, or possibly more, and Dr. Gooch bears the same testimony) the predisposition is hereditary, and of course mental deviations during gestation render an attack of puerperal mania extremely probable. Sleeplessness, which so fearfully increases nervous irritability, seems a very general predisposing cause.

Among the exciting causes we find cold, irritation, irregularities of diet, distress of mind, sudden mental shocks, frights,

(a) Gooch on Diseases of Woman, p. 124.

disordered bowels, excessive secretion of milk, and constitutional irritation thence arising, &c.; or the attack may form a part of or follow convulsions, as in a case which came under my care not long since.

Great stress is laid upon moral causes by the French writers. Esquirol, as I have before mentioned, states their frequency, compared with the physical, as four to one; and Georget mentions that out of seventeen cases there were but two not proceeding from a direct moral cause. During the invasion of France in 1814-15, eleven out of fourteen cases were from terror. British writers do not attribute so large an influence to this cause.

As to the *proximate cause or pathology* it is not very easy to speak positively. I may allude to four different views on the subject: 1. From its occurring, in many cases immediately after delivery, some have attributed it to disease of the uterine system. Fabret mentions a case of cancer which excited mania. Dr. Briere has related a case of mania from inflammation of the womb. Dr. Cooke discovered disease of the womb in two cases of puerperal mania. Dr. Burrowes mentions having seen abortion and mania, the result of inflammation of the womb, in two cases in which he was consulted; one died and the other recovered; and in two of the deaths in his table there was disease of the uterus, but, whether it preceded the mania or not does not appear. In one of the species of puerperal mania, described by Dr. Burns, he says, "the delirium is connected with the state of the uterus, particularly of the veins which are inflamed"^(a).

At a meeting of the Obstetrical Society of Dublin, Dr. Montgomery mentioned a case of puerperal mania in which the uterus and ovaries were found in a state of inflammation; and Dr. Hardy another, in which peritonitis existed, but was not suspected till after death. I have certainly seen uterine inflam-

(a) Midwifery, p. 619.

mation follow puerperal mania, but that it existed previously I cannot say: the usual symptoms were absent.

Still these cases, which are all I have been able to make out, form so very small a proportion to the cases in which there has been no disease of the womb, that without denying the condition of the uterine system is in some way connected with puerperal mania, it is clear we cannot attribute it solely to organic disease of that organ.

2. Other writers regard the disease as inflammation of the brain or its membranes. Now it is granted, of course, that such cases do occur, but they are rare; and it is contended that, in ordinary cases puerperal mania does not arise from inflammation, and the results of *post mortem* examination are in favour of the latter opinion. Burns, Campbell, Davis, Lee, and others, speak of it as a modification of phrenitis; Burrowes, Pritchard, Gooch, &c., as not being inflammatory. The latter distinguished observer thus gives the result of his experience: "In No. 1, the disease occurred in a pale lady, without any heat of skin, or much quickness of pulse, and was not relieved by loss of blood. In No. 3, it occurred in one whose constitution was drained and enfeebled by nursing. In No. 4, it occurred in a pale woman, habitually hysterical, subject to bear dead children, from want of power to afford them life for nine months. In No. 5, it occurred in one in whom, for urgent reasons, the circulation had been reduced to the lowest ebb consistent with life. In No. 7, in one who had been living very low for a week, with such marked symptoms of the irritation of debility that, at first sight, I thought it was the close of some disease that had been overlooked. It was speedily relieved, not by cupping and purging, but by the tranquillizing and sustaining power of opium. In No. 8, the disease was treated, though with all possible prudence and moderation, as an inflammatory state of the brain, by leeches, cupping, purging, and low diet; yet the patient died, not with symptoms of oppressed brain, but with those of exhaustion; and, on

examining the body, the whole venous system was found extraordinarily empty of blood. In No. 10, the patient fell as if shot, under the stroke of the lancet; and, on examining the head, there was found no effusion, and empty blood-vessels. In No. 11, the disease came on after puerperal convulsions (a disease generally, but not always, depending on cerebral congestion), and after one of those enormous bleedings commonly practised in these cases, and no morbid appearances were discovered, after death, in the brain. These cases, if fair specimens of puerperal insanity, lead straight to the conclusion that the disease is not one of congestion or inflammation, but one of excitement without power^(a).

Add to this, that Esquirol found no traces of cerebral inflammation upon most careful examination.

3. Dr. Marshall Hall believes that the disease "results, in general, from all the circumstances following parturition combined, but chiefly from the united influences of intestinal irritation and loss of blood." "I am persuaded," he adds, "that real puerperal phrenitis is comparatively a rare disease, that puerperal mania is seldom of an inflammatory character, and that it is especially to be treated by those measures which are suited to the mixed case of intestinal irritation and exhaustion"^(b). That many cases occur in patients exhausted from some cause, the extract I have given from Dr. Gooch will prove, and that the stomach and bowels are disordered in most cases is recorded by almost all writers, so that we cannot deny that Dr. M. Hall's view has much to support it. Nevertheless it does not seem to express the whole truth, nor is the want easily supplied with any degree of precision.

4. The explanation of Dr. Gooch, which I have already quoted as to the peculiar nervous susceptibility induced by the organic changes consequent on impregnation and child-bearing, although I believe it to be correct, is necessarily vague; nor

(a) On Diseases of Women, p. 144. (b) On Diseases of Females, p. 251.

is the view of Dr. Ferriar more accurate. He says: "I am inclined to consider puerperal mania as a case of conversion. During gestation and after delivery, when the milk begins to flow, the balance of the circulation is so greatly disturbed as to be liable to much disorder from the application of any exciting cause. If, therefore, cold affecting the head, violent noises, want of sleep, or uneasy thoughts, distress a puerperal patient before the determination of blood to the breasts is regularly made, the impetus may be converted to the head, and produce either hysteria or insanity, according to its force or the exciting cause."

Perhaps it is best simply to enumerate shortly the elements which may concur to produce the attack. We have the nervous shock varying in degree, but always increasing the nervous irritability, the great vascular change, the disturbance of respiration and circulation, the exhaustion, and in many cases the loss of blood; this combination must necessarily leave the nervous system in a favourable state for the operation of the exciting causes I have enumerated, and the result is mania.

The treatment of puerperal mania is very simple as regards the materials, yet requiring calmness and judgment in their application.

1. Those who regard it as any modification of phrenitis, of course recommend blood-letting, with more or less liberality. Now, from what I have said as to the nature of the disease, it will be clear that for these cases it is inadmissible, or, if ever used, it must be with extraordinary caution, and by means of leeches, in cases where there is strength and quickness of pulse, and flushing of the head and face. I have, however, never found it advisable; and Esquirol, Haslam, Gooch, Burrowes, and Pritchard, are all opposed to it. The last-named author remarks: "If we consider that the greatest danger to be apprehended for patients labouring under puerperal madness arises from a state of extreme exhaustion, that many women die from this cause within a short interval from the commencement of

the disease, and that, if they survive this period, the healthy state of the mind is in most instances restored, it will be evident that our chief endeavours must be directed to the present support of life." "Blood-letting, as a general remedy for puerperal madness, is condemned by all practical writers, on whose judgment much reliance ought to be placed"^(a).

2. When the stomach is overloaded, when indigestible food has been taken, or even for the purpose of lowering the pulse by the shock of vomiting, emetics have been found useful. They must, however, be used with caution when the face is pale, the skin cold, and the pulse quick and weak. Dr. Gooch prefers ipecacuanha to antimonials. Dr. Burrowes recommends nauseating doses of tartar emetic, with the saline mixture and digitalis, for the purpose of reducing the violence and fury of the patient; and Dr. Beatty informs me that he has derived great advantage from tartar emetic.

3. From the almost universally disordered state of the bowels, great relief is afforded by one or two brisk purgatives of calomel, followed by castor oil or Gregory's Powder. The stools are dark-coloured, and highly offensive; and in addition to the advantage of clearing out the bowels, purgatives act admirably as derivatives from the head.

4. After the bowels have been freed, the greatest benefit will be derived from narcotics. Denman prefers small and repeated doses of opiates, but Gooch, Burrowes, and Pritchard recommend full doses, and with this I concur: ten grains of Dover's Powder, twelve drops of black drop, or an equivalent of the other preparations of opium. If opium disagrees, hyoscyamus may be given; and should sleep be induced, repeated small doses may be administered; when the head is very hot, and face flushed, we should postpone the exhibition of opium, and we must guard against constipation.

5. The head may be shaved, and a cold lotion applied; if

(a) On Insanity, p. 313.

the delirium continue, a blister may be applied, but it is not generally necessary.

6. In protracted cases, or when the patient is exhausted, nourishing diet, broths, &c., and even tonics, must be allowed; ammonia, with cinchona; oil of turpentine, &c.

7. As uterine inflammation not uncommonly arises in the course of, or follows puerperal mania, a close watch should be kept for the earliest symptoms, and if they appear, calomel in small and repeated doses, or mercurial inunction, should be added to the other remedies, with such other local applications as may be deemed advisable.

8. It will be necessary to keep the most careful watch upon the patient; the nurse, who ought, if possible, to be one familiar with such attacks, should never leave the room; friends ought to be absolutely refused admission; the apartment kept slightly darkened, and the entire house perfectly quiet.

9. When the mania disappears and the patient is convalescent, a change of air and scene is most advisable.