

**ART. II.**—*Remarks on some of the Diseases incident to a state of Pregnancy.* (Read before the Lexington Medical Society January 18, 1833, and published at their request.) By JOHN E. COOKE, M. D.

**GENTLEMEN:**

IN appearing before you this evening, I do it under great disadvantages. A press of business of various kinds almost forced me to put off preparing last week, and the whole of this I have spent in a sick chamber. I must therefore request your indulgence with regard to any defects of style you may observe in the hastily prepared remarks which follow, and desire you to regard chiefly the facts which shall be stated. It is proposed to make some observations respecting the treatment of some of the morbid affections incident to a state of pregnancy, and some that immediately follow parturition. It may seem unnecessary for me to take up this subject, seeing that it is the peculiar province of one of our professors, and that most of those who are present will have, or have had, an opportunity of hearing every thing that need be said upon the subject. With all due respect however for the professor alluded to, it is thought for several reasons no undue interference with his province. It is not the information alone, which is conveyed in a statement of facts, that is valuable to the members of the medical profession. It very often happens that a man derives more benefit from being *set to thinking* by a new remark, than from the information contained in it. He may be led thereby to something far beyond even the capacity of him who made the remark. Happy should I be if I should thus this evening strike a spark in the mind of some one here, which should by pro-

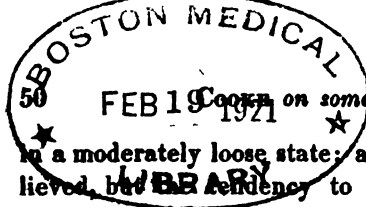
per care become in his mind a light to illuminate us all, and enable us to see things clearly which are now involved in obscurity.

To proceed with the subject. Soon after pregnancy commences, nausea and vomiting are common—and sometimes to such a degree as to be very distressing. Many attempts have been made to relieve those who suffer considerably in this way, but with very little success. It is one of those efforts of the constitution, commonly called efforts of the *vis medicatrix naturæ*, which arise out of the state of the patient, and have a salutary tendency. This is evinced in this case, by the fact, stated by a man of most extensive experience, Dr. Denman of London, that women scarcely ever suffer abortion until after the time of the cessation of the vomiting. This being the case, it is evident that we ought to take care to produce the good effect which flows from the vomiting, in some other way, before we venture to put a stop to this natural effort of the constitution to relieve itself from danger. And in order to do this, we must determine what good effect it is that, in this case, flows from the vomiting.

Vomiting has the effect in a remarkable manner of distributing the blood equably throughout the system, and therefore powerfully counteracts any tendency to congestion in the internal veins, which may happen to be present. Such a tendency exists in the system during the first months of pregnancy; as is manifest from the consideration, that the regular periodic discharge of menstrual blood does not appear—and this being the case for several successive periods before there is a call for the whole of the blood retained, for the growth of the fetus, there must be an accumulation in the vessels, greater or less in proportion to the circumstances of the patient, and which in those who are previously in a state of congestion from other causes, must often produce such a degree of it as to give rise to morbid effects. That such effects do appear, as are often produced by congestion, every practitioner may have observed. The patient is, for instance, costive, troubled with headach, vertigo, drowsiness, pain in the back,

sallow and of a bilious cast, and frequently distressed with piles. Moreover, as soon as the counteracting influence of the daily vomiting ceases to be exerted, the presence of internal congestion is shown by the frequent occurrence of hæmorrhage from the uterine vessels, preceded and accompanied by other effects of congestion. It is manifest that the daily vomiting tends to keep the blood circulating, and that when this ceases the superfluous blood if there be any must accumulate in the interior veins. There is, therefore, a strong tendency to congestion in early pregnancy, and the daily vomiting is admirably adapted to counteract it. If a curious enquirer should ask, why is such care taken to counteract in this case particularly, the tendency to congestion, it might be replied—that as the blood retained must be retained especially in the vessels from which it was about to issue, the congestion must be especially great in them, and as this state of the vessels is unfavourable to the proper action of every part of the system we are acquainted with, there is the strongest presumption that congestion in these vessels at the commencement of pregnancy would endanger the proper action of the parts, and therefore provision is made to prevent it.

The inferences to be drawn from these remarks are, that in early pregnancy the vessels of the uterine system are in a state of congestion—that this state is counteracted by the daily vomiting—that we ought not to stop this, if we could, without substituting some other effectual means of preventing the effects of congestion, or without removing congestion—and that if we were to do so, without removing congestion, we should probably bring about, by stopping the vomiting, the effect observed often to occur even when it spontaneously ceases, hæmorrhage and abortion. We may also infer that a remedy which daily tends to lessen congestion, is well adapted to prevent the evil effects that would flow from a cessation of the vomiting, and therefore to render the vomiting unnecessary, and consequently to put an end to it. Such a remedy is found in those medicines which keep the bowels



in a moderately loose state; and not only is the vomiting relieved, but **LIBRARY** tendency to hæmorrhage and abortion prevented, by procuring two or three passages daily. And even after hæmorrhage has appeared, the same treatment is effectual in carrying it off. In this case however the practice should be a little more active; and such a number of pills of jalap or rhubarb with aloes and calomel, as will operate briskly, I have long relied on in such cases; and have found the hæmorrhage almost always disappear as soon as the medicine acts freely—and if there is any remaining, it soon ceases under the continued operation.

Not only is the danger from hæmorrhage obviated in this way, but other effects of congestion, headach, and pains in other parts, and all the uncomfortable feelings which flow from a costive state, are carried off, or never appear if the plan be early adopted.

After pregnancy has advanced a few months, the action of the heart, it has long been observed, becomes more and more vigorous, until at length it is so strong as to have caused some writers to speak of such patients as being in an inflammatory state, and always bearing bleeding well, and often requiring it in every malady that befalls them. During this period women are generally most free from disease; but in the progress towards it, some of the effects of congestion are often present, so that a loose state of the bowels is to be preserved in order to keep them in the most favourable condition. They are often at this middle period of pregnancy, under no necessity of taking any thing to move the bowels; but being in a vigorous state of health, the system acts as it should in this as in other respects. Under the influence, however, of some of the remote causes of disease, we occasionally find patients labouring under various morbid affections. We find them suffering from disordered state of the liver, stomach and bowels, kidneys, head, uterine system, and even the skin. Thus I have seen a patient, who had lived a luxurious, indolent life, without exercise, and who had been in a bad state of health from these and other causes, and repeated-

ly miscarried, with the following train of symptoms. Vertigo and other similar distressing affections of the head, disordered state of the stomach, liver and bowels, leucorrhœa, and occasionally hæmorrhage from the uterine vessels, and erysipelatous blotches of the skin appearing and disappearing. All these yielded to the continued use of medicines which produced a laxative state of the bowels. The head, the stomach, the liver and bowels, the skin, were all relieved—the leucorrhœa and the menorrhagic symptoms disappeared, and although the patient had repeatedly miscarried, not having had a living child for several of her last pregnancies, she went on safely the full time under this plan of treatment. What made this case somewhat more remarkable was the circumstance, that her sister in law, (whose manner of life was similar, and who had in every pregnancy incurred great danger from hæmorrhage,) being at the same time pregnant, her husband, who was a physician, consulted me in her case. He was advised to treat her as above. He refused, in a very pointed manner, to adopt it. She went on as usual, fell into hæmorrhage, and after suffering a great deal, died.

In every combination of the symptoms above mentioned, with hæmorrhage or without, the plan mentioned has been followed with the most marked success. Hæmorrhage is not however so apt to take place in this middle period of pregnancy as at a more advanced stage. It might be considered sufficient to state the fact: it is allowable however to mention some circumstances which may tend to produce this, particularly as a hint may be drawn therefrom as to the treatment which may be advisable in order to prevent it. When the patient is in the vigorous health above mentioned as often occurring in mid-pregnancy, the appetite is almost insatiable. The consequence is, the formation of an immense amount of blood, more by far than the system requires for itself and for the fœtus. Congestion is the inevitable consequence of this, notwithstanding the increased activity of the heart—all beyond that quantity which it is capable of circulating, necessarily falling into and accumulating in the

great interior veins. This view of the matter would lead to the conclusion, that diminishing the fulness of the vessels would tend to prevent miscarriages, and this is true, undoubtedly. Hence the laxative state of the bowels should still be maintained.

Such a result from full living would be more apt to take place if the patient should be at the time exposed, as is very often the case, to the action of some of the remote causes of fever. For example in an autumnal season in which the cause of fever abounds, women are particularly apt to miscarry. Here undoubtedly congestion must exist, because all the causes of fever necessarily produce congestion before they can produce fever. Such cases evidently would be benefitted by reducing or lessening the congestion, if it can be done safely. Experience shows this can be done, not only with safety, but with marked advantage, insomuch as with a great deal of certainty to prevent miscarriages so apt to occur in such seasons. A case treated in this way, and in consequence of this train of thought, is well deserving attention.

A woman about thirty-five years of age informed me one day that she had never had a living child, but had miscarried about half a dozen times in the seventh month. On inquiry I found that she had symptoms which indicate congestion, and that hæmorrhage had always preceded the loss of the infant. She was advised to take pills of jalap, aloes and calomel, enough to produce two or three discharges from the bowels every day. She promised to do so, but the pregnancy advanced without her having complied with her promise, and hæmorrhage commenced as usual. In this condition she asked for assistance, and took mercurial cathartics immediately, with the effect of arresting entirely the discharge. She was then urged to continue the medicines regularly until the full time—but entirely neglecting the advice, she fell in a month or six weeks into the same condition. She again applied, was again treated in the same way, with the same result of immediately moderating and in a day or two put-

ting an end to the discharge; and continued to the full period, and had for the first time a living and healthy child.

Another case is quite as remarkable. A woman of short stature, very gross, and about thirty years of age, had lost six children under the following circumstances. About the commencement of the ninth month, she was in every instance affected with pains in the head, back and abdomen, with loss of appetite, sick stomach and costiveness; and after three or four days, or a week, she had in addition to these, hæmorrhage from the uterine vessels. This continued with more or less violence until she was delivered, two, three, or four weeks. The children were all born alive but one.—They had no appetite, fell away rapidly, had a discharge of black blood from the mouth, and died within the month. In her seventh pregnancy she was affected as usual, in all respects. Being consulted, I advised pills of jalap, aloes and calomel, to operate freely on the bowels. The effect on the hæmorrhage was manifest; but the patient was very unruly, and would not take any cathartics after the first one or two, but such as she chose, and when she chose. The result was the loss of the child in the usual way, but after such manifest good effect from the medicine, that both the patient and her husband, were convinced of the propriety of the treatment; and therefore, in the next pregnancy, they applied again. In the commencement of the ninth month the usual symptoms appeared; but before they had progressed much, and before hæmorrhage had made its appearance, she took a cathartic which operated well—on the next day another—on the third, her bowels were so loose that she took nothing. This state continued and she had three or four passages every day for the whole month; she had no hæmorrhage, and at the proper time a healthy child, which was living years afterwards.

It is unnecessary to particularize all the symptoms which occur in pregnancy, the heart-burn, the piles, the colic, œdematous swelling of the limbs, &c. and all the rest are prevented by the early adoption of the plan proposed, and

are relieved and carried off by the same if adopted after their appearance.

Patients so treated are moreover free from that inability to move actively, which is a very common result of indolence and full living. The vessels are loaded with blood, so as apparently to interfere with the action of all the muscles. Be this as it may, the fact is, that the use of such remedies removes the stiffness of the limbs, the inactivity of the body, and the patient moves about with life. This may be in part owing to the removal of some degree of œdematous swelling of the limbs, not yet perceptible. It is certain that such a swelling would in some degree interfere with the action of the muscles of the limb; and it is equally certain that when such swelling has advanced, so as to be manifest, a laxative state of the bowels continued as above mentioned, will carry it off entirely.

This treatment has some other most beneficial effects. In the act of parturition great changes are to be produced in a very short time. The soft parts surrounding the vagina are to be dilated in a most extraordinary manner; and to be reduced to such a degree of thinness as is scarcely conceivable by those who have not witnessed it. This can only be effected by the expulsion of the great mass of the fluids contained in the vessels of the parts—which is effected partly by being driven on through the veins to the heart, and partly by an increase of the secretion of the parts. Such is the attenuation of the parts, and so complete the arrest of the circulation of the fluids through them at the moment of the greatest distension, that if continued for several hours (in consequence of an entire suspension of the labour) the parts are exceedingly apt to die and slough away; of which I have known several instances.

This process of attenuation, by the expulsion of the fluids from the vessels of the part, takes place in every labour which terminates favourably. The thickness and rigidity of the soft parts, and their indisposition to become thin, is the main difficulty in many cases, and the greater or less ease



with which they yield, constitutes the chief difference between easy and difficult labours, when the pelvis is well formed. Whatever therefore tends to facilitate this process of attenuation, must tend to facilitate and shorten the labour. And the reverse. Those who live indolently and eat freely, it has been already remarked, are unwieldy in their motions, from the fulness of the vessels which are seated in the muscles. The same extreme fulness, excessively distending every part, thickens and enlarges them. And this is the very state which is obviously present in the soft parts which are to be dilated, in those who have slow and difficult labours. The vessels of these parts are not only full of fluid, in common with every other part of those who live indolently and eat a great deal, but they are particularly liable to be over-distended and to suffer a continued distension in consequence of the constipation common with such people in a pregnant state. These vessels therefore are full as possible; they have suffered excessive distension, and have become inactive, so that the process they have to go through in labour, of expelling all the fluid in them, is slowly carried on, and so imperceptibly in some cases, that days are spent in that which is often done in two or three hours.

This being the state of the case, it is obvious that a laxative state of the bowels, by keeping down general fulness, and the extreme fulness of the vessels of the soft parts in question, and by obviating costiveness and the consequent excessive and continued distension of them, must not only prevent the great degree of thickness of the parts that must otherwise exist, but also the rigidity arising from the continued distension of them, and their consequent comparatively sluggish action in getting rid of the fluids in them, until which is effected the passage of the infant is impossible.

Practice confirms this view of the subject. I never knew difficulty to arise from this cause where laxatives had been regularly taken. The success which accompanied this treatment was the cause of many applications in which great difficulty was apprehended, and some most remarkable cases fell

thus into my hands. During a residence in Winchester, Virginia, for several years I had the regular care of a great number of persons whenever in labour, and this plan was uniformly adopted; and it is a remarkable fact that a full fourth part of the number had such easy and speedy labour, that it was impossible to reach the house before it was over. They were all in town. One case occurred of so remarkable a character that it must be stated. A man with whom I was very well acquainted, and in whom I could place confidence, applied for a woman who was the wife of a tenant. The story he told was this: that she had several times been pregnant, but had had such lingering labour that the physicians of the neighbourhood had in every instance destroyed the child to save the mother. She was then pregnant, and a consultation having been held, it had been decided to procure premature delivery after the manner alluded to by Denman, of evacuating the water in the eighth month. She had heard of the effect of some medicines administered in such cases by me, and desired to try them. Without giving any opinion whatever of the probable result, I told him I would give him the medicine with which he might do as he pleased. She took it regularly, and he afterwards informed me, had a healthy child in due time. I know no more of the case than is here stated, as the patient lived sixteen miles off, and I never saw her. The medicine taken in this case consisted of jalap, aloes and calomel in equal parts, made into pills with water alone.

After child birth, a fever almost invariably comes on, in about two or three days. Those who are not treated in the way proposed during pregnancy, fall almost inevitably, from the length of time they are in that state, and from the various causes acting upon them in the course of it, into a state of congestion. If this be considerable, the fever which follows parturition is so too, and is often extremely violent. The obvious mode of preventing this, is to keep down congestion, which is to be effected by laxatives, and these are so effectual, that, excepting cases of extreme imprudence, as

where a patient arose on the day she was delivered, and went to the door to speak to the servant in the kitchen, in February, when the ground was covered with snow, I have never known a fever, to be worth regarding if the patient followed the plan faithfully during pregnancy, and afterwards for a short time. There need be no interruption, at least of more than a day, that immediately following the labour, during which the discharge of blood is considerable; and no evil arises from taking the medicine on that day.

The fever occurring in consequence of such exposure, or in cases in which the patient had not been thus treated during pregnancy, has always been readily controlled by bleeding, purging, low diet, cool drinks, free ventilation, and avoiding too great warmth in bed. So far from any impropriety in purging patients in child-bed, they very often require it then more than at any other period of their lives. They have been living for months a sedentary life, eating freely, and have become full of blood. This by the vigour of the action of the heart above mentioned, has been kept circulating with great force up to the time of delivery. During labour they are depressed by fear, exhausted by their almost incredible efforts, and the action of the heart sinks down, frequently, into extreme feebleness. The blood being now thrown into the arteries in much smaller quantities than before, is necessarily left in the great veins, which pour it into the heart. The hepatic veins therefore, which enter the great venous trunk close to the heart, are necessarily greatly distended by the accumulation of blood, caused by the diminished action of the heart; and this distension necessarily extends to the smaller veins which pour their blood into these larger ones. The parts in which these smaller veins are situated are the bowels at large, the uterus, &c. All these are, in the state the patient is in, in a relaxed condition, ready to yield to any determination of blood to them; and accordingly we find in most cases, in which no steps have been taken to guard against it, more or less fulness and tension of the bowels or uterus; so great sometimes, as to produce uneasiness, often

discoverable by slight pressure on the abdomen, or uterus, and frequently causing pain, sometimes most excruciating.

Every thing here stated is consistent with the nature of the parts, the peculiar condition they are in, and the effect of the great and sudden change in the circulation upon them; and is confirmed by the facts of the case. The system at the time of parturition is very full of blood in healthy people, if steps have not been taken to diminish the quantity. The blood is kept in free circulation until that time, by an action of the heart more vigorous than is observed at any other period, in health. After parturition the action of the heart actually subsides into extreme weakness. Though we cannot see it, yet it is as certain as if we could, that the blood at this period is accumulated in the veins entering into the heart. This accumulation must distend the hepatic veins, which enter the vena cava close to the heart. It must therefore distend the branches of these veins even in their ordinary state. At the period in question they actually are, together with the parts in which they are situated, in a relaxed condition, and therefore must yield more than common to a distending force pressing into them. And lastly we continually meet with cases in which with an extremely weak pulse, the abdomen is greatly distended, or the uterus, or both, with great pain in them, increased by pressure, and continuing till the last beat of the pulse, if the patient dies.

In this state of things it is evident that the only way to relieve the patient is to lessen the fulness of these vessels. The pulse is however often so low that bleeding is unsafe, and I have seen a patient die in five or ten minutes after bleeding. The only other way left to effect this object is by procuring free discharges from the liver, which being supplied with blood for the secretion of bile by these very veins, discharges from it take off, in a very direct manner, from their fulness, lessen the tension, and remarkably relieve all the symptoms, pain, &c. Such discharges are in general readily produced by the common mercurial cathartics. Sometimes however extreme difficulty occurs, and then there is no alternative but

this, to persevere until the object is effected, or let the patient die. I have seen a patient take pills of scammony, aloes and calomel in this state, with the most marked advantage from the discharges; so that upon the cessation of the operation in the night for some hours, the pain returned, and continued severe until the discharges were restored by the same means, when it immediately ceased. It is to be remarked, that, as any cathartic medicines sometimes produce griping even in persons in pretty good health, these medicines in the painful state the bowels are, in the disease under consideration, often produce severe pain. Senna and salts do the same. But this is an unavoidable inconvenience. The patient must bear it, or cease from all efforts to escape death.

Those who use the cathartic medicines, as above mentioned, regularly during the last months of pregnancy, are preserved also from the distressing swelling of the breasts—so that I have no recollection of any case in which the patient, if treated thus, was under the necessity of having the breast lanced. By keeping down the feverish state, and avoiding distension from the superabundance of milk, by regular attention to having it drawn off, the inflammation is effectually guarded against.

Sometimes the discharge immediately following the birth, called the lochia, ceases entirely on the first or second day. The consequence of this is fever, and frequently excessive hæmorrhoidal swellings. To prevent both, the moment the discharge is known to have ceased, pretty free discharges from the bowels should be procured. The mercurial cathartics, as rhubarb, aloes, and calomel, are very effectual. If the piles are very sore and painful and the mercurial cathartics are slow in acting, they may be aided by small doses of Epsom salts—about a drachm every two or three hours until they begin to act. Two or three drachms are generally enough. The same will be found very beneficial when the discharges are acrid and painful: The pain and soreness will be removed in a very short time in this way, if it be followed early; say on the first day of their appearance: afterwards it is less effectual, but still useful.

Another disease that women in child-bed are liable to is the phlegmasia dolens, or as it is commonly called the swelled leg. In general the physician is not called to take charge of such cases until the leg is excessively swelled, tense and shining. But in the commencement of the enlargement the leg is soft and even œdematous: at least I have known such cases. The first symptom which attracts the patient's attention is severe pain in some part of the leg; generally in the calf, or on the inside of the thigh, just above the knee, and sometimes higher up, and even in the groin. This is the time to be of service to the patient—little can be done after the leg is fully swelled. The disease takes its course notwithstanding all the efforts of the physician, as far as my acquaintance with the subject extends, and the patient seldom recovers the use of the limb in less than three months. If in the commencement the patient be bled, and purged actively, and blistered upon the part where the pain is, the disease is soon carried off—sometimes in a few days—at others in a week or two. If the pain after being removed from one part, attack another, another blistering plaster should be used, and another if necessary.

The result of the whole matter is, that in the course of a number of years practice, in which the plan proposed, of purging moderately but almost daily during the latter months of pregnancy, was followed by a number of women of every rank in this country, the relief throughout from the various aches and ails incident to that state, was such, that there was no difficulty in inducing them to attend to the prescription—there was never a case of convulsions to harass the physician and the patient—never a case of puerperal mania—never a case of lingering, tedious and harassing labour—never a case but the one stated of puerperal inflammation—no dangerous illness following delivery—no fever—and nothing distressing but two cases of swelled leg—and both of these were speedily relieved by a more vigorous prosecution of the same plan of treatment, by purging with mercurial cathartics, together with bleeding, and likewise blistering that part of the leg which was in pain.