

The treatment of flooding must depend materially upon its severity, and the time when it occurs. In the early months, when the discharge is slight, and when it causes little distress, simple means will answer. The patient must lie on her back, on a hair mattress, with the pelvis raised, by means of a pillow, higher than the rest of the body. The air must be kept fresh and cool around her; she must keep herself quiet in body and mind, live rather low, and drink freely of cooling drinks, such as soda water, lemonade, tamarind tea, or ice water.

If the flooding does not stop with these simple means, external applications must be made of cold, wet cloths, or even ice, over the abdomen, and inside the thighs. Finally, if further treatment is still needed, cold astringent injections may be carefully thrown into the vagina. Cold water is perhaps as good as anything for this purpose, and I have frequently known a most severe flooding checked immediately by injecting cold water into the vagina and rectum, and applying cold wet cloths over the abdomen, and inside the thighs. Some astringent drink may also assist, such as a little syrup of comfrey, or extract of rhatany, and particularly a tea made of the root of the black currant, as recommended before. If the patient be nervous and irritable, or suffer much from pain, an opium pill may be taken, or from ten to twenty drops of laudanum.

The general practice in these cases is to *bleed* freely and *give opium!* And as this practice certainly does succeed in many extreme cases, I should certainly recommend, if the simpler means fail, to resort to it at once. I dislike bleeding very much in any case, and here it seems particularly inappropriate; I should therefore say *try almost anything and everything first*, but never obstinately refuse to resort to it if nothing else succeeds.

In some cases a plug or tampon is used to fill up the vagina. It may be made of a roll of cloth, cotton, or a piece of sponge. This practice, however, is useless in the latter months of pregnancy, and very often fails even at other times. When it succeeds it causes the blood to coagulate, and thus closes up the mouths of the vessels. Quite as often, however, it only keeps it in, and makes it accumulate in the womb till it all rushes away at once; still it may be tried.

If the hemorrhages should occur so frequently, or be so excessive, in spite of all treatment, as to endanger the safety of the patient, there is no other resource left to save her life but to produce abortion, because the presence of the foetus and its appendages is evidently then the irritating cause which keeps up the discharge, and it cannot be expected to stop till the womb is emptied.

ABORTION, OR MISCARRIAGE.

When the foetus is prematurely expelled before it can survive, it is called an *abortion*, but if its expulsion takes place so late that it can live, it is called *miscarriage*. Both these are serious accidents. In abortion the child is lost, as a matter of course, but in miscarriage it may live, after the seventh month. The danger to the mother is considerable from both, though greatest probably from abortion. It is probable that many very early miscarriages take place unperceived, the female suffering but little from the accident, and the embryo being too small to be seen, unless carefully looked for.

The most frequent periods for such accidents are found to be six months, five months, and three months; and what is very singular, a much greater number

of male children are aborted than females, the proportion being about sixteen to eleven.

These accidents are so intimately connected with flooding, that many writers always treat of them together, considering the flooding merely as the most frequent cause and symptom of miscarriage or abortion. In speaking therefore of the immediate causes of premature expulsion of the foetus, we place hemorrhage first, and the causes before enumerated, which produce that, as being its most frequent remote ones.

A full habit, with tendency to local congestion, seems to predispose a female very much to miscarriage. Every one so constituted should carefully avoid luxurious living and an inactive life. Violent bodily exertion, falls, or blows, or strong mental excitement are most usually the immediate causes, though with some it will come on spontaneously without any such exciting agencies. Some females will miscarry many times in succession, and always so near the same period, that they can tell to a day or two when it will happen. It seems to become a *habit* of the womb, with them, to contract at that particular time, and the only way to break through the habit is for them to avoid becoming pregnant for some considerable time, say two or three years after; they may then go the full time, but will seldom do so if they conceive immediately after having miscarried. In some persons miscarriage is caused by a *too eager* gratification of certain desires, but in others it may arise *from the opposite cause*.

There is a disease of the womb also by no means unfrequent, though but little understood, which undoubtedly causes much miscarriage, and that is *rheumatism of the womb!* This mostly exists before the pregnancy, however, and should be then attended to.

Miscarriage also arises in many females from a rigid state of the muscular fibers of the womb, which not relaxing sufficiently to allow that organ to expand, become irritated by the pressure they experience, and begin to contract. This contraction of the womb of course soon leads to the expulsion of its contents, the same as in real labor. Women with their first children are more liable to miscarriage than others on this account, the womb not having become habituated, as it were, to the necessary relaxation.

And this is the reason also why some females, after suffering from this accident many times in succession, at last escape it. In general, they miscarry early the first time, from the womb not relaxing sufficiently, but go a little longer the next time, and longer still the next, and so on, till they reach the full period. The fibers of the womb have gradually become accustomed to relax, and have borne the irritation longer and longer each pregnancy, till at last they have forborne to contract till the proper time. I knew one female who miscarried *twenty-one times* in succession, getting gradually nearer to the full period each time, till at last she reached *nine months*, and was rewarded with a living child.

Sometimes the accident may be produced by a uterine tumor, by a great quantity of water in the womb, or even by there being more than one child, because in either of these cases there is required more room than ordinary; and of course from the greater expansion required, the liability is increased. Various womb diseases may also be mentioned as causes, such as adhesions of its body, or ligaments, to the walls of the abdomen, and also a diseased state of the placenta. The pressure of corsets and tight dresses also not unfrequently leads to the same result. Some general diseases undoubtedly often cause miscarriage, such as measles, jaundice, scarlet fever, con-

sumption, and probably many others, particularly those in which the quality of the blood is much altered, or the nervous power much exalted or depressed. Convulsions have already been mentioned as being frequent causes of miscarriage, and all strong mental or moral impressions. Indeed, these last causes operate more than is suspected, and make it necessary for a pregnant female to be kept as calm in her mind as it is possible for her to be. I have even known one to miscarry from a fright *in a dream*.

It is also a fact, though not generally known, that there are certain diseases of *the father* that may produce miscarriage, and unfortunately they are of that kind that often remain for a long time in the system without much external manifestation, so that many persons think they are perfectly free from them even while they are working great mischief.

The death of the child also is sure to produce miscarriage, and this may result from various causes, such as external injuries and violence, or from remaining too long in the warm bath, and thereby causing congestion of blood in the womb. Small-pox and syphilis in the mother may also cause the death of the child, though not always, many having been born at full term with these diseases upon them.

In general the fœtus is expelled very soon after it dies, but occasionally it is retained for a considerable time, and may not pass away till it is completely decayed. It has even been known to become almost fluid, and several months elapse before it was entirely expelled. Most women know when it dies, by its seeming to fall down to the bottom of the abdomen, like a dull weight, and also by its feeling very *cold*. Very often, however, there is no indication of its death whatever. M. Chailly mentions a case where the embryo died, probably when about fifteen days old, but the placenta continued to grow, and the lady was delivered, when about six months and a half gone, of the dead embryo, only about a quarter of an inch in length, though the after-birth was nearly large enough for one of the usual size. In this case it had died but not decayed, and remained in the womb six months and a half. In cases of twins also, one will sometimes die at an early period, but remain till the other is born at full term.

The *growth of the placenta over the mouth of the womb*, and *shortness of the cord*, have already been referred to as causes both of flooding and miscarriage; and to these may be added monstrous or deformed fœtuses, which rarely reach the full term.

It is probable that there are many constitutional and individual peculiarities predisposing to miscarriage, with which we are not much acquainted, and which may account for the constant occurrence of that accident in many females, notwithstanding all we can do. A *scrofulous* taint is with good reason supposed to be one of these, and it is probable that the *disease of the placenta*, and its consequent separation from the womb, before referred to, is mostly caused by a taint of this kind. In many instances where a female has miscarried from no apparent cause, if the placenta be carefully examined it will be found dotted here and there with diseased spots, sometimes *like scrofulous sores!* It is advisable always to ascertain this, and to carefully examine the fœtus and its appendages. In all cases the advice I gave, to *keep from being pregnant for some time*, will be found most likely to succeed in averting the accident, both because it gives the womb time to regain its strength and break through its *habit*, and also because it gives us time to operate upon the constitutional taint, if there be reason to suppose it exists.

It is a curious fact, but one often observed, that even *living in certain localities* predisposes to miscarriage. There is a certain district in France where the females are so liable to it, that all who can do so leave the place when they become pregnant, and thus escape the greater risk. Miscarriage also becomes epidemic at certain times, and prevails like contagious diseases; several instances of which are recorded in history.

Bleeding is also supposed to be a cause of abortion, and probably it may lead to it in certain states of the system, but by no means so certainly as many suppose. Instances have been known of pregnant females being bled from ten to twenty times without any evil result, even though carried so far as to make them faint. Mauriceau tells us of one who was bled *ninety* times, and yet was delivered of a healthy living child at full term. In like manner many other ordinary causes of abortion will often fail entirely of their usual effects. Thus Mauriceau informs us that a female seven months gone fell upon the hard pavement from a *third story window* and broke her arm, but yet did not miscarry. Madame Lachapelle also tells us of a young pregnant woman who threw herself down stairs purposely, from fear that she should have to submit to the Cæsarean operation, she having a deformed pelvis. The fall caused her death soon after, but did not make her miscarry. Certain powerful medicines are also taken by some, a very small quantity of which, in most cases, produces abortion immediately, but without effecting what they desire, though it sometimes poisons themselves.

Indeed the power which the womb sometimes exhibits to retain its contents, in spite of the most violent disturbing agencies, is truly astonishing. Cases have been known even where the womb itself has been severely wounded, and yet miscarriage did not take place; as in the case of a poor country-woman whom I heard of, who accidentally fell upon a sharp wooden stake, and ran it far into the body, injuring the womb in a terrible manner, but strange to say, though far advanced in pregnancy, she recovered and went safely through her full time. I have often known women begin to flood and suffer from dreadful pain, with other common symptoms of abortion, as early as the second month, and yet they went safely the full time, though these signs continued the whole time. In some cases the waters have even been partially discharged, and yet abortion did not result. M. Velpeau tells us of an instance where the bag of waters broke, in a female six months gone, and one arm of the child even came down into the vagina, and yet the arm returned, the discharge ceased, and she went her full term.

The *progress of a miscarriage* varies according to the time at which it occurs, and the causes from which it arises. When it results from any violence, or accident, it usually takes place in a short time, and is preceded by abundant flooding, which comes on immediately. The discharge of blood, however, is less the nearer we approach the full term, so that a female six months gone is not in nearly so much danger from flooding as one only two or three months gone. The reason is this: in the early months nearly the whole of the fœtal membranes are attached to the womb, so that, in case of their being separated, it bleeds from nearly all its internal surface, but in the latter months the only point of attachment is the placenta. In the latter months also the womb contracts vigorously, and so closes its vessels, but in the early months its contractions are comparatively feeble. In those cases also, where the child has been dead a considerable time before its expulsion, there is seldom much flooding, the connection between it and the mother having been more or less destroyed by decay of the parts. The same result mostly follows a miscarriage from internal

disease, particularly of the placenta. Indeed, in some of these cases, the blood-vessels connecting the fœtus with the mother have been so completely destroyed, that no blood whatever could escape from them.

In regard to the probable consequences of premature delivery, it has already been remarked that it is more dangerous in the early months than the latter. It may also be added that it is much more dangerous, at any time, when caused by violence of any kind, or by forcing medicines, than when it occurs naturally. The danger is much increased if it occurs during fever, or any eruptive disease, or if the patient be suffering from diarrhœa or convulsions. As a general rule we may say, in all cases, that miscarriage or abortion is always more dangerous to mother and child than natural labor, both in its present and in its future consequences. During an attack of jaundice an abortion may terminate fatally in a few hours; and very frequently the trouble with the after-treatment is very great and long-continued.

The treatment in an accident of this kind must vary according as we are required to prevent it, or to remedy the evils that follow when it has occurred.

If an abortion be threatened from any cause, the same general practice must be adopted as recommended for *flooding*, the indications being the same. I believe myself that in most cases, except from accidental violence or internal disease, miscarriage may be averted. I knew a lady who had miscarried many times, always at the same period, who avoided it at last by simply *preventing constipation* from the first commencement of pregnancy, and by using an enema every evening of warm starch and water, pretty thick, with about thirty drops of laudanum. This was administered by means of a common injection pipe, just before going to bed, and continued till after she had quickened, and repeated occasionally after that, if she felt any premonitory symptoms of uterine disturbance. If the patient be of a full habit, she should also, *from the very beginning*, live low, keep the bowels free, and the skin in good action, and take gentle regular exercise in the open air.

When all the means used are found of no avail, and it becomes evident that the fœtus must be expelled, every endeavor should be used to assist nature in its removal as early and as safely as possible. For this purpose, the same treatment, as far as practicable, must be pursued as in a real labor. If the hand can be conveniently introduced, without undue force, it may be so, to remove clots, or to take hold of any part of the fœtus which may present, and assist in its extraction. In the early months, considerable help may be given sometimes by introducing the finger into the mouth of the womb, with a little extract of belladonna, to promote its relaxation, but no *force* must be exerted in doing so. If any part of the after-birth can be laid hold of, it should be withdrawn, but no extraordinary effort must be used to reach it. Frequently it happens that a portion of the after-birth remains in spite of all attempts to take it away, and there is a *possibility* that it may produce inflammation of the womb, but no very serious apprehensions need be felt of such a result, providing the patient is properly attended to in other respects. The retained portion gradually decays, and passes away, merely occasioning inconvenience, and being very offensive. The danger from leaving it, except at a very late period, is generally thought to be less than that from using any forcible means to remove it.

The best means for correcting the offensive discharge, are cleansing and antiseptic injections. Warm soap-suds made with tar soap are very good, or a decoction of Peruvian bark in water, or six drops of carbolic acid to the half pint of water. Strong *coffee* is also excellent, or a weak solution of chloride of lime or borax. The bowels

must be kept free, and the skin carefully cleansed and well rubbed. On all occasions when the hand can be introduced with moderate and safe efforts, it should be so, and the after-birth removed.

In conclusion it should be remarked, that the tendency to miscarry, like many female diseases, is undoubtedly owing, in great part, to the general debility and weakness which characterizes so many women at the present day, and which is brought on chiefly by neglect of their physical education when girls, and by their artificial mode of life afterwards.

CHAPTER LXXXI.

DISEASES OF CHILDBED.

Puerperal Fever, or Childbed Fever.

THIS is undoubtedly the most serious of all those maladies that so often follow labor. It appears from medical records that puerperal fever has been known from very remote times, and that it has frequently become *epidemic*, or has spread from one to another, like the cholera. In hospitals this has often been observed, and also in cities, sometimes almost every female delivered in the place having been attacked while it prevailed. There is also no doubt but that it is *contagious*, or capable of being transmitted from one person to another, like small-pox. Numerous instances have been known where nurses and physicians have conveyed it to all whom they attended, during a long period after having been with a single case. One physician, after attending a case of puerperal fever, lost nine patients successively from the same disease, before he suspected the cause; and an old nurse assured me, that when she was a young woman, she was the unfortunate means of conveying it to two females whom she visited, by merely having been in the room a short time with one who was suffering from it. It is therefore highly important that all persons who may happen to be with a female so affected should not attend another case of child-birth for some time, and particularly that they should not wear any portion of the same clothing they then had on, and that they should bathe the whole body several times. If a case occurs in a hospital or other public institution, the female must be carefully isolated from all the others, and none of her attendants must be permitted on any account to visit other puerperal patients, till after a sufficient time has elapsed, and every precaution has been taken.

The causes that produce this terrible disorder are not very well understood; some of them probably predispose to it before delivery, or even before pregnancy, while others are connected with labor and its consequences. Among the former may be mentioned improper diet, an inactive life, anxiety of mind, bad air, a damp situation, a full habit, or great weakness, the frequent use of stimulants, and *certain excesses!* The principal causes operating immediately are difficult labors, violent treatment, the use of instruments, tearing away the placenta too soon, retention of the lochia, cold, rising from the bed too soon, depression or excitement of the mind, over-exertion in talking to and seeing company, and neglect of cleanliness. The most frequent cause probably is cold or damp, which checks the lochia and the perspiration, and leads directly to inflammation. It is on this account that the complaint is nearly always worse in winter than in summer, and prevails most in low damp situations, and in badly ventilated apartments, or in those insufficiently warmed. In most warm countries, and in those of an equable temperature, where the females remain much in the open air, and use regular exercise, puerperal fever is but little known.

The nature of this complaint appears to be a severe and sudden inflammation, commencing either in the womb or some of the neighboring parts, which, if not arrested, rapidly extends to all the organs of the pelvis and abdomen, and hastens to a fatal termination with fearful speed. The precise seat, and place of commencement of the inflammation, vary in different cases, but this makes little difference either in the symptoms, consequences, or treatment of the disease, and it is of but little use to give a separate name to all these various forms. Uterine phlebitis, metro-peritonitis, puerperal metritis, and puerperal peritonitis, are all essentially the same complaint, and identical with what is called puerperal or childbed fever.

The disease generally appears from the second to the fifth day after delivery, but may be delayed as late as the fifteenth or twentieth day, or commence as early as two or three hours after; and has even been known to show itself before labor came on.

It usually begins with headache, general debility, uneasy feelings, creeping of the flesh, and chills: then follow tremblings, numbness of the limbs, cold feet and hands, with a burning heat in the body. The abdomen gradually gets tender, so that it cannot bear the slightest pressure, sharp pains are felt in various parts of it, and the patient continually complains of twisting and burning within. She prefers to lie on her back, with the head raised and the knees drawn up, so as to relax the abdominal muscles. Very soon she complains of great thirst, and cries out repeatedly from the sharpness of the pain; the headache increases, and the breathing becomes laborious. Hiccough generally occurs at an early stage, and is usually accompanied or followed by vomiting and diarrhoea, but sometimes by obstinate constipation. The abdomen continues to swell, and becomes still more tender; the face is pale, bathed with cold perspiration, and indicates in every line the anxiety and suffering under which the patient labors. The features seem to be drawn inwards, and together, or *pinched up*, and indeed the whole body seems to *shrink*. In general, the lochial discharge either stops altogether or lessens very much, the breasts remain empty, or nearly so, and the pulse is weak and irregular. In some few cases, however, the lochia continues to flow, or even increases, and the breasts remain full up to the time of death. The urine is high colored and thick, and causes smarting and burning as it passes away. The tongue furs and becomes pointed, and pale colored. The eyes often seem much engorged, and the white parts become yellow, as indeed the skin does over the whole body, owing to derangement of the liver, and alteration in the character of the blood. In most cases the mind retains its faculties nearly till dissolution, but there is frequently a vague sense of uneasiness and fear, with great depression of spirits and weeping. Some even feel assured, from the beginning, that they will never recover, and occasionally become delirious.

The duration of this disorder varies considerably, though in most cases it carries off the sufferer in a short time, frequently even in two or three days. It may however, last five, ten, or twelve days, and has been known to do so fourteen.

The manner in which it terminates is also different in different cases. The fluid resulting from the inflammation may either be absorbed, or suppuration may ensue and the matter be discharged, either from one of the natural passages or from an artificial opening; or it may not be discharged at all. Sometimes gangrene or mortification ensues, and sometimes the inflammation partly subsides and becomes chronic. When it terminates by resolution, which is the most favorable mode, the patient begins to improve about the fourth or fifth day; the pains become less acute, the

swelling and tenderness become less, and the milk, lochia, and other secretions that were suppressed, begin to reappear. The patient is also able to lie either on the back or sides, and soon feels conscious herself that she is improving. But even when a turn for the better has decidedly taken place, too much confidence should not be prematurely felt, nor should there be any relaxation of attention, for the slightest causes may bring back all the symptoms with more than their former severity. When supuration ensues, which is most commonly the case, a mass of fluid forms in the womb or abdomen, and is plainly indicated, either by its moving about or by a portion escaping from the body. In this case also the pain and tenderness decrease, and the abdomen seems less hard, but the pulse becomes weaker, a sense of weight is felt about the womb, the extremities become cold, chills come on, and gradually the powers of the system seem to fail till complete exhaustion ensues. When gangrene or mortification takes place, the termination is nearly the same, but more rapid, and all the above symptoms are more marked. When it passes into the chronic form, there is but little permanent abatement in the severity of the symptoms for some time; they partially lessen at intervals, but return again, sometimes with renewed rigor, and it remains long a matter of doubt whether the disease has really passed the critical period or not. Recovery takes place occasionally in this form of the disease, but more frequently the patient becomes daily weaker and more emaciated, diarrhoea and slow fever set in, the vital powers steadily sink, and at last death ensues. This fatal termination may however be delayed for an indefinite period, and may ultimately result from consumption or dropsy, both of which frequently follow chronic puerperal fever.

In regard to the probable termination of this disease, but little hope can be entertained that it will be favorable, nor are there many indications that can be relied upon with certainty as to what course it is likely to take. In general, it is favorable when the swelling subsides and the pains abate in severity, and particularly if the milk and lochia begin to be secreted again. The indications are also good in proportion as the symptoms are mild, and when there is no great sympathetic disturbance of other parts of the system. It is regarded as unfavorable when the pain and tenderness extend over a large portion of the abdomen, and when the attack commences very suddenly. The danger is also considered greater in proportion as the disease begins nearer to delivery; and when its first symptoms exhibit themselves before labor, it is always considered mortal. It is likewise more dangerous with twins than with a single birth, and with first children than afterwards. It is seldom possible however to come to any probable conclusion till between the fifth and tenth days, and even then it is in general a matter of great uncertainty.

The best treatment of this fearful disease is one of the greatest problems in medical science. So many different plans have been adopted, and with such various success, that the history of past cases affords but little reliable data to guide us in future ones. In general, the most powerful *antiphlogistic* measures, or those thought most likely to reduce the inflammation at once, are immediately resorted to, such as bleeding, purgatives, and cold bathing. Bleeding is in particular the great agent depended upon, either from the arm, or by cups and leeches to the abdomen and vulva. Dr. Gordon, of Aberdeen, in Scotland, who once met with a regular epidemic of puerperal fever in that city, assures us that nothing else succeeded in arresting the disorder but copious and frequent bleeding, at the very commencement. He carried it so far as to take *twenty-four ounces* at once, and he says that when he did so the patient

was nearly sure to recover, but that at first, when he only abstracted about twelve ounces, she was as nearly sure to die. In about fifty cases to which he was called in time, he only lost *five*, and taking the average of all he attended, the recoveries were about two-thirds of the whole number, which is above the usual proportion.

It appears however, from the experience of the most eminent practitioners, that the bleeding must commence early; that the first abstraction should not be omitted beyond twenty-four hours after the first symptoms of the disease, and should be as much earlier as possible. With very few exceptions, they also think Gordon's standard of twenty-four ounces not too much. Indeed it is generally admitted that if the blood be not drawn *at first*, and in *large portions*, it had better not be drawn at all. There may be, of course, many peculiar circumstances that will make bleeding improper, which nothing but experience and observation will teach a practitioner, but the number of such cases is thought to be small. The use of leeches meets with but few advocates, and certainly they seem to have had but partial success, compared with the lancet. Dr. Collins, of Dublin, depended chiefly upon leeches and calomel, but he tells us that in *eighty-eight* cases, *fifty-six* died when so treated, while in *fifteen* that were freely bled from the arm only *eight* died. In short, it appears that the bleeding must be carried far enough, *at the very beginning of the disease*, to cut it short at once, or it will be of no avail, it being of little or no use merely to *check* it! In conjunction with the bleeding, it is also usual to give enemata of starch and castor oil, or something similar, and to bathe the extremities in hot water.

I know that this practice of bleeding meets with strong opposition from many physicians, and that it is objected to by patients generally. I myself am as much opposed to it as any one reasonably can be, and I am well aware of the numerous evils which follow it, but still it cannot be denied that Dr. Gordon's plan has cured a greater number of cases of *puerperal fever* than any other yet tried. It is true that many of those thus cured may have afterwards died of dropsy, convulsions, typhus, and other diseases *produced by the bleeding*, but then the risk they ran of dying from these was less than that from the puerperal fever, and in a choice of evils we ought to choose the least. It should also be remembered that some eminent practitioners assert, if this plan be adopted *promptly and fully*, it will *always cure*, or at least with very few exceptions.

Several other modes of treatment have also been adopted to dispense with bleeding, some of which have been much more successful than others, though none so much so as we could desire. Thus some practitioners resort immediately to hot fomentations and sweating medicines, or a hot bath if convenient, together with brisk purgatives and injections. Some depend upon calomel in large doses, with leeches to the groins and vulva. Others again use cold fomentations, and cold injections both to the rectum and to the vagina. Others again use blisters over the abdomen, in conjunction with purgative enemata and moderate bleeding; but this mode seems to do but little good. Another plan is to give about six grains of ipecac, and to repeat the dose several times, at intervals of an hour or less, in conjunction with purgatives and warm fomentations. Turpentine has also been used internally and by enema, but seems to have accomplished little good. Perhaps the most frequent plan, after bleeding, is to rub one or two drachms of *mercurial ointment* well on the skin, over the abdomen, every two or three hours, sometimes for several days regularly, eight or ten grains of calomel being also given daily at the same time. This brings on salivation, and in many cases the symptoms begin to abate in severity as soon as that

commences. I am not aware, however, that this treatment is any more successful than bleeding, nor do I think the consequences afterwards, in a case of recovery, are any less to be dreaded. It is difficult in fact to say what plan can be best recommended, even in the majority of cases, and certainly no one yet tried is applicable to all, on account of the peculiarities and varying circumstances of each. If the practitioner or patient is not decidedly opposed to the bleeding plan, that has undoubtedly the best recommendation, from former success. Next to that, perhaps, comes the mercurial treatment, which usually meets with as much opposition as the bleeding, but which certainly has been frequently found efficacious. The other plans have met with but little favor, though possibly they might sometimes succeed when the rest fail.

If I were asked what I should advise for those who *would not* submit to the use either of the lancet or mercury, I should say, commence with a strong dose of Epsom salts, or jalap, and repeat it in about five hours after its full operation. Also apply warm fomentations to the abdomen, or put upon it a flannel bag full of hops soaked in vinegar, as hot as it can be borne, and put mustard poultices on the feet, and inside of the thighs. The hands must also be kept as warm as possible, and the head cool. The diet should be very spare, and contain nothing heating or stimulating, and cooling drinks, such as ice-water, or cold lemonade, should be drunk freely. The purgative should be repeated at least every day, for two or three days, or more if the symptoms are not modified, and the mustard poultices may be regularly used to various parts of the limbs, for the same length of time. In conjunction with these means the breasts should also be kept warm, to promote the flow of the milk, and injections of starch and castor oil should be thrown up the rectum daily. The object being, as far as possible, to keep the surface of the body warm, and to cool the internal fever, at the same time that all the natural secretions are excited as much as possible, to remove any morbid matter that may be formed. It should also be mentioned that the urine sometimes stops, or at least becomes very scanty and thick, in which case a little sweet nitre may be given, or if necessary the catheter must be used. Some bitter tea, as boneset or chamomile, should also be taken occasionally, and a James's fever powder with it once or twice a day, to promote perspiration; or if there be severe pains, a dose of Dover's powders may be used instead.

If the disease passes the acute stage and becomes chronic, the same means must be pursued, and with strict regularity, or there will be danger of its again becoming acute. In all cases send for the most experienced practitioner *as early as possible*, and whatever his plan may be, if his past success proves it to be tolerably successful, *submit to it*, whether it be bleeding, salivation, or anything else. If there be no one at hand on whom dependence can be placed, follow the plan I have laid down as nearly as circumstances will allow, but practice it fully without delay, and till a change takes place. Those persons who make light of this disease, and pretend to say that this or that simple treatment is all-sufficient, either deceive themselves or wish to impose upon others. There are few affections more serious, as will be evident when it is borne in mind that, on an average, *two females die out of every three attacked by it*. To avoid all liability to it as far as possible, attend well to the general health during pregnancy, have everything comfortable, clean, and wholesome, during labor, and be careful to avoid cold, damp, and all kinds of mental and bodily excitement afterwards. The assistant also, whoever it may be, must be as careful and as gentle as possible, so as to avoid all violence or undue force, and *not to hurry*

nature. A want of attention to such simple details has, undoubtedly, brought on many attacks of this fearful disease that otherwise would never have been experienced.

AFFECTIONS OF THE BREAST OCCURRING AFTER PREGNANCY.

The functions of the breast are liable, from many causes, to become deranged, and such derangements may lead to serious results, both to the mother and the child. It is a common opinion that females who nurse are not so liable to suffer in this way as those who do not, but experience proves this opinion to be untrue; nevertheless, as it is the duty of mothers to nourish their own offspring, it should be a subject of careful study to relieve them of this liability as far as possible, or to assist them when necessary.

Galactorrhœa.—This means an overflow, or excessive secretion of the milk, which sometimes takes place, particularly in those who do not nurse. At the commencement of the milk fever, galactorrhœa needs but little attention, but if it continue to the second or third day, proper remedies should be applied to correct it. These consist in complete rest, both of body and mind, cooling drinks, and spare diet. If these do not correct it soon, a flax-seed poultice should be placed on each breast, and the patient should be made to perspire, either by warm teas and clothing, or by means of steaming. The bowels should also be freely opened with castor oil, or a seidlitz powder, and it will often benefit very much to give warm water freely to drink, with ten grains of nitrate of potash (*saltpetre*) to the pint.

In those that nurse, it is very seldom the case that the secretion of milk is too profuse, unless the child has been kept too long from the breast. As a general rule it should be put to nurse in a few hours after birth, even if there be no milk, because its suction will materially help to bring on the flow. It frequently happens, when the child is kept away till the milk comes, that the breasts have swelled so that the nipple is buried and cannot be laid hold of well by the mouth, in consequence of which the child does not get nourishment enough, and the breasts not being well emptied become engorged, and their functions deranged. All this may be avoided by putting the child early to nurse. Sometimes, however, notwithstanding every precaution, the flow of milk is excessively great, and constitutes a real disease, which may cause great weakness and debility. In such cases it will generally be found that the diet is too stimulating or too rich, or that the bowels have been too inactive, and the first step toward an improvement must consist in correcting these faults. The skin should also be kept active by frequent bathing and good friction, and the quantity of nourishment taken should not be greater than the mere healthy support of the body requires. In particular no stimulating liquors should be used.

Agalaxy.—This complaint is the reverse of the former, as it consists in a deficient secretion of milk. The causes of this deficiency are various; sometimes it arises from a constitutional inertness of the breasts, sometimes from insufficient nourishment, and sometimes from profuse discharges in other parts. All excesses also tend to decrease the quantity of the milk, *particularly those of a certain kind*; and it is seldom so abundant or lasting either in extreme youth or advanced age. The appearance of the menses in like manner generally causes the flow to become less, and it ceases naturally in some much earlier than in others. Sometimes there is a deformity in the child's mouth, which prevents its sucking properly, and the milk may stop for want of being completely drawn. The breasts also may be dis-

eased, or the nipple not sufficiently prominent, and the same difficulty be thus produced in another way.

In treating agalaxy, therefore, the first thing is to ascertain if there be any deformity or disease in either mother or child, which prevents proper nursing. If there be nothing of the kind, it must next be ascertained whether the mother has any excessive secretion elsewhere, such as diarrhoea, great flow of urine, or heavy sweats; if she have, these must be corrected. It must next be seen if she takes sufficient nourishment, and of a proper kind for her stomach and bowels. Sometimes a little spiced wine is excellent, or some porter, with white meats, and arrowroot milk. If she be of a full habit, however, and makes much blood, the contrary course must be pursued, and the diet be made low and unstimulating, while the bowels are kept free and the skin in good action.

In many cases when the nipple is small, it may be much enlarged by titillation, just before the child is put to it, after which the suction will increase it still more.

If the female be advanced in life, or very weak, or if she becomes pregnant, it may be better to procure a nurse than to attempt to stimulate the flow at all. The appearance of the menses need not occasion a suspension of nursing, unless it evidently deranges the secretion of the milk, or affects the health of the mother; in either of which cases the child should be weaned at once.

Engorgement of the Breasts.—The breasts are liable to become swollen, or engorged, from colds, blows, hard nursing from the child, over-feeding, and from soreness or excoriations preventing them being fully emptied. This state may occur at any time, but is most frequent a few days after delivery. In general there is no danger from it, unless it be very bad or continues too long; when the breast may inflame and discharge, or become permanently hard. To prevent such accidents, the breasts should always be sufficiently emptied, either by the child or by artificial means, and every precaution should be used against cold or violence. Constipation must also be guarded against, and the diet and drink must be carefully observed, so that it be not too feeding, or too stimulating. Warm fomentations or poultices may also be used when the breasts are painful, and a Dover's powder may be given at night, after bathing the feet in warm water, to promote perspiration.

Inflammation of the Breasts.—This is only a more advanced stage of the previous malady, produced by the same causes, and by want of timely attention. Like simple swelling, it may arise at any time during nursing, but is more frequent a few days after delivery. As soon as the inflammation commences, the breasts become red, swollen, and excessively tender, particularly at one point, which soon begins to project like a nipple, if the disease is not stopped, and at last bursts and discharges the contained pus. Sometimes the inflammation is comparatively superficial, and extends only over a small portion of the surface, but at other times it goes deep and spreads wide. In proportion to its extent is the severity of the symptoms, which are those of inflammation in general, such as headache, thirst, fever, general uneasiness, and cutting pains in the part affected.

As soon as the abscess is formed, and can be plainly discovered, it is usual to open it immediately, because the longer it remains, the more extensive it becomes, and the larger is the portion of the breast diseased. It is necessary however to be certain, before making an opening, that it is really an abscess on which we are going to operate, for sometimes a healthy part of the breast feels very much like one, and a mis-

take may easily happen; in fact such a mistake has often been made, and by men of experience too. In the early stage of the inflammation every effort should be used to prevent an abscess from forming, by the use of purgatives, sweating medicines, low diet, cooling drinks, and warm fomentations over the whole chest. Some females practice cold fomentations over the breasts, and with good success, in the commencement of the inflammation; but it may increase the difficulty with others, and, so far as I have seen, is no more generally useful than the other method. The warm bath all over the body is also very serviceable in a number of cases.

It usually happens however, in spite of every precaution, that matter will form, and its discharge become necessary. As soon as this is evident, it should be promoted as much as possible, by hot fomentations and poultices, till the head of the abscess is sufficiently distinct for it to be safely opened. While the swelling is going on, the pain is often very severe, and it should be eased as much as possible, by using laudanum in the fomentations, or by putting on an opium plaster. After an abscess has opened and discharged, it should be kept open for some time, by little pledgets of lint, to prevent its closing up too soon, otherwise a portion of the matter may be shut in by the wound healing over it, and another abscess will form. Warm poultices and lotions should also be used afterwards, to promote the discharge as much as possible, but they should not be used after it has evidently begun to cease naturally. In short, every means pointed out should be used energetically in the first stage, to prevent the gathering, but if it takes place in spite of them, then it should be hastened and discharged as early as possible, to prevent its extending. After this, when it has evidently all escaped, the wound may be suffered to heal, and the patient must be enjoined to be very careful in future, for the same accident will be very liable to reappear.

Sometimes these abscesses become very extensive, and remain for a long time. I have known ten or twelve on one breast, and I have known them to continue open for many months. When this is the case it is much to be deplored, as it is very likely indeed to destroy the breast, and may even lead to more serious results. Attention therefore cannot be bestowed upon them too early or too unremittingly, particularly if the female be scrofulous, or of a very full habit. Sometimes the inflammation attacks both breasts, and at other times only one, in which case every effort should be exerted to prevent its extending to the other. In many persons the same side is always affected, and becomes a scape-goat as it were for the other.

When the means used succeed in scattering the swelling, its dispersion is usually followed by some critical discharge, such as diarrhoea, or a great flow of urine, or even by profuse perspiration, which shows how nature operates in removing the diseased matter and cautions us not rashly to check such discharges.

It is a very serious matter for the swelling to indurate or harden, as it sometimes will, without either scattering or dispersing, as it is then constantly liable to become worse again, besides destroying the structure of the gland. Every means should therefore be used to prevent this, by promoting its dispersion or discharge, in the way already pointed out. It is also very good in these cases to bathe frequently with alum water, or decoction of white oak bark, or even to rub on some of the ointment of hydriodate of potassa, diluted with an equal weight of fresh lard. A piece as large as a hickory nut may be well rubbed on twice a day, for three or four days, but it should be stopped immediately the swelling begins to subside, and not used again unless it still remains, or again increases. In many cases pretty frequent friction