

with the hand anointed with a little oil will be all-sufficient, especially if a hot fomentation be used afterwards.

Excoriations, or Cracks in the Breasts.—The annoyance from this cause is sometimes very great, the pain which is experienced when the child begins to nurse being so acute that it is impossible for the mother to allow it to remain. Frequently I have known it compel weaning much earlier than was desirable, and sometimes it has even been so bad that the dress could scarcely be borne against the breasts. The precise cause of this liability to crack is not known, nor do we know of any certain means to prevent it. In many cases, however, I have known it prevented, to a great extent, by having the nipple gently sucked, very frequently, for six weeks or two months before childbirth. This hardens it, and if a wash of borax water be also used after each time, it will be gradually prepared for its proper use. Our means of curing this troublesome affection are very limited, and frequently everything fails that is tried. The mucilage of quince seeds, prepared by bruising and boiling them in a small quantity of water, rubbed over the sores with a soft feather, immediately after nursing, often does much good. The mucilage from the tender tops of young sassafras sometimes succeeds better than that from the quince, and a bruised leaf from the large *horse-shoe geranium*, laid on like a poultice, is frequently better than either. A good lotion may also be made with a quarter of an ounce of borax, and a teaspoonful of laudanum, to half a pint of warm water, to be used frequently during the day. Some females use a wash made of saleratus, with considerable benefit, and others find relief from one made of nut-galls, or white oak bark. Most of these means, however, are well known, and many others also, which, like them, sometimes succeed and often fail. The artificial nipple, or *shield*, should be tried if none of these means succeed, and frequently it will enable the mother to allow the child to nurse, though it may not altogether prevent the pain.

It not unfrequently happens that the child's mouth may be diseased, particularly with *aphthæ*, or thrush, and this may possibly keep up the excoriations. In like manner, the state of the breasts may also influence the child's mouth, and therefore the condition of each should be well ascertained when anything is the matter with either.

BRONCHOCELE, OR SWELLING IN THE THROAT.

This is often observed in childbed, and sometimes even comes on during labor. It is usually attributed to cold, and no doubt it often does arise from cold, but more frequently it is owing to sympathetic derangement, and from violent attempts to swallow during and after the pains. Many females, in fact, cry out at those times that something has *broken* in the throat, and they fear they are going to suffocate. As a general rule, the swelling gradually subsides in a short time, without any special treatment, but sometimes it increases and inflames, and an abscess forms, which may become very troublesome, and even dangerous. To prevent this, it should be frequently treated with warm fomentations and poultices, till the inflammation subsides, and then with the same washes recommended for indurated or hardened breast, in the preceding section of this chapter. If the swelling becomes hard, and remains indolent, the ointment of hydriodate of potassa may also be prepared and used, as there recommended.

PHLEGMASIA, ALBA DOLENS, OR MILK-LEG.

This is a painful tumefaction, or swelling of one or both of the limbs, which comes on from the fifth to the fifteenth day after delivery. It generally commences with slight pain, or stiffness, or cramp, becoming more painful as it proceeds; but sometimes shooting, cutting pains of great violence are felt suddenly, at the very commencement. The swelling also occasionally comes on gradually, but at other times rapidly. In most cases, the patient complains of a sudden pain in the groin and thigh, which is preceded by a chill followed by fever, and then the limb begins to enlarge. Most frequently the lower part swells first, and then it extends upward, sometimes even to the hip. The skin on the swollen part looks white, shining and tight, as if ready to break; it is also extremely painful, so that pressure upon it can scarcely be borne. It looks, in fact, like a thin bag of skin filled with milk, and hence the name *milk-leg*, from an idea that it was really filled with milk, which had by some means reached there from the breast. This idea is erroneous, in the sense it is usually taken; the milk does not flow into the leg, as many imagine, nor is anything like it to be found there, except a peculiar thin white matter when it breaks. Still, however, a sudden stoppage of the milk may cause such a swelling, like a sudden stoppage of any other secretion, but in no other way. It is probably most frequently produced by sudden cold, which checks that profuse perspiration into which females generally fall immediately after delivery, and so drives the perspirable matter within, and causes inflammation and suppuration. A difficult or prolonged labor may also lead to it, by preventing for a long time the proper circulation of the blood through the large veins of the pelvis, and so engorging those below; or the veins may become paralyzed, as it were, by the pressure they have sustained, and so become for a time unable to transmit the blood. In fact, both the veins and lymphatics become engorged, as if tied above the limb, and exhibit knots and bundles, like bunches of grapes.

Sometimes the fever will occur some days first, and the female cannot tell what it is owing to, till the swelling comes on; and even this may take place so gradually, and with so little pain, that the limb may be very large before it is observed. I have known females complain of a slight fever only, on going to sleep at night, and wake up in the morning with a confirmed case of milk-leg, and I have known others start with a sudden pain in the groin, or hip, and be affected in the same way in less than two hours.

The disease usually lasts from a month to seven or eight weeks, and terminates either by a gradual resolution or scattering of the fluids, or by suppuration and discharge. When suppuration ensues, there will sometimes form one or more very large abscesses, which it may be difficult to heal, and which may lead to serious results, either from their extent, or from the constitutional irritation they produce.

The treatment at first consists in warm fomentations, such as those of poppy-heads, or hops, with cooling drinks, purgatives, low unstimulating diet, and occasional doses of James's fever powders, to promote perspiration. This is intended to disperse the swelling, and, in general, it does so. If, however, the abscess forms and breaks, in spite of all the means used, it must be treated the same as abscess in the breast, previously described. In ordinary practice, it is the general custom to *bleed* at the commencement of the disease, or to apply leeches to the groin. This sometimes does good, but frequently is of no service at all, even if it does not make matters

worse. I would, however, make the same remarks on bleeding here, that I did in regard to its use in *puerperal fever*, to which milk-leg has a resemblance, in some respects.

Another practice is to use tight bandages, the same as for varicose veins, but I think the plan is not, in general, a successful one, though it may be occasionally. Plunging the limb in cold water, or keeping it wrapped in cold wet cloths, has succeeded much more frequently, and is, with some, a favorite remedy. Stramonium leaves boiled in vinegar, and laid on hot, will also effect a cure sometimes; and so will bathing with hot lye, or alcohol. A large poultice of hops, soaked in hot vinegar, has also been found useful.

TROUBLE WITH THE URINE.

The bladder, from its position, is very apt to be inconveniently pressed during the passage of the child, and to be temporarily affected for a short time after, in consequence. Sometimes the neck of the bladder will be *paralyzed*, and the urine cannot be discharged. In this case, fomentations of warm milk and laudanum must be used, or a warm hip bath, if there be no danger of flooding, and the bowels must be freely opened. If this does not relieve, the catheter must be used, and always before the bladder is too full. To avoid its becoming so, the attendant should inquire of the female, during the first day, if she has urinated, or feels any inclination that way, so that he may know in time if the difficulty exists. In general, this paralysis passes off in the course of a day, but may endure longer sometimes; in which case the patient herself should speak of it. Cases have been known where the bladder has become so full as to *burst* through inattention to this matter. The contrary difficulty is occasionally observed, and the urine cannot be retained, but flows away as fast as it is secreted. It is very seldom, however, that this state remains more than a single day, and more frequently only a few hours. A dash of cold water on the pubes, and against the meatus urinarius, has often corrected it at once, and so has a single purgative dose. If it remain after the first two days without amendment, it is customary to put a small blister on the abdomen, which usually relieves in a short time.

CHAPTER LXXXII.

USE OF CHLOROFORM IN MIDWIFERY.

An Inquiry into the Utility and Propriety of Preventing the Pain and Suffering which usually attend Childbirth, with an Account of the Means to be employed for that Purpose.

In a former part of this work I remarked that a great portion, and perhaps nearly the whole of the suffering and danger to which parturient females are exposed, arises undoubtedly from their bad physical education and mode of life; and that, in a more rational state of existence, it was probable that both would be so slight as to excite no apprehension. This improved state of things is much to be desired, and should, of course, be striven for by all friends of humanity. But, in the mean time, it is proper to consider whether there are any means by which those now living can be relieved in their hours of distress. The agony which many females endure at this time is so great that there are few circumstances under which relief is more needed, or would be more acceptable; and I, for one, cannot subscribe to the doctrine that such relief would be improper, unless it prove to be injurious. There are some persons, I know, who say that this suffering has been *ordained* for woman, and that it *ought to be* endured. This notion, I think, needs no refutation, it being just as unreasonable as to say that the sick should be allowed to suffer and die without assistance, because *their* condition has been ordained.

Some years ago, a celebrated physiologist, who supposed that the chief cause of pain and difficulty in labor was the size and hardness of the child's *bones*, advanced the theory that if these bones were less developed, and softer, the pain and difficulty would be materially lessened, if not entirely removed. He proposed, therefore, since the hardness of the bones is caused by the deposition of *lime* in them, which is derived, of course, from the blood of the mother, that she should avoid taking anything to eat or drink, during pregnancy, that contained lime. This, he supposed, would keep the bones of the child soft till after birth, and so allow them to give way and crush together during delivery, and thus prevent the suffering and difficulty usually experienced. It was also thought that the bones of the mother would be partially softened at the same time, and give way a little, so as to facilitate the process still more.

I am not aware, however, that this theory has ever succeeded in practice, either in the human species or in the lower animals, though frequently tried. Nature will work on her own plan, and will develop the bones of the foetus, while in the womb, to a certain extent, providing she has the means to do so; and if these are withheld she is very likely to suspend its development altogether, rather than send it forth imperfect. I have known cases where everything was withheld, for the whole period, that contained a particle of lime, and yet the child's bones were as hard at birth as

in any other case; the material being, probably, taken from the bones of the mother, which might be thus weakened, and made liable to displacement, without any good result whatever. It is also a question whether such a course, supposing it to succeed, might not be dangerous in another way, by causing an imperfection in the child, which its future growth could not overcome. I have known some cases where this practice appeared to have caused abortion, from imperfect development, and several others in which there was too much reason to fear that the child was injured, though safely born. As this is, therefore, at best, a very uncertain and ineffective process, and is also, probably, dangerous to the mother or child, or both, it does not appear to me worthy of further attention, and I merely allude to it in order to make the present sketch of such means complete.

The other means are such as do not interfere, in any way, with the natural processes, but merely prevent sensation or feeling at the time of delivery. *Mesmerism* has been recommended, and, in some few instances, tried, for this purpose, but its success has either been so small, or its action so uncertain, that no dependence can be placed upon it, notwithstanding many persons assert its power. Opium and other powerful drugs have also been given, but so much of them is required, at that time, to produce a sufficient effect, that their use becomes dangerous. Other substances, in the form of *vapor* or *gas*, have also been used, the effects of which only last for a short time, and are not, generally speaking, at all dangerous. Among them may be mentioned nitrous oxide, or *laughing gas*, carbonic acid, sulphuric ether, and chloric ether, all of which were first employed in severe surgical operations.

The success of these agents, especially *ether* and *chloroform*, in *preventing pain*, is undoubted; nor do they appear to have any other effect, nor to prevent any necessary effort or process of nature, except in a few cases which will be mentioned further on. Many hundred operations of the most severe kind, such as cutting off limbs, removing tumors, stones, and so forth, are daily performed while the patients are under the influence of these agents, and without causing them *the slightest pain*; in fact, many remain, during the whole process, in a pleasant dream, and cannot be persuaded, when they wake, that the dreaded operation is over. The same thing is also observed daily in hundreds of cases of midwifery, both in natural labor and when instruments have been used. In numerous instances the female has been *put to sleep*, and safely delivered, without knowing or feeling anything whatever, during the whole time; the first intimation that she had become a mother being the cheering cry of her new-born babe. In some instances, the state of insensibility has been continued for a long time, and during its continuance the most hazardous operations have been safely performed.

So far as can be safely judged it appears that there is no danger whatever, from the employment of these means, except when improperly administered, and in certain peculiar conditions of the system; which causes of danger will, of course, be removed by competent experience and knowledge. It is highly encouraging, however, that though ether and chloroform have each been used so extensively and indiscriminately, both by those who understood their nature and those who did not, yet the cases in which they are proved to have done injury are very rare; and in all those that I have heard of, some obvious impropriety had been committed in their use. It should be borne in mind, however, that even if the danger from them was considerable, we might still be justified in their use. It is well known that, in numerous cases, the *fear* of suffering, beforehand, and its severity while being endured, produce the most

serious, and even fatal results. Many a patient who might have passed safely through the ordinary effects of a painful operation, has sunk from the mere effects of *fear* and suffering. Instances have even been known in which a fear of this kind has caused *death*, and frequently it has given a shock from which the patient never fully recovered. There is also, in many cases, great danger from the violent efforts and struggles of a person in pain, and many necessary operations are even prevented altogether by them; this is often observed in difficult labors. When insensibility is produced, however, all these causes of difficulty and danger are removed; the patient's *fears* are quieted, suffering is entirely prevented, and there is no struggling to prevent the necessary assistance.

In regard to the two agents now chiefly used, *ether* and *chloroform*, there is no difference in their mode of action, but the chloroform appears to be more speedy, certain, and efficacious, and is, therefore, the most valuable, but proportionably more dangerous when improperly administered. There are numerous instruments or *inhalers*, for administering these vapors, most of which are both costly and complicated, and all of which may be easily dispensed with. A very good plan is to take a large sponge and dip it in hot water, then squeeze out the water and pour on the ether or chloroform, and hold it over the mouth and nose. In two or three minutes consciousness and feeling will both be gone, and the patient will sink into a calm sleep which will last sometimes ten or fifteen minutes, and may be kept up as long as desired, by putting the sponge to the mouth for a few minutes whenever there are signs of waking. When it is left off, the patient gradually comes round as if waking from ordinary sleep, and frequently speaks of having been in a dream, sometimes of a very pleasant character, but never knows what has taken place. No ill effects follow, but sometimes there is a little drowsiness or stiffness of the limbs, which soon passes off. A pocket handkerchief soaked in the fluid, and held over the mouth and nose will answer equally well; but whatever is used, *it must not be pressed close*, because a portion of air ought to enter with the vapor to prevent suffocation; and it should also be removed immediately the effect is produced. When it is borne in mind how much these requisites have been neglected, and how *impure* the ether or chloroform has often been, it is wonderful that more accidents have not occurred; and the fact that so few have happened under such a state of things, and with our limited experience, goes far to prove that there is little or no danger at all in competent hands, with pure materials. The accounts circulated in the papers of "*death from ether*," and "*fatal effects of chloroform*," have mostly been gross exaggerations, and frequently false altogether. In most of the cases where death has *followed* from the use of these agents, it has been proved to arise from other causes, and would have happened if they had not been used. In one or two cases, however, of surgical operations, the ether itself appears to have caused death by producing suffocation, or congestion of the lungs; but, even in these, it has been shown that it was used in an improper manner. Thus a young woman in Newcastle, in England, inhaled ether to have a diseased toe-nail cut off, and died. It appears, however, that there was an evident disposition in her to congestion or rushes of blood, and therefore she was not a fit subject, and besides, the ether was poured on a *thick table-cloth*, which, of course, prevented the entrance of *air* along with the vapor, and thus suffocated. I believe there is *not a single case* on record of injury resulting when due precautions have been used, and I have not heard of one at all in midwifery practice.