

THE CONDUCT OF NORMAL LABOR*

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The conduct of normal labor should have for its goal a live, healthy and uninjured mother and babe. Whatever contributes to this end should logically come under this head. Yet the writer intends to omit all factors of general health and habits of the parents and even the care of the mother before confinement, and begin with labor itself.

Since most labors begin as normal ones, and become pathological only as they progress, or as abnormalities develop, it is necessary in the normal confinement to keep ever in mind the matter of preventing as far as possible their occurrence. We must think of these both on the part of the mother and also of the babe. On the part of the mother, prevention must be directed against sepsis, hemorrhage and laceration of the perineum; while on the part of the babe, it should be with reference to establishing respiration, proper treatment of the cord, eyes and skin.

Measures which prevent sepsis are the same or similar to those which prevent infection in any other part of the body, namely those which prevent bacteria from entering the freshly abraded surfaces of the perineum and uterus. A well-developed surgical conscience is therefore necessary to a uniformly good obstetrical technic, since obstetrics can only be considered as one phase of surgery—the most difficult one in fact, in that the conditions are usually unfavorable.

The first prerequisite is that the doctor himself shall come contagion- and infection-free to the confinement.

We wish to emphasize the following points with reference to the conduct of labor:

1. Do not depend on the home or even a nurse when in a home, for the preparation of sterile goods which are not boiled, but rather carry them to the confinement in a pack already sterilized.

We believe the sterile pack to be of vital importance to the best asepsis, and that it is available to any practitioner. This pack should contain at least one gown, one pair leggings, six hand towels, tape and dressing for cord. These articles can be wrapped in a package which measures 9x10x2 or 2½ inches. By having on hand from five to ten of these packs one can care for a practice of 30 to 75 cases a year; half of them being in preparation while the other half are ready for use.

With each sterile pack should also be a metal or glass container holding about one-third pound of cotton which has likewise been sterilized.

These insure uniform preparation which in the best homes is unlikely and in the poorer homes not to be thought of; and with uniform preparation, a uniform technic can be carried out. This leaves the home to provide nothing but fire and water and ordinary bed clothes, the vulvar pads having been previously arranged for either by buying them already sterilized or by washing, ironing and wrapping the ordinary menstrual napkins.

* Read at the Forty-Seventh Annual Meeting of the Michigan State Medical Society, Muskegon, July 10-11, 1912.

2. Depend much on the external examination for diagnosis of presentation and position so that the internal examinations can be reduced to the minimum. Before the internal examination is made, prepare the patient as thoroughly as for operation.

3. Have *good* instruments and at least enough to properly care for the cord and to do a primary perineorrhaphy.

4. Have a good arrangement of the bed, light, chairs and tables, having at least one table for sterile goods only.

5. Have the best available help on every case, and enough to give adequate assistance. If no trained help is at hand, it is a good investment to take a few minutes to teach those present what they are to do and not to do. If trained help is not at hand, the physician himself must do most of the preliminary arrangement, so that there will be little left for the unskilled assistant to do.

To review then the details of delivery in the order of their occurrence the following points would be mentioned (when the doctor is alone):

1. On entering the room get a history of the duration of labor, the severity, frequency and regularity of pains; whether or not the show or liquor amnii have been discharged. From these one can judge the amount of time he has for preparation.

2. Take the temperature, pulse and respiration. This will help to exclude existing disease which might later be taken for puerperal infection.

3. Select instruments, basins, gloves, sutures and all things to be boiled and place them over the fire. Put razor and clippers in lysol solution.

4. Arrange the furniture. The bed should be arranged so as to get light on the perineum during delivery. One chair for the physician should be placed facing the bed. One small table each for sterile and non-sterile goods, a box or chair for

solution bowls and a tub under the bed for slops, should be provided.

5. Drape patient lengthwise in bed for external examination.

6. Doctor to put on rubber trousers or rubber apron, and scrub hands and arms, and make the external examination.

7. The patient is then changed to the transverse, dorsal position with hips projecting over the edge of the bed, feet resting on the physician's chair and the legs are draped with sheet, allowing a wide exposure of lower abdomen and perineum. Papers or rubber are placed under patient's hips so as to direct slops into tub beneath.

8. Bring in the pan containing the boiled things; open sterile pack and place it on the table for non-sterile goods; open the cotton can and place it on chair or box used for solution bowls.

9. Scrub again. Have water changed and with this scrub the field with soap and water and cotton or gauze, but not brushes, avoiding the vulva. Shave or clip. Use fresh water and soap after shaving, this time beginning with the vulva and using care to remove smegma from genital folds.

10. Scrub hands in lysol solution, then the vulva and later the surrounding parts. Put on gloves in lysol; separate the labia with the fingers of one hand and make the *first internal examination* with the other.

Thus far, no sterile gown or towels are used because they are unnecessary and also because when once put on they will become contaminated if removed before labor is finished. If labor is not well advanced, a sterile pad is applied to the vulva and the woman allowed such positions as may be desirable. If, however, labor is well advanced the sterile goods are arranged for the rest of the delivery as follows:

1. Two or three towels are placed as a cover for the table designated for sterile goods, and on this cover all sterile goods

and the things which have been boiled are placed. This allows immediate access to any article needed, and without fishing it out of a pan of water or solution as is often the case. This table is placed close to the doctor and close to the box holding the solution bowl.

2. The sterile gown is put on. Sterile leggings are applied to the patient. This completes a sterile field from the doctor to and including the field of operation. The physician can now touch anything in this field and also the patient can straighten out or bend her legs without contaminating any part of this field. This makes a long continuance of this position possible and comfortable for both doctor and patient. It also allows of repeated flushings of the perineum and the fecal matter is washed down into the tub beneath. With this position the initial enema lessens in importance since there is perhaps less danger in caring for formed stools in this way than there is in the intermittent expulsion of liquid stool from an enema which has not been completely expelled before the end of labor.

The head is retarded in its passage through the perineum by pressure upward and towards the pubes, placing the fingers directly against the head and not against the stretching perineal muscles. The patient is told to breathe through the mouth during pains and to bear down between pains. Ether is given during this stage if the patient wants it, but usually only to the degree of partial narcosis.

As soon as the head is born, search is made to learn if the cord is about the neck, and if it is, delivery is hastened. If the cord tightens, the two forceps are applied close together and the cord cut between. If the cord is not about the neck, the baby's eyes are washed with boric acid solution and the mouth freed from mucus. The woman is then told to bear down and expel the child.

When expelled, such aid as is needed to start respiration is given, and when the child's color is good, the cord is tied with small tape, carried in the sterile pack, about $\frac{1}{2}$ inch from the skin. A clamp is then placed about an inch from this tape and the cord cut between. If after careful observation there is no bleeding from the stump, the tape is then cut and the dry sterile cord dressing from the pack is applied, after first removing all vernix from the area which is covered by the binder which holds the dressing in place, by means of albolene carried in the bag.

From fifteen to thirty minutes are then allowed to elapse for the placenta to be expelled. If there is no attempt to expel it in half an hour, early or Credé expression is employed, and if these fail, we have little reluctance in entering the uterus with two or three fingers or the whole hand and removing all that should come out. This procedure should be a safe one if our asepsis is as good as it can be, with the above plan. If hemorrhage occurs, it is the surest and quickest method to arrest it.

Examination is usually made to discover if lacerations are present, while waiting for the placenta to be expelled. This allows the waiting time to be utilized by repairing them if present, and the placenta holds back the blood which would interfere with a clear field after the placenta has been expelled.

The blood is then washed off with lysol solution, a sterile pad applied and the woman placed lengthwise in the bed. No binder is employed.

Instructions are left that the uterus shall be massaged, but gently and frequently enough to cause it to contract firmly, and to retain its contraction. This is aided by the administration of 1 to 3 drams of Fl. Ext. Ergot during the first one or two days. This is employed to prevent after pains and sepsis.