

**ORIGINAL COMMUNICATION.**

OBSTETRIC TECHNIQUE AT BELLEVUE HOSPITAL.

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EMERGENCY PATIENTS PROPER AND THEIR PREPARATION FOR  
CONFINEMENT.

About fifty per cent. of the number of women delivered in Bellevue Hospital are either brought by ambulance or they walk into the hospital in active labor, and many of these are nearing the completion of the second stage when they are admitted.

Patients who at the time of their admission are in labor are at once taken to the bathroom, their street dress is removed, a soapsuds enema is given, a clean short gown is put on, and they are then taken to the delivery room. If time will allow before their delivery the pubes are shaved, the external genitals, buttocks, thighs and abdomen are scrubbed with warm water and tincture of green soap and washed with a 1 to 3,000 sublimate solution. They are then given two quarts of a 1 to 10,000 sublimate vaginal douche.

*Patients Awaiting Confinement and Their Care During Pregnancy*—The other fifty per cent. of cases cared for in this hospital apply for admission about six months before their expected confinement; they are called "waiting cases," and when their condition permits before their confinement they are occupied with the lighter housework about the wards. Women are not received earlier than the seventh month of gestation.

CLEANSING ON ADMISSION.

These patients on being admitted first receive a full bath, the hair and scalp are washed with warm water and tincture of green soap and then a 1 to 10,000 sublimate solution. If the woman has a suspicious vaginal discharge, she is given a 1 to 10,000 sublimate vaginal douche, and this is given daily until she is con-

fined or the discharge ceases. Laboratory examinations of vaginal discharges are not made as a routine.

*The Examination and Management of Pregnancy*—An antepartum examination is made and the patient's family and personal history taken, the latter including her age, nationality, occupation and her medical history. Date of last menstruation and quickening are asked. There is further elicited her history of previous pregnancies as to number, character and length of each, length and character of labor at term, history of previous puerperia as to fever present in, after pains, mastitis and number of days she remained in bed.

An external physical examination is made, including heart, lungs, breasts and nipples. The abdomen is examined, the uterine axis and elevation, and the amount of liquor amnii noted. The position on the abdomen of the fetal heart and its rate are also noted. The fetal head, dorsal plane and small parts are located. Presentation and position are determined. The pelvis is then measured, the diameters at the crest and the spines, the external conjugate and the right and left external obliques are found. Also the height of the fundus above the symphysis and the distance between the symphysis and the ensiform are measured. The circumference of the pelvis is then measured.

An internal examination is then made, the external genitals are inspected for varices, amount of secretion, inflammation, and the condition of the perineum. The vagina is inspected for rectocele or cystocele. The position and condition of cervix are then determined. The depth of the fetus in the pelvis and its presentation are then found. The internal measurements of the pelvis include the distance from the subpubic arch to the coccyx, and the flexibility of the latter, and the diagonal and estimated true conjugates. A record of the above is made and kept for reference at the time of the patient's delivery.

*Urinalysis*—If albumin or casts are found the patient is put to bed, is dieted, receives salines and is given other treatment that may be indicated, and the urine is examined every few days until it clears up or the patient is delivered.

*Cathartics, Cleanliness, Vaginal Irrigation in Pregnancy*—The first night of her admission to the hospital the patient receives a cathartic which is usually required. Either castor oil ℥iiss, Epsom salts ℥ss, compound licorice powder ʒi, or two compound cathartic pills are given.

From the time of the admission of the patient to the hospital until her confinement, she is obliged to have a full bath twice a week, her bowels are kept open by the use of the oil, salts, pills or licorice powder; if she has a suspicious vaginal discharge she is given daily a 1 to 10,000 sublimate douche, and she has only the regular diet of the hospital.

*Diet During Pregnancy*—The diet is general or mixed. Breakfast, which is served at seven o'clock, consists of fruit, cereal, eggs, bread and butter, and coffee or milk. Dinner at twelve o'clock consists of soup, meat, vegetables and dessert, with tea, coffee or milk. Supper, served at five o'clock, consists of cold meat, potatoes, tea or milk, and bread and butter.

*Care of the Nipples*—During the time before confinement the nipples are washed daily with a saturated solution of boric acid and alcohol 50 per cent.

#### THE MANAGEMENT OF LABOR.

When the patient has her first labor pain she is prepared for delivery by a soapsuds enema, then a full bath and a clean short gown. She is then taken to the operating room and examined.

*Asepsis of Nurses*—Before making the examination the hands and arms to the elbows are scrubbed with hot water and tincture of green soap, the nails are cut and cleaned with an orange stick, and the hands and arms are again scrubbed with hot water and tincture of green soap. Chlorinated lime and a saturated solution of washing soda are then used and this is followed by rinsing the hands and arms in hot sterile water and then in a 1 per cent. solution of lysol. Sterile rubber gloves are then put on.

*Vaginal Irrigation*—If the patient has had a suspicious vaginal discharge she is given a 1 to 10,000 sublimate solution vaginal douche; if she has no discharge she is not given a douche. The patient is then examined, the position of the child is determined, the strength and frequency of the pains and the amount of dilatation of the cervix are found. If any abnormal condition is present the hospital interne reports to the attending physician on duty. If not, and the patient is only in the first stage, she is urged to walk around, resting at intervals, until there is full dilatation, at which time the interne is sent for. If the first stage is prolonged the only diet given is hot milk, of which eight ounces are given every three hours.

*Preparation of the Room*—During this time the delivery room is being prepared. Sterile sheets are pinned on the table and four solutions are made and kept for use during the time of the patient's delivery: A 1-2,000 sublimate and a 1 per cent. solution of lysol for the hands of the obstetrician; and a 1-3,000 sublimate and a 0.5 per cent. solution of lysol for sponging the external genitals of the patient.

*Asepsis of Internes*—On the interne's arrival, he first puts on a rubber apron; the hands are sterilized by scrubbing them and the arms to the elbow for five minutes with hot water and tincture of green soap; the nails are cut and cleaned; the hands are then again scrubbed; the chlorinated lime and a saturated solution of washing soda are rubbed over the hands and arms; they are then rinsed in hot water and in a 1 per cent. solution of lysol. He then puts on a white sterile cotton gown over the rubber apron and rubber gloves which have been previously boiled.

*Asepsis of Patient and Management of Labor*—Before the delivery the nurse shaves the patient's pubes, scrubs the abdomen, thighs, buttocks and external genitals with hot water and tincture of green soap, and washes them with a 1-3,000 sublimate solution. A sterile short gown is then put on the patient and sterile white stockings reaching to the trunk are drawn on, and sterile towels are placed over the abdomen.

During the descent of the fetal head the patient's external genitals are sponged with sterile cotton wipes soaked in the sublimate and in the lysol solutions. The patient is usually delivered in the dorsal position, rarely in the lateral.

When the perineum is fully dilated the progress of the fetal head is manually regulated and diminution of expulsive forces is urged and the head delivered during the interval of pains.

*Chloroform*—Chloroform is used in most cases. If the shoulders do not follow the head in a few minutes, they are manually delivered by the finger in the posterior axilla.

*Fundus uteri*—As the body of the child descends the fundus is followed down by an assistant nurse, and after the birth it is held by her until after the placenta is born and the abdominal binder put on.

*Cord*—When the child has been delivered it is held by one of the nurses, and after pulsation in the cord has ceased or there has been good lung expansion, the interne ligates the cord. The

Wharton's jelly is first stripped from it and then it is tied about two inches from the abdomen with No. 18, surgeon's braided silk, which has just previously been boiled. The child is then folded in a warm blanket and the interne and nurse turn their attention to the mother. The physician first removes his gloves and they are placed in the sublimate solution. The hands and arms are again sterilized and a fresh pair of gloves are put on before delivering the placenta.

*The Third Stage*—If the afterbirth has not been spontaneously delivered by this time, which is usually about fifteen minutes after the birth of the child, it is delivered by Cr  d  's method. It is expressed into a white enamelled pan which is used for that purpose only, and which has been washed in a 1-20 carbolic acid solution and covered with a sterile towel. This is held by the nurse under the patient's vulva and the placenta caught. If the membranes do not follow the placenta they are gently opened fan-shaped.

*Perineum and Cervix*—After the placenta and membranes have been delivered, they are examined for completeness. The perineum is then inspected, and if it has been lacerated, is immediately repaired. There is no vaginal examination made after labor unless there is reason to believe the cervix is seriously torn. If it is, it also is repaired at this time.

*Ergot*—Immediately after the third stage the patient is given ℥i. of the fluid extract of ergot diluted in about one-fourth glass of water.

*Vaginal Irrigation*—The interne gives the patient two quarts of a 1-10,000 sublimate solution vaginal douche. The external genitals, thighs and buttocks are then washed with a 1-3,000 sublimate solution.

*Vulval Dressing*—A wet sublimate, 1-20,000 dressing, is applied to the vulva and this is covered with an oakum pad.

*Binder*—An abdominal binder is then applied; this is made of unbleached muslin, reaching from just under the breasts to a few inches below the trochanters. It is pinned down; the front and gores are pinned in on each side. The vulva pad is then pinned to the lower part of the abdominal binder, both in front and back. If the uterus is large and flabby, a folded towel is placed over the fundus before the binder is pinned on. The gown and stockings are then removed and a short clean gown put on. Before removing the patient from the table the tem-

perature is taken and the pulse and respiration counted. The patient is then placed on a carriage and wheeled to her bed in the lying-in ward.

After the mother has been placed in bed the child is weighed, measured, and the eyes are cleaned, and the cord dressed for the first time. The placenta is then weighed and measured and any abnormalities noted, the site of rupture in the membranes is found, the length of the cord is measured and any peculiarities noted.

#### CARE OF THE NEWLY-BORN CHILD.

As soon as the head of the child is born the nurse cleans its mouth by placing a piece of sterile gauze, which has been soaked in a boric acid solution, on her finger and sweeps it around the mouth and pharynx.

*Eyes*—The eyes are then wiped out with boric acid gauze. After the birth of the rest of the body and after the cord has been tied, the child is rubbed with olive oil and placed in a warm blanket until after the mother has been put to bed. Then a drop of 1 per cent. solution of silver nitrate is instilled into each eye and this is followed by an irrigation with a solution of boric acid.

*Anomalies*—The child is examined by the physician for any abnormal condition and then it is weighed and measured.

*Measurements*—The measurements taken are its total length from the vertex to the coccyx. The diameters measured are occipito-mental, occipito-frontal, sub-occipito-bregmatic, fronto-mental, trachelo-bregmatic, bi-parietal, bi-mastoid, bis-acromial and the bis-trochanters. The circumferences measured are the occipito-mental, sub-occipito-bregmatic, bis-acromial and the bis-trochanteric.

*Cord*—The cord is then dressed by washing it with a 1-5,000 sublimate solution and a sterile gauze compress put on, and the binder placed over this. Little pads of boric acid gauze are placed on each eye. The rectal temperature is taken, the child is then again placed in a warmed blanket and put in its crib.

*Bath*—A full tub bath is not given the child until after the cord has separated.

*Dress*—The dress consists of shirt, diaper, barrow-coat, and an outer dress. The clothes are all sewed on, no pins are used except in the diaper.

*First Nursing*—It is then put to the mother's breast, it now being about six hours old.

#### MANAGEMENT OF THE PUERPERIUM—THE MOTHER.

*Fundus*—After the mother has been placed in bed she is visited every hour by the nurse and the condition of the fundus noted.

*Temperature, Pulse, Respiration*—For the first twenty-four hours after delivery the temperature is taken and the pulse and respiration are counted every four hours. After this they are taken every six hours until the woman is out of bed, and three times a day until she is discharged.

*Vulva Dressing*—The vulva pads are changed every four hours for the first twenty-four hours and after this they are changed every six hours until the discharge ceases. When the pads are changed the nurse first scrubs her hands with hot water and tincture of green soap for five minutes and then rinses them in a 1-2,000 sublimate solution. The patient's external genitals are washed with sterile cotton and a 1-3,000 sublimate solution, and after the first twenty-four hours a dry dressing is applied, instead of the wet sublimate, and covered with an oakum pad. After each urination or defecation the external genitals are washed with the sublimate solution, 1-3,000, and clean pads are applied.

*House Staff Rounds*—The height of the fundus above the symphysis is measured just after labor, and this is done once a day thereafter until it sinks below the symphyses.

The patient is seen twice daily by the house physician; the pulse, temperature, quantity, odor and character of the lochia, the condition of the uterus, the bowels, the bladder, the breasts and the nipples are noted.

*Diet*—The diet of the first twenty-four hours consists of milk alone, which the patient is obliged to take hot. About three hours after being put to bed, unless the patient is asleep, she is given eight ounces of the milk, and this amount is given regularly every three hours, she getting, in all, about two quarts the first day. On the second day milk alone is given, and with the same regularity and in the same quantity, but the patient may take it hot or cold. On the third day crackers and broth or soup are added to the same quantity of milk as given on the other two days. On

the fourth day light meats, such as mutton, lamb or veal chops and toasted bread and tea or coffee are given. From this day on the diet is increased, if the patient's condition is normal, until she gets the same food as before confinement. In addition to the regular meals on and after the fourth day the patient is given eight ounces of milk, either hot or cold, three times a day, at 10 a. m., 3 p. m., and at 8 p. m.

*Bowels*—At 9 p. m. on the third night after confinement the patient is given two compound cathartic pills. At 5 o'clock the following morning she is given a half-ounce of Epsom salts. If the bowels have not been thoroughly opened by 9 a. m., she is given a soapsuds enema. After this her bowels are kept open daily, if necessary, by one of the above cathartics or the enema until she is discharged.

*Urinalysis*—The urine is examined the first day after labor, and if it is found normal it is not again examined. If it is abnormal the patient is given any treatment that is indicated and the urine is examined daily until she is discharged, or the urine becomes normal.

*Bladder*—If the patient has not urinated within eight hours after labor she is urged to do so. If she has difficulty, hot water is poured into the bed pan, hot compresses are placed over the pubes, and if urination is not then accomplished she is catheterized, and this is done every eight or ten hours thereafter if necessary.

*Nipples*—The nipples are washed with sterile gauze soaked in a saturated solution of boric acid before and after each feeding of the infant. If the nipples are cracked they are painted with compound tincture of benzoin, or touched with a silver nitrate stick. If the breasts are very hard and painful they are massaged.

*Posture in Bed*—For the first twenty-four hours the patient is kept perfectly quiet in the dorsal position, and she is not allowed to turn on her side until the second day. On the first day she is not allowed to see her relatives or friends, but she may receive them on and after the second day. If her condition has been normal the woman may on and after the sixth day sit up in the bed for a few hours each day.

*Leaving Bed*—The time at which she is allowed to leave the bed depends entirely on the quantity and character of the lochia and on the involution of the uterus. While the lochia is san-



guinous or sub-sanguinous, or if the fundus is above the symphysis the woman is kept in bed. If the lochia is serous or absent and the fundus is below the symphysis on the ninth day she is allowed to get up and sit in a chair for a few hours, and on the tenth day she is allowed to walk around the hospital ward.

*Discharge*—On the twelfth or thirteenth day she is discharged.

*Examination Before Discharge*—Before being discharged, the woman has a physical examination made by the hospital physician. The condition of the breasts, nipples, and of the perineum is noted. The position and condition of the cervix and the condition of the os are determined, and also the position, sensibility and mobility of the uterus and the condition of the parametrium are found.

#### MANAGEMENT OF THE PUERPERIUM—THE CHILD.

*Temperature*—The rectal temperature of the baby is taken, and its respirations and pulse are counted once a day, unless it is indicated oftener. This is done just before giving the bath.

*Bath*—The child is given a bath every day. Until the cord has separated the bath is a sponge bath given on the nurse's lap. The binder is not removed and the cord is not allowed to become wet. After the cord has separated the binder is taken off and the bath is then given in a tub. The temperature of the water is about 98° F. A new wash cloth is provided for every child and white castile soap is used. The buttocks, external genitals, axilla and neck are dusted with talcum powder.

*Cord*—After the cord has separated, a sterile gauze pad is put over the umbilicus and the binder kept on until the child leaves the hospital.

*Eyes*—The eyes are washed with a saturated solution of boric acid, applied with an eye-dropper, and wiped out with sterile gauze, once a day just after the bath, unless indicated oftener.

*Ophthalmia Neonatorum*—If ophthalmia develops the child is at once isolated in a darkened room and it has a special nurse. Cold compresses are applied to the eyes; they are irrigated with a saturated solution of boric acid as often as necessary to keep them clean, and one drop of a solution of argyrol is put into each eye several times a day, followed by washing with the boric acid solution. If called for other treatment is prescribed by an oculist.

*Diapers*—The napkins are changed every four hours or oftener if necessary, the buttocks and genitals are dusted with talcum powder, and after each stool the buttocks are washed.

*Nursing*—The baby is first put to the breast six hours after its birth, and then every two hours during the day and twice during the night, at 1 a. m. and 5 a. m. It is allowed to nurse ten or fifteen minutes at each feeding. If the mother has an insufficient quantity of milk, or for any reason cannot nurse her child, it is nursed by one of the other healthy women who are in the hospital, and nursing infants at the time. If the child is syphilitic or has any contagious or infectious disease, it is given two ounces every two hours of modified cow's milk from a nursing bottle.

*Mouth*—The mouth is washed before and after each nursing with sterile gauze soaked in a saturated solution of boric acid.

*Weight*—The child is weighed once a day when it has been undressed for its bath.

*Examination on Discharge*—A physician's examination is made by the hospital physician on the day the child leaves the hospital. The heart and lungs are examined, the condition of the umbilicus, eyes, mouth, skin, bowels and bladder are noted.