

*MANAGEMENT OF A  
SPONTANEOUS VAGINAL  
DELIVERY*

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# *SPONTANEOUS HAND DELIVERY*



# *DATA BASE FOR SECOND STAGE OF LABOR*

- Continuing evaluation of :
  - any significant findings from the H& P, pelvic exams and lab results
  - the progress of labor
  - the fetus
  - the woman
- Continuing screening for S&S of OB complications and fetal distress

# *PROGRESS OF LABOR*

- FRIEDMAN
  - Average maximum rate of descent
    - 1.6cm/hr for nulliparas
    - 5.4cm/hr for multiparas
  - Average length of second stage
    - 1 hour primigravidas
    - 15 mins multiparas
    - Abnormal if second stage last longer than
      - 2 hours for primigravid and 1 hour for multipara

# *THE PROGRESS OF LABOR*

- Kilpatrick and Laros, Jr.
  - Determined a statistically significant difference in length of both first and second stage of labor dependent on whether conduction anesthesia was used
  - Aderhold and Roberts
    - Phase I, the lull:
    - Phase II, active bearing down
    - Phase III, perineal

# *MECHANISMS OF LABOR*

- Engagement
- Descent
- Flexion
- Internal rotation \_\_\_\_\_ degrees to the \_\_\_\_ position
- Birth of the head by \_\_\_\_\_
- Restitution 45 degrees to the \_\_\_\_\_ position
- External rotation 45 degrees to the \_\_\_\_\_ positions
- Birth of the shoulders and body by lateral flexion via the curve of Carus

# *FETAL WELL-BEING*

- Evaluate the amount of caput succedaneum and molding
- Evaluate the normalcy of progress through the mechanisms of labor
- Evaluate fetal heart tones
  - early decelerations
  - fetal bradycardia

# *MATERNAL PHYSIOLOGICAL CHANGES*

- BLOOD PRESSURE
  - Rises another 15 to 25 mm Hg with ctxs in second stage
  - Evaluation of BP must be well between ctxs
  - An average rise in BP of 10 mm Hg between ctxs is normal during second stage

# *MATERNAL PHYSIOLOGICAL CHANGES*

- METABOLISM
  - Steady rise in metabolism in second stage
- PULSE
  - Varies, although elevated in second stage.  
Definite tachycardia reaching a peak at time of delivery
- TEMPERATURE
  - Highest elevation occurs at time of delivery and immediately thereafter.
  - A normal increase is 1 to 2 degrees Fahrenheit

# *MATERNAL PHYSIOLOGICAL CHANGES*

- CHANGES ARE THE SAME AS FIRST STAGE OF LABOR FOR:
- RESPIRATIONS
- GI CHANGES
- RENAL CHANGES
- HEMATOLOGICAL CHANGES

# *MANAGEMENT PLAN FOR SECOND STAGE LABOR*

- PREPARATION FOR DELIVERY
- MANAGEMENT OF DELIVERY
- MAKING MANAGEMENT DECISIONS FOR THE SECOND STAGE OF LABOR

# *SECOND STAGE MANAGEMENT DECISIONS*

- FREQUENCY OF VS
- FREQUENCY OF FHTS
- WHETHER TO ENCOURAGE THE WOMAN'S PUSHING EFFORT
- LOCATION OF DELIVERY
- POSITION OF DELIVERY
- WHETHER TO CATHERIZE THE WOMAN IMMEDIATELY PRIOR TO DLIVERY

# *SECOND STAGE MANAGEMENT DECISIONS*

- WHETHER TO SUPPORT THE PERINEUM, AND IF SO, HOW
- WHETHER TO CUT AN EPISIOTOMY, IF SO ,WHAT TYPE TO CUT
- TYPE OF ANALGESIA/ANESTHESIA
- WHETHER TO DELIVER THE HEAD WITH A CTX OR BETWEEN CTXS
- WHETHER TO USE A RITGEN MANEUVER

# *SECOND STAGE MANAGEMENT DECISIONS*

- WHEN TO CLAMP AND CUT THE UMBILICAL CORD
- WHETHER THERE IS A NEED FOR A BACK UP OBSTETRICIAN OR ASSISTANT

# *BLADDER*

- If catheterization is to be done it is done before any other procedure and before the vtx gets too low in the pelvis
- Things to consider:
  - is the bladder distended?
  - has she emptied it in the last two hours?
  - what has her fluid intake been
  - do you anticipate a potential complication?
    - PP hemorrhage, shoulder dystocia

# *MATERNAL PUSHING EFFORTS*

- Maternal pushing efforts must be evaluated for effectiveness
- Evidence of effectiveness:
  - Sequential bulging of rectum, perineum, and crowning.
- Absence of progress is probably either
  - ineffectual pushing or psychological obstacle

# *MATERNAL PUSHING EFFORTS*

- Controversy exists between routine or “forced” pushing and “physiological pushing.

# *MATERNAL PUSHING EFFORTS*

- ROUTINE PUSHING
- Onset when complete
- Done out of concern to prevent prolong second stage
- Attitude more prevent in hospitals with rigid limits on second stage
- General impatience
- PHYSIOLOGICAL
- Onset when natural urge reflex occurs
- More beneficial
- More natural
- Decreases frenzied harassment to push
- Promotes calm relaxed atmosphere

# *MATERNAL PUSHING EFFORT*

- THINGS TO CONSIDER IN EVALUATING THE TWO METHODS:
- Breathing used in natural pushing is series of short pushes, reduces hypoxia/acidosis
- Slow distention of perineum decrease lacerations/episiotomies
- Incidence of uterine prolapse/cystocele may be lessened
- Birth trauma to fetal head may be lessened:

# *NEED FOR ANALGESIA/ANESTHESIA*

- Pudendal block
  - Anesthetizes a large area
  - No tissue distortion
  - Alleviates discomfort or pain from stretching
  - Relaxes perineal musculature
- Local anesthesia
  - Used by most providers
  - Distorts tissue for repair
  - Provides only relief at site of infiltration

# *PERINEAL INTEGRITY*

- Goal of each delivery is to deliver over an intact perineum.
- A number of techniques facilitate delivery over intact perineum, although there are two divisions of thinking

# *PERINEAL INTEGRITY*

- Those who believe in “hands-off”
  - Hands interfere with the natural timing and stretching by the mother
  - Touching stimulates muscular contractions which distract the mother
  - Increased risk of perineal trauma and edema
  - Irritating to the mother due to hyperstimulation of an already supersensitive area

# *PERINEAL INTEGRITY*

- Those who believe in “hands on”
  - Prenatal digital stretching by partner or self
  - “Ironing out” the perineum- stretches muscles, stimulates pushing reflex
  - Warm compresses-increases circulation/promotes relaxation
  - Perineal massage- Warm oil
  - Perineal support at the time of delivery
  - Fetal head control

# *PERINEAL INTEGRITY*

- Whatever method chosen points to remember:
  - DO NO HARM
  - ABIDE BY MATERNAL WISHES
  - MATERNAL SELF-CONTROL IS THE KEY TO DELIVERING OVER AN INTACT PERINEUM

# *TO CUT OR NOT TO CUT*

- WOMAN'S PREFERENCE
- YOUR BELIEFS ABOUT EPISOTOMY AS PROPHYLACTIC GYNECOLOGY
- YOUR BELIEF- IS IT BETTER TO CUT OR TEAR
- NEED FOR SPACE IN CASE INTERVENTIONS ARE NECESSARY
- SIZE OF THE BABY
- SELF CONTROL OF THE WOMAN

# *PREPARATION FOR DELIVERY*

- LOCATION OF DELIVERY
  - Delivery room, labor room, birthing room, LDR, LDRP or at home
- POSITIONS OF WOMAN FOR DELIVERY
  - Lithotomy, dorsal, left lateral, squatting, standing, knee-chest, hands-knees, or birthing stool

# *PREPARATION FOR DELIVERY*

- GENERAL PREPARATIONS
  - Make sure patient knows who you are
  - Make sure newborn resuscitation equipment and supplies are available and working
  - Make sure you have a heat source for infant
  - Notify nursing staff of glove size, plans for anesthesia, anticipation of possible problems
  - Be familiar with the delivery room, equipment, supplies, routine of nurses

# *PREPARATIONS FOR DELIVERY*

- Know how to function within the room-delivery table, lights, bed etc.
- Assist patient to chosen position
- Put on sterile gown AND THEN sterile gloves.
- Ask nurses to PREP perineal area prior to sterile drape
- Organize equipment on the field

# *PREPARATION FOR DELIVERY*

- Separate out what you will need for the delivery- scissors, two clamps, bulb syringe
- Reorganize table as needed.

# *MANAGEMENT OF THE DELIVERY*

- HAND MANEUVERS-be very familiar with this for all presentations and positions
- DELIVERY OF THE HEAD- between ctxs or with ctxs
- RITGEN MANEUVER-controls head of baby, not routinely used but may be needed if second stage needs to be shortened

# *MANAGEMENT OF THE DELIVERY*

- CLAMPING AND CUTTING THE UMBILICAL CORD
- Timing of clamping is controversial
- Neither early or late cord clamping has any effect on infant mortality
- Don't advise placenta transfusion to preterm newborns if known blood transfusion
- Leboyer recommends waiting till cord quits pulsating, 4-5 mins after birth.

# *MANAGEMENT OF THE DELIVERY*

- IMMEDIATE CARE OF INFANT
- Establish airway
  - head lower than body
  - wipe infant face, head, nose and mouth
  - suction nose then mouth
- Keep baby warm
- Show infant to mother/father
- Assign 1 minute apgar

# *MANAGEMENT OF THE DELIVERY*

- CLEAN-UP
  - Assist with woman, pick up sharps, separate linen from paper
- CLOSURE
  - Last time you may see the woman, congratulations, praise, plans for feeding, birth control
- DOCUMENTATION- delivery note

# *OBSERVATIONS/TIPS*

- KNOW THE PATIENT/INTRODUCTION
- HAND MANEUVERS
- PREPARATION
- NUCHAL CORD REDUCTION
- GOWNING/GLOVING
- CURVE OF CARUS
- DELIVERY OF PLACENTA