Management of Normal Labor

Management of Normal Labour

Aims

1. To achieve delivery of a normal healthy child with minimal physical and psychological maternal effects.
2. Early anticipation, recognition and management of any abnormalities during labour course

I STAGE OF LABOUR

PRINCIPLES

1. Non-interference with watchful expectancy so as to prepare the patient for natural birth.
2. To monitor carefully the progress of labor, maternal conditions and fetal behavior so as to detect any intrapartum complication early.

First Stage of Labor

- HISTORY
- EXAMINATION
- INVESTIGATIONS
- PROCEDURES

First Stage of Labor

History:

1. Complete obstetric history
2. History of present pregnancy
3. History of present labor

First Stage of Labor

Examination

a. General examination
b. Abdominal examination
c. Pelvic examination/ Vaginal examination

First Stage of Labor

Investigations:

If not done before or if indicated:

- Blood group-Rh typing.
- Urine for albumin and sugar.
- Hb%.
- Ultrasonography

First stage of Labor
Procedures

- General
- Bowel
- Rest and ambulation
- Diet
- Bladder care
- Relief of pain
- Assessment of mother and fetus and Partograph recording

Management of first stage

GENERAL

- Antiseptic dressing are as described before
- Encouragement, emotional support and assurance
- Constant supervision is ensured.

Management of first stage

BOWEL

An enema with soap and water or glycerine suppository is traditionally given in early stage.

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BLADDER CARE

- Patient is encouraged to pass urine
- Full bladder often inhibits uterine contraction and may lead to infection.
- If cannot go to the toilet, give bed pan.
- If the patient fails to pass urine, catheterization is to be done.

Management of first stage

DIET

- Food withheld during active labor

(There is delayed emptying of the stomach in labor. Low pH of the gastric contents is a real danger if aspirated following general anesthesia)

- Fluids in the form of plain water, ice chips or fruit juice may be given in early labor.
- Intravenous fluid with ringer solution is started where any intervention is anticipated

Management of first stage

REST AND AMBULATION

- Patient is allowed to walk during the early first stage particularly with intact membranes.
- If rest is needed the patient lies on her left lateral position.

Management of first stage

RELIEF OF PAIN

Pharmacological and non pharmacological measures

Management of first stage

ASSESSMENT OF MOTHER AND FETUS AND PARTOGRAPH RECORDING

THE MOTHER:

1. General

- Pulse every 30 minutes
- Blood pressure every 1 hours
- Temperature every 2 hours.
- Urine ouput - volume, protein or acetone.
- Any drug (oxytocin or other)

Management of first stage

2. **Abdominal palpation**

a) Uterine contractions: The number of contractions in 10 minutes and duration of each contraction in seconds are recorded in the partograph

b) Pelvic grip: Gradual disappearance of poles of the head (sinciput and occiput) which were felt previously

c) Shifting of the maximal intensity of the fetal heart beat downwards and medially.

Management of first stage

3. Vaginal examination

a) Dilatation of the cervix
b) Position of the head and degree of flexion
c) Station of the head
d) Color of the liquor
e) Degree of moulding of the head

Management of first stage

THE FOETUS

- FHR every 15 minutes
- Continuous electronic fetal monitoring

II STAGE OF LABOUR

Management of second stage

The transition from the first stage to the second stage is evidenced by the following features:

a) Increasing intensity of uterine contractions
b) Appearance of bearing down efforts
c) Urge to defecate with descent of the presenting part
d) Complete dilatation of the cervix

Management of second stage PRINCIPLES

1. To assist in the natural expulsion of the fetus slowly and steadily
2. To prevent perineal injuries.

Management of Second Stage of Labor

Preparation for delivery

1. The patient is transferred on a wheel or trolley to the delivery room.
2. Put her in the lithotomy position.
3. The lower abdomen, upper parts of the thighs, vulva and perineum are swabbed with antiseptic lotion.
4. Sterile legs and towels are applied.

Management of Second Stage of Labor

Conduction of delivery

- Delivery of the head
- Delivery of the shoulders
- Delivery of the trunk
- Immediate care of newborn

Management of Second Stage of Labor

DELIVERY OF THE HEAD

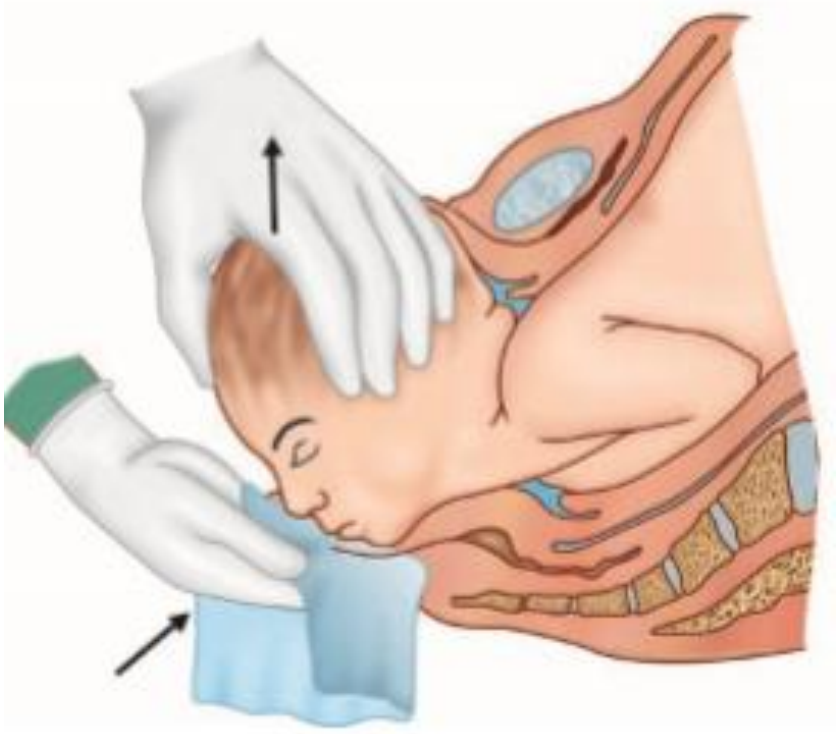
The principles to be followed are to maintain flexion of the head, to prevent its early extension and to regulate its slow escape out of the vulval outlet.

Management of Second Stage of Labor

- The patient is encouraged for the bearing down efforts during uterine contractions.
- When the scalp is visible for about 5 cm in diameter, flexion of the head is maintained during contractions.

Management of Second Stage of Labor

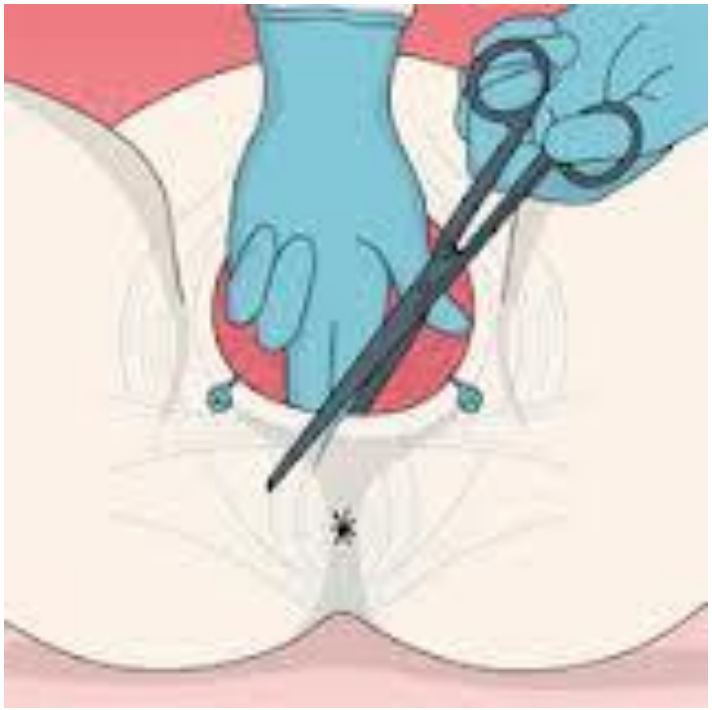
- The flexion of the head is maintained by pushing the chin with the right hand placed over the anococcygeal region while the left hand exerts pressure on the occiput (Ritzen maneuver)



- Flexion of the head should be maintained till crowning
- The purpose of increasing the flexion of the head is to ensure that the small suboccipito-frontal diameter 10 cm distends the vulval outlet instead of larger occipitofrontal diameter 11.5 cm

Management of Second Stage of Labor

- When the perineum is fully stretched and threatens to tear specially in primigravidae, episiotomy is done at this stage after prior infiltration with 10 mL of 1% lignocaine.



Management of Second Stage of Labor

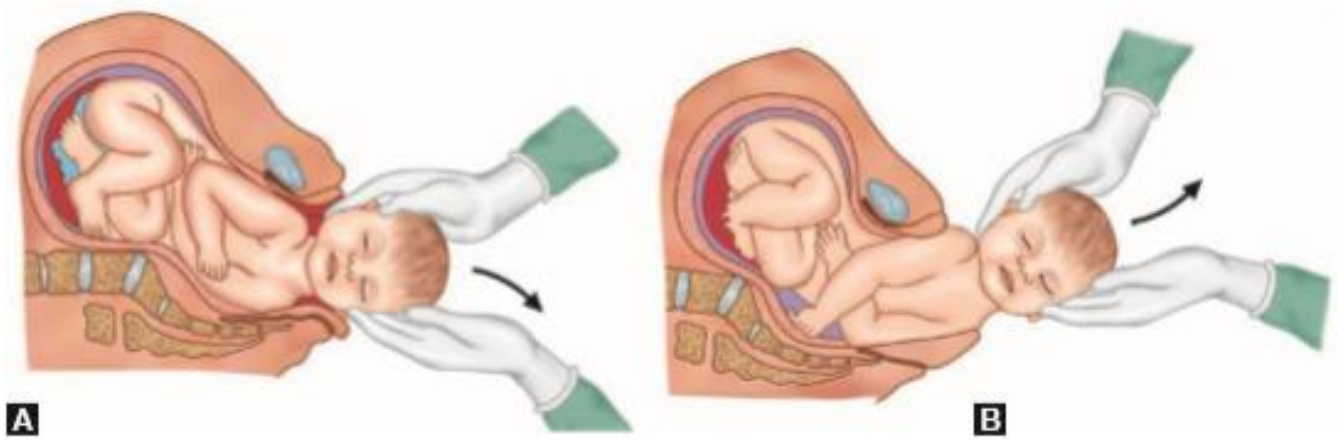
Care following delivery of the head

- The mucus and blood in the mouth and pharynx are to be wiped with sterile gauze piece or a mucous sucker
- The eyelids are then wiped with sterile dry cotton swabs
- The neck is then palpated to exclude the presence of any loop of cord

Management of Second Stage of Labor

DELIVERY OF THE SHOULDERS

Gentle downward traction is applied to the head till the anterior shoulder slips under the symphysis pubis. The head is lifted upwards to deliver the posterior shoulder first then downwards to deliver the anterior shoulder.



Management of second Stage of Labor

DELIVERY OF THE TRUNK

Usually slips without difficulty otherwise gentle traction is applied to complete delivery.

Management of second Stage of Labor

IMMEDIATE CARE OF NEWBORN

1. Baby should be placed on a tray covered with clean dry linen with the head slightly downwards.
2. Air passage (oropharynx) should be cleared of mucus and liquor by gentle suction.
3. Apgar rating at 1 minute and at 5 minutes is to be recorded.

Management of second Stage of Labor

4. Clamping and ligature of the cord

- The cord is clamped by two Kocher's forceps, the near one is placed 5 cm away from the umbilicus and is cut in between
- Delay in clamping for 2–3 minutes or till cessation of the cord pulsation facilitates transfer of 80-100 mL blood from the compressed placenta to a baby when placed below the level of uterus.

Management of second Stage of Labor

Delayed clamping is contraindicated in

a) Pre-term or a low birth weight baby
   Hypervolemia

b) Rh-incompatibility

   To prevent antibody transfer from the mother to the baby

a) Babies born asphyxiated or one of a diabetic mother.

5. Put an identification band

III STAGE OF LABOUR

Management of III stage of labour

EXPECTANT MANAGEMENT

ACTIVE MANAGEMENT

Management of III stage of labour
Expectant management

Clamp the umbilical cord

Catheterize the bladder

Guard the fundus

Wait for spontaneous separation of the placenta

Placenta is separated

Wait for spontaneous expulsion

Management of III stage of labour Expectant management continued…

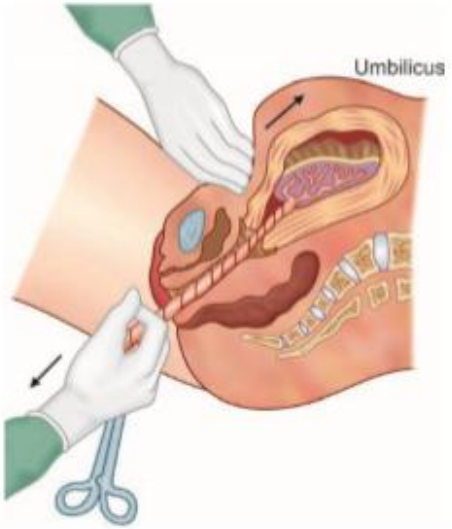
If not expelled

Expulsion is done by Modified Brandt Andrew's method (controlled cord traction method)

Inj Oxytocin 10 units IM

Examine the placenta

Examine the genitalia



Management of III stage of labour
Active Management

Inj. Oxytoin 10 units IM

Clamp the umbilical cord

Expulsion is done by Modified Brandt Andrew's method (controlled cord traction method)

Fail

Management of III stage of labour Active Management continued

Repeat after 2-3 minutes

Fail

Wait for 10 minutes and repeat

Fail

Manual removal of placenta

IV STAGE OF LABOUR

Fourth Stage of Labour

- Observation for the patient particularly atony of the uterus and vaginal bleeding.

Mother

1. Transfer the mother from the delivery table to the recovery room
2. Provide perineal care
3. Ensure emergency equipments are available
4. Check the fundus

- 1st hour- every 15 minutes
- 2nd hour- every 30 minutes
- Thereafter hourly

Mother

6. Document lochia
   - ❖ 1st hour- every 15 minutes
   - ❖ 2nd hour- every 30 minutes
   - ❖ Thereafter hourly
7. Observe the mother for chills
8. Monitor vital signs and general condition

Mother

9. Observe urinary bladder for distension

Characteristics

- Bulging of the lower abdomen
- Spongy feeling mass between the fundus and the pubis
- Displaced uterus
- Increased lochia

➢ Full bladder can cause PPH

➢ Nerve blocks may alter the sensation

If possible ambulate the patient to bathroom

Mother

10. evaluate the perineal area for signs of developing edema or hematoma

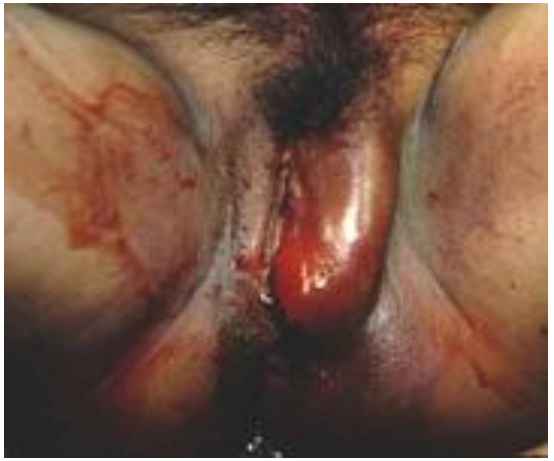
Causes

- Prolonged second stage
- Delivery of a large infant
- Rapid delivery
- Forceps delivery
- Fourth degree lacerations

Mother

Edema

- Apply ice pack
- Advice sitz bath
- Bladder distension



Hematoma

- Discolouration
- Severe pain
- Edema
- Feeling to defecate due to pressure over rectal muscles
- Check sensitivity to the area

Mother

- Small hematomas (< 3 cm) are left to resolve on their own—ice packs may be applied
- Large hematomas (> 3 cm) may require evacuation of the blood and ligation of the bleeding vessel
- Analgesics and broad-spectrum antibiotics may be ordered due to increased chance of infection

Mother

11. Observe for signs of hemorrhage
12. Assess for ambulatory stability
13. Nutrition management
14. Initiate breastfeeding