Intrapartum Issues
General Assessment, and Gestational Assessment

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- Pictures are from Up To Date
- All diagrams used in this presentation were taken from Mosby’s Nursing Consult. This valuable resource is available through the Info Web at Cape Fear Valley Health System.
- Anne Geddes prints are used with permission.

Delivery Room

- Assessment of fetal well being is ongoing through pregnancy
- Remember always follow NRP guidelines
- Delivery Room Temperature should always be warm
- Consider polyethylene bag or wrap for the preterm infant
Check all equipment when mother is admitted to the delivery room; prior to delivery and prior to the birth.
- The warmer is turned on at maximum heat at delivery.
- Anticipate problems.
- How long has mother’s membranes been ruptured?
- Was an epidural used?
- What drugs did the mother receive and when?
- Did mother have a temperature at delivery? How long prior to delivery?
- Were there decelerations in the fetal heart rate?
- Was there a nuchal cord?

- Abruptio placentae?
- Is there a history of drug use?
- Did Mom have prenatal care and when did it start?
- How did the mother present?
- What are mothers prenatal labs?
- What is the mother’s age?
- What was her triple screen?
- What are other potential risk factors?

- Was there any cord compression?
- Is the baby tachycardic?
- Does the baby have a temperature?
- Is the baby pale?
- What are Infection Risks?
- PPROM
- Were antibiotics used?
- Were there concern for Chorioamnionitis
- What are mother’s health concern’s?
Birth

- Infant is placed on warmer.
- Dry the infant.
- Place a hat on the infant.
- While you are drying and thus stimulating the baby, assess the baby’s color and respiratory effort.

- Bulb suction the baby’s mouth and nose, only if clinically indicated.
- If secretions are blocking the oropharynx or nasopharynx, suction with a number 6, 8 or 10 catheter depending on size and gestation.
- Make sure the wall suction is set at 100mmHg when occluded.
- Monitor the heart rate and the infant’s color while suctioning.
- Follow NRP.

- Remember, suctioning may depress the infant in the first few minutes of life and lead to advanced resuscitation.
- Observe the baby’s work of breathing.
- Respirations should be 40-60 per minute.
- There may be some initial intercostal, subcostal and/or substernal retractions. These may be due to secretions blocking the airway or normal transition with alveoli filling with air as amniotic fluid is forced into the interstitial area to be absorbed by the lymph system.
Retractions should be mild in nature and decreasing in frequency.
If retractions worsen or become deeper, there is tachypnea and any cyanosis or questionable cyanosis, circumoral or peripheral. Provide oxygen, warmth, use oxygen saturation monitor.
Retractions may be part of normal transition.
They may last as long as 4-6 hours before they spontaneously resolve.

If the baby remains pink, accu-checks are normal and the temperature is normal, the baby needs only to be observed.
CBC and blood culture may be sent.
Grunting may also be a normal part of transition.
If grunting is soft and intermittent and the baby is pink without oxygen, it is safe to observe the infant.
If grunting becomes worse or the infant requires oxygen, baby will be admitted to the NICU.

Grunting may be due to a pneumothorax.
This may cause the baby to have retractions and some tachypnea as well.
The degree of increased work of breathing will increase with the size of a pneumothorax.
Air leak that is small usually causes minimal distress.
• Ask yourself the following:
  • Are breath sounds equal?
  • Is the chest rise equal?
  • Are breath sounds coarse or wet sounding?
  • Do you hear anything in the chest other than breath sounds such as bowel sounds?
  • Where are the heart sounds heard the loudest?
  • Always consider suctioning the baby in any distress and providing oxygen if the baby is not pink.

• Case Presentation!
  • Normal term born by repeat c. section and placed on preheated warmer crying at 17 seconds of age

• If the baby is pink over the head and right arm but the rest of the body is cyanotic, what might be happening?
The baby has a critical co-arctation or interrupted aortic arch.
The baby requires immediate admission to the NICU.
Question:
If the baby becomes pink on one side and pale on the other, what is going on?

Is there a sharp demarcated line in the middle of the body?
Answer:
Harlequin color changes.
Normal in the newborn period.
Occurs more frequently in preterm infants but does occur in term infants.
Occurs when baby is in the side lying position.
The lower half or dependent area is pink and the upper part is pale.

Harlequin color changes is normal in the newborn period and causes the baby no distress.
This will usually resolve within a few minutes when the infant is placed supine but may last for hours
Causes no distress
No intervention
At birth a baby is tachycardic, what are the possible causes?

The baby’s heart rate is 210, are you concerned?

Don’t forget, while baby is attached to mom, what affects mom will affect the baby!

Does mom have a temperature?

Don’t forget, heart rates over 200 may represent SVT
• Notice how the baby’s color changes
• The head, upper extremities and mid trunk become pink first, why?
• The hands and feet are usually the last to become completely pink.

If the baby does not become pink quickly, reposition the head with a neck roll to make sure the airway is completely open.

• Auscultate the chest anterior and posterior.
• Does the heart have a regular rate and rhythm?
• Is there a murmur?
• How loud is the murmur?
• Is this normal at Birth?
• How long does it take for the PDA to close?
• Do you hear a click?
• Is a click normal at birth?
• Where should you listen to hear heart sounds?

• Note where the PMI is
• What side of the chest is the PMI on?
• Is the precordium active?
• Is the baby centrally pink?
• What is the heart rate?
• Note the size of the head in proportion to the body.
• Palpate the anterior and posterior fontanels.
• Are the fontanels soft and flat?
• Where are the sutures?
• Are the sutures opposed, overlapping or separated?
• Are separated sutures normal?
- Is the presenting part bruised?
- Is there a caput?
- Is there a cephalhematoma?
- Are there any scalp defects?
- Cutis aplasia may be present with some trysomies or without syndromes.

Note the eyes and the distance they are from each other as well as the size of the bridge of the nose.
Note the nose.
Is it normally positioned?
Are the nares patent?
A baby with bilateral choanal atresia
- Pink with crying and cyanotic at rest
Inspect the mouth.
Is the hard and soft palate intact or is there a cleft?
All mucous membranes should be pink.

Does the tongue fit comfortably in the mouth or does it protrude?
Does the chin look normal in size and shape?
Inspect the neck.
Is there normal or extra or redundant skin?
This may be associated with some chromosomal anomalies.
Inspect the ears.
Are they normally positioned?, about the level of the outer canthus of the eye.
- Are the ears shaped normally?
- Look for preauricular pits or sinus and skin tags.
- If present these may indicate renal issues and/or hearing deficits.

**Abdomen**
- Look, listen and palpate.
- The newborn's abdomen should be soft and round.
- The liver edge is normally at or just below the right costal margin.
- Listen to bowel sounds.
- Where should you hear bowel sounds at birth?

- Is the abdomen flat or scaphoid?
- Inspect the umbilical cord?
- Are there three vessels?
- What are the concerns with a two vessel cord?
- Inspect the genitalia.
- For a male, look for the meatus opening.
Is the meatus at the tip of the glans or on the underside?

Does there a hypospadias?

Inspect the testis.

Do they feel normally shaped and size?

Do you feel fluid around the testis?

Does the scrotal sac have lots of wrinkles or rugae?

A female infant at term has a larger labia majora compared to labia minora. A hymenal skin tag is normal.

Inspect the anus.

Is it patent?

If the baby was breech, is the buttock bruised? Remember presenting part!
Musculoskeletal

- Is the baby moving all extremities with equal tone?
- Palpate the clavicles.
- Do you feel crepitus?
- Inspect the hands.
- Are there extra digits? (polydactyl)

- Look at the position of the fingers.
- Do they form a normal fist or are some fingers overlapping?
- Check the palmar creases.
- Is there a single or simian crease?
- Inspect the legs and feet.
- Hip click or clunk may indicate hip subluxation or dislocation
- Are they normally positioned?

- Are there extra toes?
- Amniotic bands may restrict growth.
- This may result in amputation of digits or an extremities.
- Inspect the spine.
- Is it intact?
• Look for dimpling, pilonidal or a tuft of hair at the level of the sacrum.
• Is there Mongolian spots?
• These may appear on the buttock, thighs or shoulders.
Inspect the skin for rashes or vesicles.
Is this normal?

Answer: Yes
This is milia or white papules.
Normal in the newborn period.
Cysts are caused by accumulation of sebaceous gland secretions.
When they appear in the mouth, they are called Epstein’s pearls.

What is this?
Answer: Erythema Toxicum.

- These are white or yellow papules with an erythematous base.

- If these are unroofed and a smear sent to the lab, they would contain eosinophils.

- These usually resolve within the first few days of life.
The difference between Erythema Toxicum and transient Neonatal Pustular Melanosis (TNPM) is that TNPM may occur at birth. When these pustules open and resolve, they leave a brown pigmented area. These contain neutrophils. These usually resolve completely by 3 months of age.

What are flat brown spots called?

Hint: they are less then about 3 cms in length and less then six in number.
Answer:

Café au lait spots

They usually have no significance.

Larger or more than six may however represent Cutaneous Neurofibromatosis.

What is this?

Answer:

Nevus Simplex or Stork bite

Usually found at the nape of the neck, eyelids, bridge of nose and upper lip.

It is the most common of all birthmarks

It is dilated capillaries.

They usually fade away by the second year of life.
What is this?

Answer:

- Port Wine Nevus
- It is flat and pink-red, darker in color compared to nevus simplex.
- Size and shape varies.
- Usually only one on the body.

What is this?
Answer:
- Strawberry Hemangioma.
- Lobulated tumor.
- Bright red in color and raised.
- May be a problem if located in the airway.
- Usually increases in size for the first six months of life, then shrinks.
- Complete regression may take several years.

Petechiae:
- Small hemorrhagic areas on the skin.
- Abnormal finding.
Neonatal Lupus Erythematosus!
Caused by maternally transmitted autoantibodies.
Major manifestations, dermatologic and cardiac.
Congenital heart block:
about 10% of cases of maternal Lupus.
Mostly papulosquamous and annular. These are erythematous, nonindurated scaly plaques.
Resolve completely usually between 6 months and 2 years of age.

The End!