

COURSE TITLE: REPRODUCTIVE HEALTH IV

COURSE CODE: GNS 321

THIRD YEAR, SECOND SEMESTER.

LECTURE BY: R.I ATABO

BIRTH INJURIES

Defination:-Birth injury is defined as an impairment of the neonate's body function.

A birth injury can also be discribed as any type of harm to a baby that occurs during or near the time of birth. This can include oxygen deprivation (birth asphyxia), excessive pressure on the baby's head or body (birth trauma), contracting an infection, and other complications.

Birth injury may occur as an inevitable even if the delivery is spontaneous and uncomplicated.

Causes of birth injuries

(1) Foetal health conditions. Examples are macrosomia baby,malpresentation,fetal abnormalities.

(2) Maternal factors:-Like contracted pelvis, prolonged labour, obstructed labour

(3) Malpractices:- For example, injuries during Ceaserean section, forcep delivery, delivery by unskilled worker.

Types of birth injuries

1. Superficial traumatic lesions

- Caput succedaneum
- Cephahaematoma
- Bruising and ecchymoses
- Abrasion
- Lacerations and cuts

2. Trauma to deep structures

3. Injury to bones

- Fractures

-4. Injury to nerves

- Facial paralysis
- Brachial plexuses

5. Intracranial injuries

- CARPUT SUCCEDANEUM

Is an oedema of the area of the scalp which was in contact with the internal OS. There is swelling on the head at birth and pits on pressure. It may extend across sutures, it occurs in many cases of prolonged labour.

Management

It usually requires no treatment as it disappears within 24 hours of delivery.

CEPHALHAEMATOMA

This is a swelling in the head of the new born due to the collection of blood from damaged capillaries under the periosteum of the cranial bone. The swelling is confined to the affected bone and does not cross the suture line.

Cephalhaematoma is usually detected after birth or within 24 hours of life.

Management

The condition does not require treatment, it disappears spontaneously after 48 days to 4 weeks. The mother should be reassured that the swelling will disappear with time. That it doesn't interfere with baby's normal development.

BRUISING AND ECCHYMOSIS

This arises from superficial injuries to tissues and result in effusion of blood under the skin leading to discoloration of the affected area. They are common with breech and face presentations and are seen in the scrotum, labia majora and face respectively.

Many of these occur as a result of the baby's passage through the birth canal during delivery. In most cases, an infant's bruises heal on their own. However, some of these bruises may be signs of birth trauma caused by problems with the mother's health or medical errors .

Management:-

In most cases, ecchymosis and bruises on a newborn are nothing to worry about and they go away on their own within a few days. Bruises occur when damaged blood vessels leave dark blood spots beneath the skin.

2. TRAUMA TO DEEP STRUCTURES

Rupture of the liver and spleen: These injuries are rare, rupture of either organ may occur with breech delivery if the attendant grasps the trunk forcefully below the ribs. Death is often the outcome of these injuries.

The diagnosis of the ruptured liver and spleen is not easy hence there will be sudden collapse, increasing pallor and rapid pulse as suggestive.

3. INJURY TO BONES

Clavicle, also known as collar bone, fractures are the most common injury sustained by newborns during birth. A clavicle fracture is a break in the collar bone and occurs as a result of a difficult delivery or trauma at birth.

Factors that may increase a risk for a clavicle fracture include :-

- Big Baby.(macrosomia)
- The newborn's shoulder getting stuck during delivery e.g in deep transverse arrest
- Contracted pelvis .
- Instrumental delivery.

Signs & Symptoms

- The most common symptom associated with a clavicle fracture in a newborn is fussiness or crying with movement of the affected arm due to pain in the clavicle.
- The infant may experience pain with lifting him or her under the arms. The infant themselves may not move the affected arm as much as the uninjured arm.
- If injury has occurred to the nerves of the arm, the infant may not be able to move the arm at all and it may hang limp at the infant's side.
- The affected shoulder may appear slightly lower than the uninjured shoulder.
- After a few weeks, healing of the bone may cause a lump to develop at the area of the fracture, which may be felt when the area is touched.

Diagnosis

When a clavicle fracture is suspected, an x-ray or ultrasound image of the bone is ordered to confirm that it is broken.

Management

In most cases, clavicle fractures in newborns heal very quickly without any problems. Usually no treatment is required; however, the parent may be instructed to pin the child's sleeve of the affected arm to the front of their clothing to avoid moving the arm while it heals.

Complications

The most significant complication associated with fracture of the clavicle during birth is the inability to move the arm due to an injury to the brachial plexus, or collection of nerves of the arm.

(4) INJURY TO NERVE .

ERB'PALSY

Erb's palsy is a paralysis of the arm caused by injury to the upper group of the arm's main nerves, specifically the severing of the upper trunk C5–C6 nerves. These form part of the brachial plexus, comprising the ventral rami of spinal nerves C5–C8 and thoracic nerve T1

Signs and symptoms of Erb's Palsy .

- Difficulty moving the arm or pain in movement
- Holding the arm against the body with a bend at the elbow
- Trouble gripping objects or the fist on one side
- The arm does not have to be entirely motionless for the child to have the condition. It may just look weak, be sore or be numb.

Risk factors

The following delivery and pregnancy situations may contribute to Erb's palsy:

- Use of vacuum extraction tools or forceps during delivery
- Infants with high birth weights
- Mothers of small stature

Mothers who have gained excessive weight during pregnancy

- Breech births
- Prolonged second stage lasts for longer than an hour
- Birth injury from excessive pulling of shoulders during delivery

Erb's Palsy Prognosis. In many cases, Erb's palsy resolves on its own with little or no treatment. In other cases, however, if the nerves in the upper brachial plexus are severely damaged, the affected arm may suffer from permanent weakness or paralysis.

Management

Physical therapy and massage therapy can help improve the strength of the arm and the nerves. This is usually true in more mild cases and will include both home care and professional care. Parents should know exactly what's being done. Routines should help rather than interfere with the child's progress. Some babies may actually benefit from Botox. It can send stimulation to the child's arm that helps the nerves recover. Botox treatments are typically done for up to two months.

(5) INTRACRANIAL INJURIES

The commonest intracranial injury is hemorrhage which is due either to a tear of the tentorium cerebelli or falx cerebri or the small vessels in the brain.

Intracranial hemorrhages (otherwise known as brain bleeds) are birth injuries that range from minor to extremely severe. They can be caused by birth asphyxia (oxygen deprivation during or around the time of birth) or birth trauma (injuries caused by excessive mechanical force to the baby's head).

Signs and Symptoms

Symptoms of intracranial hemorrhages in infants vary based on the type and severity of the bleeding but include the following:

- Excessive crying.
- Difficulty in sleeping.
- Stiffness in the neck
- Not able to move and focus eyes.
- Lethargy
- Neonatal seizures
- Apnea
- Feeding difficulties
- Irritability
- Bulging fontanelle/soft spot
- Shallow or strained breathing
- Abnormal tone
- Altered level of consciousness

Complications

More severe bleeds can result in mental and physical impairments such as developmental delays, learning disabilities, and cerebral palsy (CP).

Management of intracranial hemorrhages

Treatment of brain bleeds is mostly of a supportive nature, although neurosurgical intervention may be necessary to manage certain types. The prognosis varies depending on the severity and location of the hemorrhage. Some infants do very well with little or no residual effects.