High Risk OB and Difficult Deliveries

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- WorldÂ´s best father.mp4

Obstetric Terminology

- Prenatal aka Antepartum- interval prior to delivery
- Post partum- interval after the delivery
- Natal- relating to date of birth
- Gravidity- number of pregnancies
- Parity- number of pregnancies carried to full term
- Primigravida- Pregnant for the first time
- Primipara- given birth to first child
- Multigravida- pregnant more than once
- Nulligravida- never been pregnant
- Grand multiparity- delivered at least seven babies
- Gestation- period of time for intrauterine fetal development

- Pregnancy can aggravate preexisting medical conditions;
  - Diabetes
  - Heart disease
  - Hypertension
  - Seizure disorders
  - Neurological disorders

Pain, Vaginal Bleeding and Active Labor

- Complains of Pain - Determine;
  - Onset, character and especially the regularity of occurrence
- Vaginal Bleeding;
  - Determine events prior to it's start
  - Number of sanitary pads used
  - Save any clots or passed tissue
- In labor;
  - Need to push, move bowels
  - Have membranes ruptured (water broke), which are all signs of possible "imminent" delivery
- Always Protect the Patient's Modesty

Crowning

- Bulging of the fetal head past the opening of the vagina
- During a contraction crowning is an indication of impending delivery
- Do not perform a internal vaginal exam in the filed
- Remember you have two patients

Abortion

- Complete; All of the uterine contents are expelled
- Incomplete; Part of the uterine contents were expelled
- Threatened; Characterized by unexplained bleeding during the first half of pregnancy
- Inevitable; Characterized by bleeding and severe abdominal cramping and dilation
- Elective; Requested by the mother

Abortion

- Spontaneous; Natural occurring expulsion of the fetus prior to viability. Most occur before week 12, many occur within 2 weeks of conception
- Criminal; Intentional termination of a pregnancy under any condition not allowed by law
- Therapeutic; Termination deemed necessary by a physician, usually to protect the maternal well being

Spontaneous Abortion

- Treat the patient suffering an abortion as you would any patient at risk for Hypovolemic shock
- Be human, Provide emotional support to the family

High Risk Pregnancy Indicators & Diagnosis

Risky Behavior for Moms

•Smoke from cigarettes and cigars is harmful, whether yours or someone else's.

•Alcohol includes beer, wine, wine coolers and liquor. Drugs include street drugs, prescription drugs, over-the-counter medicine, supplements and herbal products.

•Smoke, alcohol and drugs can pass directly through the placenta and umbilical cord to your baby. This can cause serious problems during pregnancy, including miscarriage, birth defects and premature birth.

Ectopic Pregnancy

- Assume that any female of childbearing age with lower abdominal pain is experiencing an ectopic pregnancy
- Ectopic pregnancy is life threatening, treat for shock, immediate transport

Ectopic Pregnancy

Assessment

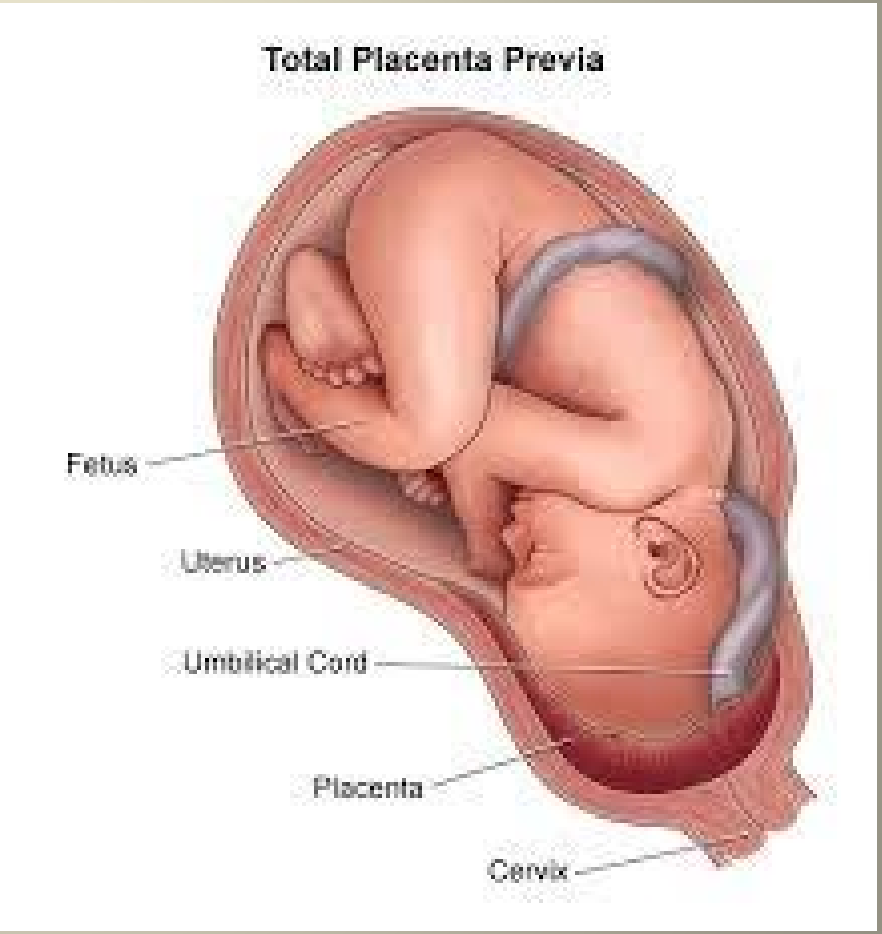
- Ectopic pregnancy occurs in 1 out of 44 live births
- The abdominal pain starts out a diffuse tenderness and then localizes as sharp pain in the lower Abdominal quadrant
- Absent or late period
- Abdomen becomes rigid and pain Intensifies
- Referred pain to the shoulder on the affected side

Management

- Warning this poses a significant life threat to the mother.
- Immediate aggressive treatment for shock
- Trendeleburg position if indicated
- Surgery often indicated to resolve the situation

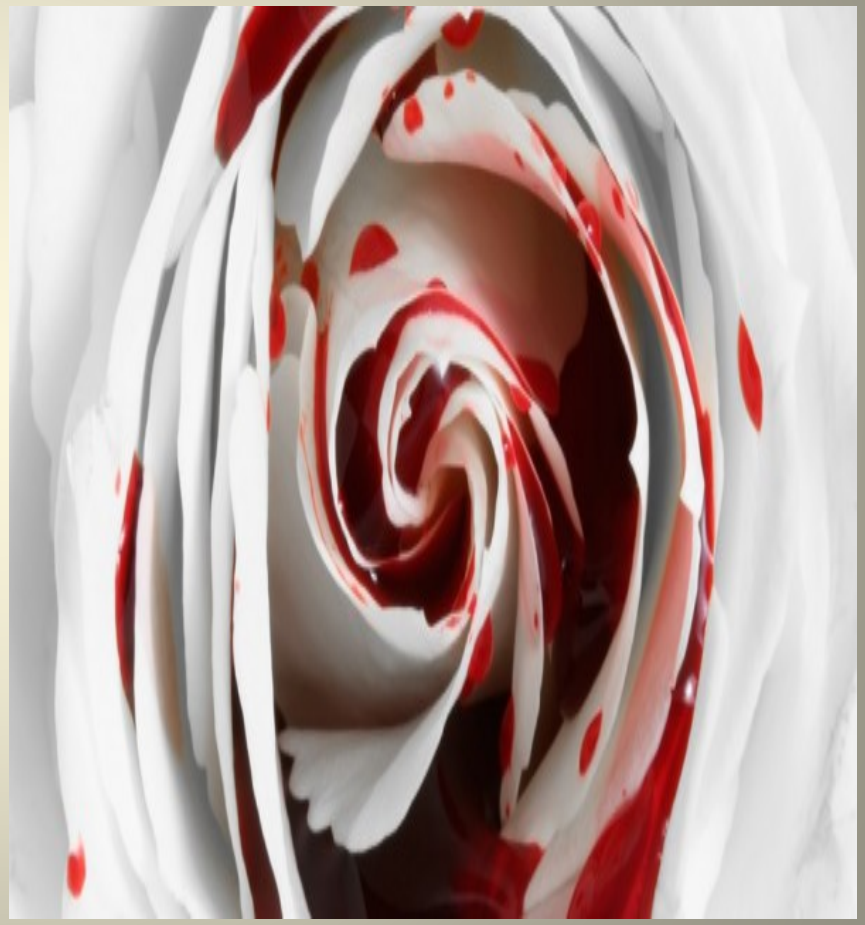
Placenta Previa

- Third –trimester bleeding should be attributed to placenta previa or abruptio placentae until otherwise proven
- Previa presents with painless bleeding
- Abruptio presents with sharp pain with or without bleeding



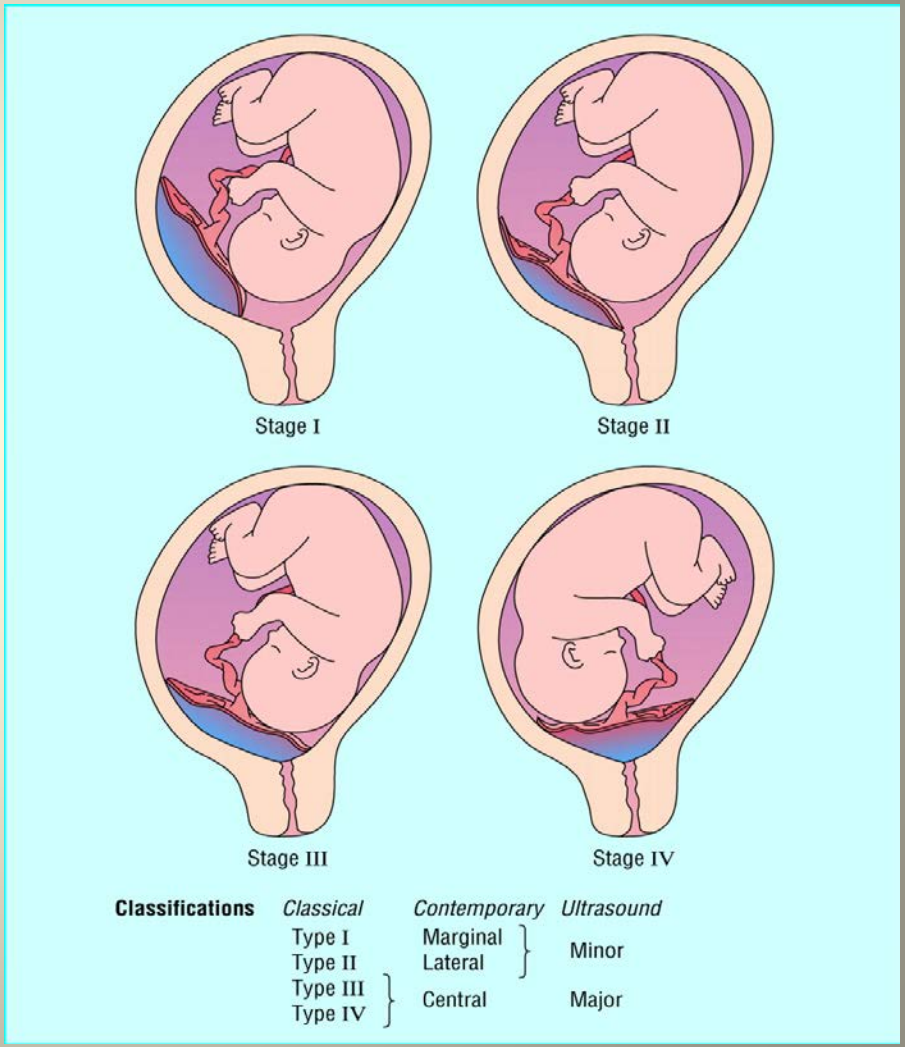
Placenta Previa

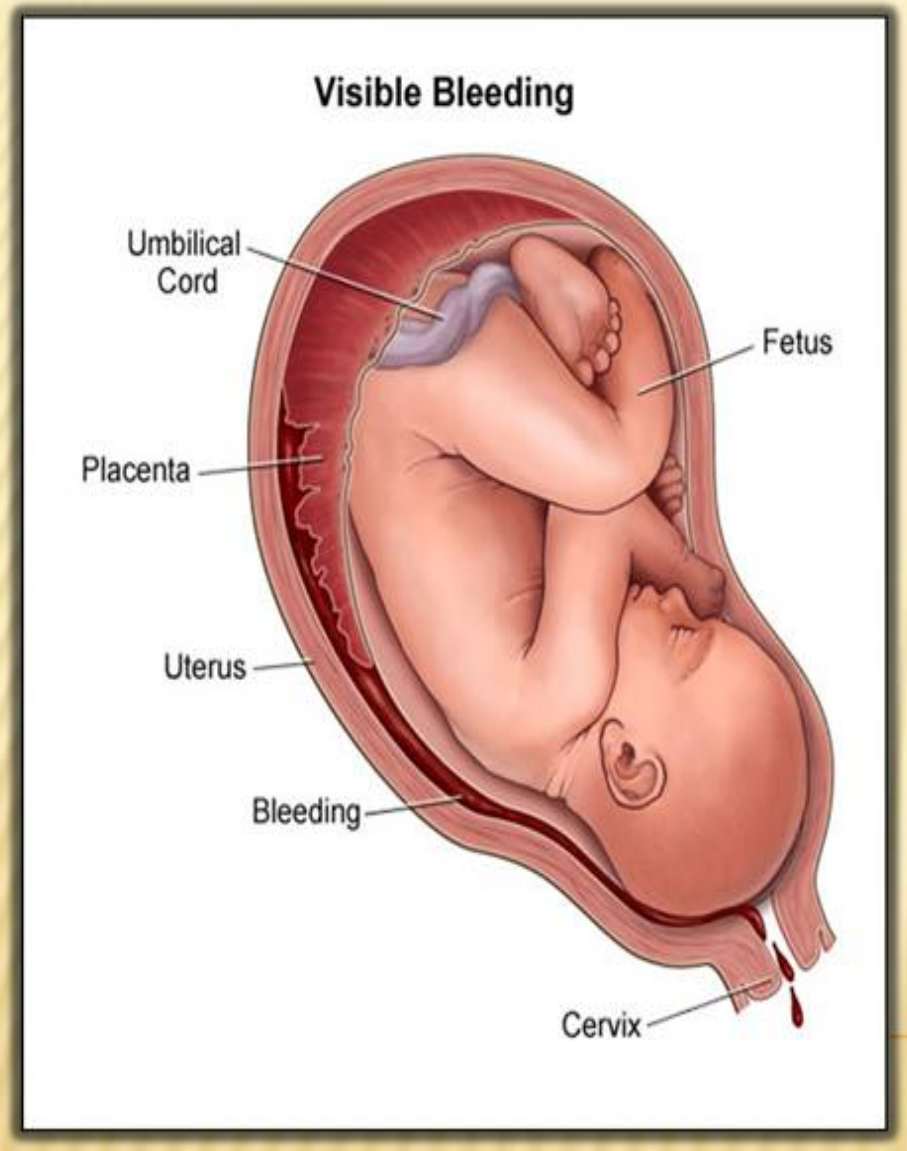
- NEVER attempt a digital exam, risk puncturing the placenta and cause fatal hemorrhage
- Because of the potential for profuse hemorrhage, always treat for shock and rapid transport
- Definitive treatment is delivery by C section

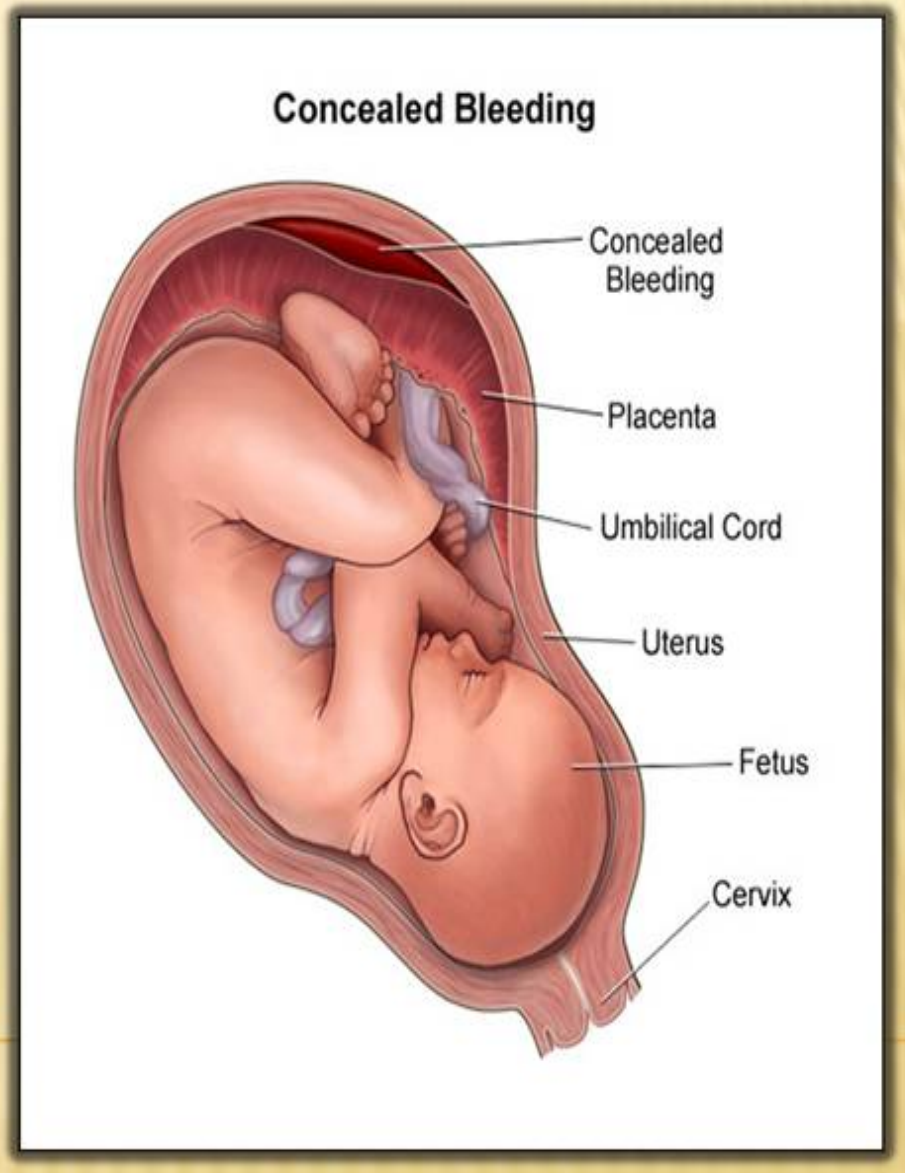


Abruptio Placentae

- Marginal abruption, bleeding but no pain
- Central Abruption, Sharp tearing pain and stiff, boardlike abdomen
- Complete abruption, will result in massive hemorrhage
- Life threatening condition treat for shock, rapid transport




Visible Bleeding
Umbilical Cord
Fetus
Placenta
Uterus
Bleeding
Cervix


Concealed Bleeding
Concealed Bleeding
Placenta
Umbilical Cord
Uterus
Fetus
Cervix

Preeclampsia and Eclampsia

- 5% of all pregnancies have hypertensive disorders of pregnancy
- Preeclampsia is a progressive disorder that is usually categorized as mild or severe. Severe symptoms include seizures or coma.
- Maternal blood pressure normally drops during pregnancy, a women may be hypertensive at 120/80 if her early pregnancy BP was 90/60

Preeclampsia and Eclampsia

- With suspected hypertensive disorder, it is critical to obtain an accurate history
  - Weight gain
  - Headaches
  - Visual problems
  - Epigastric or right upper quadrant abdominal pain
  - Apprehension
  - Seizures

Hypertensive Disorders of Pregnancy

- Preeclampsia and eclampsia are life threatening
- Keep the patient calm. Dim the lights
- Place the patient in the <u>left lateral recumbent</u> position and transport quickly <u>without lights and siren</u>
- Administer mag sulfate to control seizures
- Contact Medical Control who may request antihypertensive or a sedative

Supine Hypotensive Syndrome

- Treat supine hypotensive syndrome by placing the patient in the left lateral recumbent position or elevating her right hip
- Monitor fetal heart tones and maternal vital signs
- If volume depletion is evident, initiate an IV of normal saline.

Gestational Diabetes

- Consider Hypoglycemia when encountering a pregnant women with altered mental status
- If blood glucose is <60 mg/dL, administer 25 grams of 50% dextrose
- If Hyperglycemia administer 1 to 2 liters of normal saline

Braxton-Hicks Contractions

- Prior to the onset of labor occasionally called "false labor"
- They will increase in intensity and frequency but do not cause cervical changes.
- It is virtually impossible to distinguish false labor from true labor in the field
- The patient with suspected preterm labor should be transported immediately

Field Delivery

- Transport the patient in labor unless delivery is imminent
  - Maternal urge to push
  - Crowning
  - Water is broken, in the multigravita

- You just ran out of time.

Imminent Delivery

Bulging Peritoneum

Crowning

Field Delivery

- Most deliveries are normal
- Your primary job will be to assist the mother in the delivery of the child

Normal Delivery

- When the infant's head appears during crowing, cup your gloved fingers over the bony part of the skull. (avoid the fontanel)
- Exert very gentle pressure to prevent the baby's head from coming out too fast and tearing the perineum

Normal Delivery

- If the cord is wrapped around the baby's neck and cannot be loosened, you will need to remove it
- Place two clamps 3" apart and carefully cut the cord between the clamps

Normal Delivery

- Gently guide the head upward to deliver the bottom shoulder
- Do not pull the child out of the mother by force, late mom push the baby out.

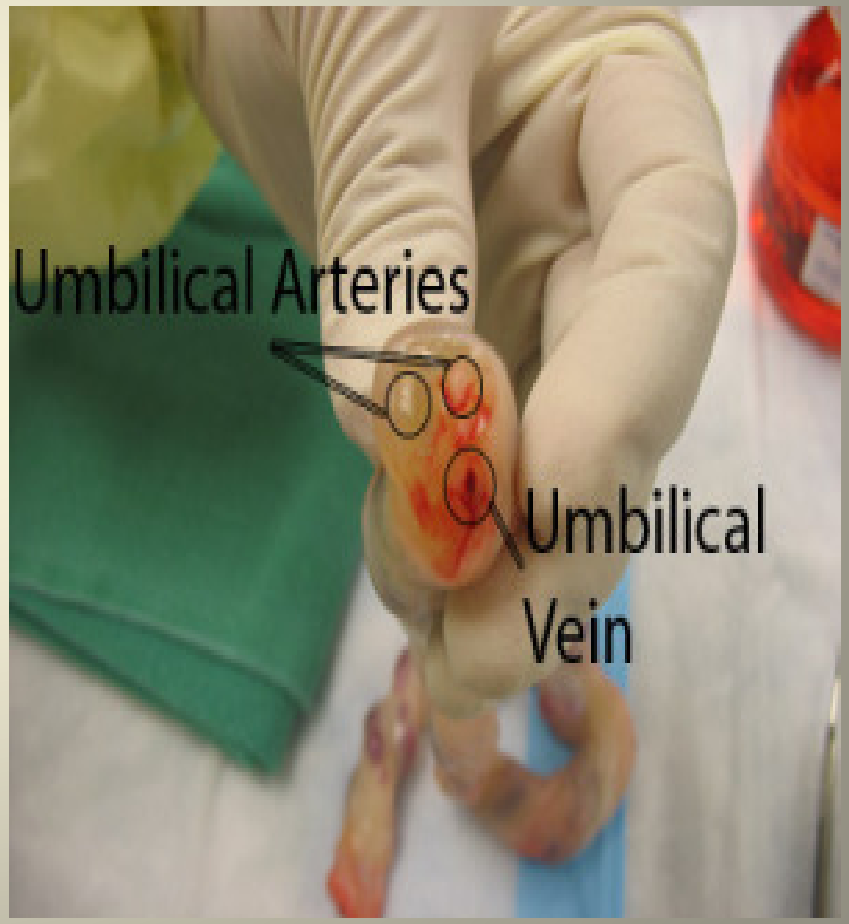
Normal Delivery

- Suction baby when the head emerges and until it starts breathing, most important with the presence of meconium
- Keep the baby level with the vagina until the cord is clamped.
- Always handle the cord gently to avoid tearing

Important to Remember

- The newborn must be kept warm.
- Deliver the baby into a blanket or towel.
- Pat dry the child and the put them into a clean dry blanket or towel.
- The baby should be put on mom's abdomen or up to the breast. Body contact will also warm baby.

Delivery of the Placenta
NEVER Pull on the Cord



Complication of Pregnancy

- Domestic Abuse
- Substance Abuse
- Diabetes
- Bleeding
- Ectopic Pregnancy
- Hypertensive Disorders

Complication of Labor

- Premature rupture of the membranes
- Preterm labor
- Abnormal presentations
- Prolapsed cord
- Hemorrhage
- Amniotic fluid embolism
- Premature/low birth weight

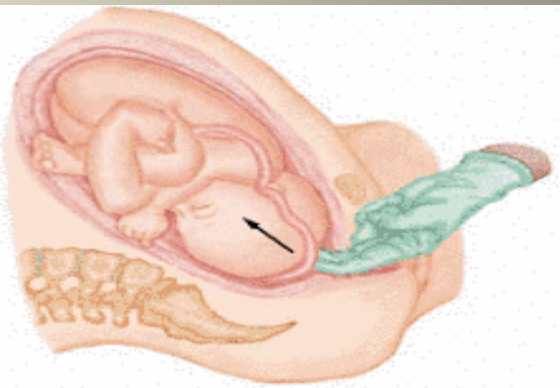
Nucal Cord

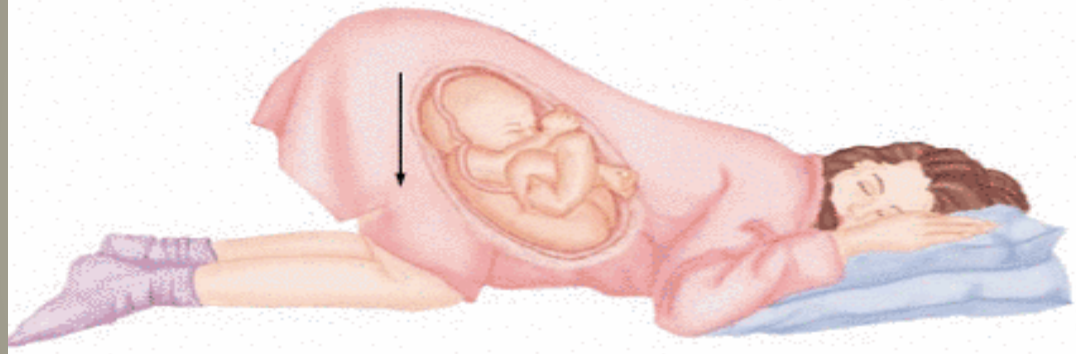
- Treatment of a nuchal cord consists mainly of prevention of umbilical cord compression during delivery
- A loose nuchal cord usually can be slipped over the baby's head to decrease traction during delivery of the shoulders or body. If the cord is wrapped too tightly and this is not possible, there is a technique by which the rescurer can slip the cord over the baby's shoulders
- If there is more than one loop or the loop is too tight and cannot be easily undone, the cord must be clamped and cut before delivery of the shoulders to ensure adequate oxygen supply to the baby.

Cord Prolapse

- If the umbilical cord is seen in the vagina, insert two gloved fingers to raise the fetus off the cord
- Place the mother in the Trendeleburg or knee-chest position, administer oxygen, and transport immediately
- Do not attempt delivery

A gloved hand in the vagina pushes the fetus upward and off the cord.

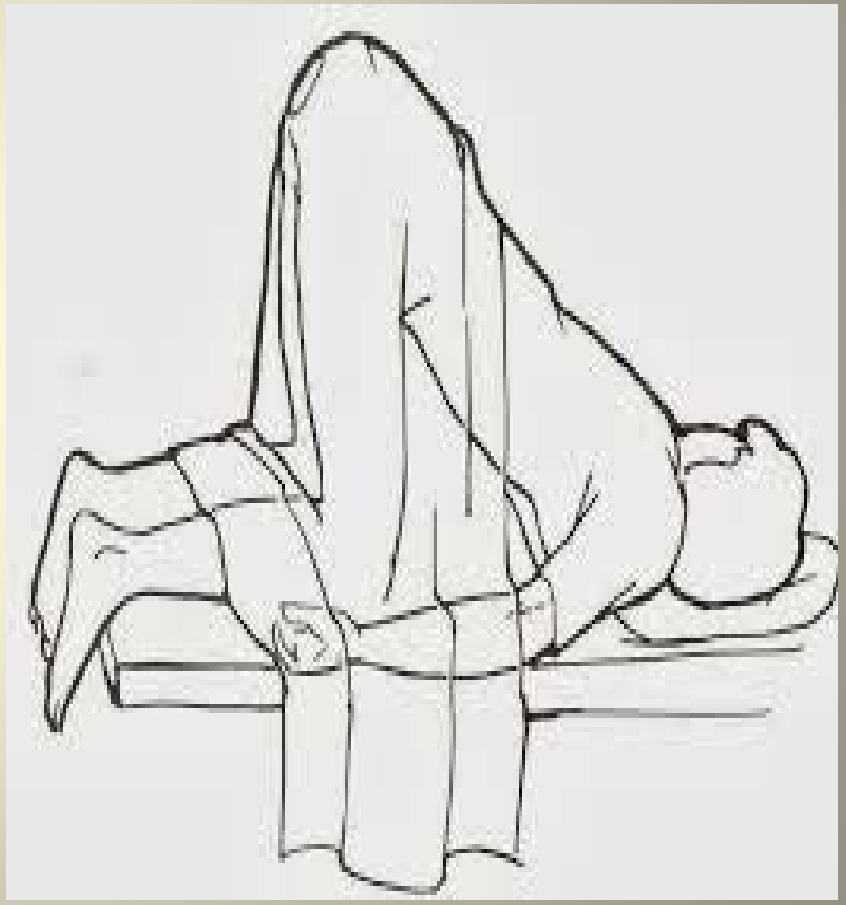




Knee-chest position uses gravity to shift the fetus out of the pelvis. The woman's thighs should be at right angles to the bed and her chest flat on the bed.

The woman's hips are elevated with two pillows; this is often combined with the Trendelenburg (head down) position.

Transportation of the Beach or Prolapsed Cord



Breech Presentation

- Most infants present in a head first and face down, (vertex) position

- Breech presentation is either the buttocks or both feet present first which is 4% of the births

1/2

Breach Presentation

- There is an increased risk for delivery trauma to the mother, as well as an increased potential for:
  - Cord prolapse
  - Cord compression
  - Anoxic insult for the infant

Difficult Delivery, Difficult Resuscitation

Birth Weight, Too Big or Too Small

Limb Presentation and other Abnormal Presentations

- With limb presentation, place the mother in the Trendeleburg position
- O2, immediately transport
- Do not attempt to deliver out side of the hospital
- Do not pull on the extremity or attempt to push it back into the vagina

Meconium Staining

- Meconium is thick, visualize the infant's glottis and suction the hypopharynx and trachea using a clean endotracheal tube each time until all meconium has been cleared from the airway
- The fluid is yellowish green or dark green
- The thicker and darker the color the higher the risk of fetal morbidity

Between 10 – 30 percent of all deliveries have meconium-stained fluid

Postpartum Hemorrhage

- When there is a loss of more than 500cc of blood immediately following delivery, <u>Treat for shock</u>. Two large bore IV's of saline and titrate O2 per pulse ox
- <u>Rapid Transport</u>
- Begin fundal massage

Pulmonary Embolism

- Usually presents with sudden severe dyspnea and sharp chest pain
- Administer high-flow, high concentration oxygen and support ventilations as needed
- Establish an IV of normal saline
- Transport immediately, monitoring the heart , vital signs, and O2 saturation.

Mothers under 17 years of age

- **Teenage pregnancy** ; In well-nourished girls, usually takes place around the age of 12 or 13.
- Pregnant teenagers face many of the same obstetric issues as other women.
- There are, however, additional medical concerns for mothers aged under 15. For mothers aged 15–19, risks are associated more with social economic factors than with the biological effects of age.
- However, research has shown risks of low birth weight, premature labor, anemia and pre-eclampsia are connected to the biological age itself, as it was observed in teen births even after controlling for other risk factors

Mothers over 35 years of age

- Greater likelihood to develop gestational diabetes
- Greater risk of heart conditions
- Greater risk of cancer and infections
- Greater likelihood to have a multiple pregnancy
- Greater likelihood to develop high blood pressure during pregnancy
- Greater likelihood to have a low birth weight baby and a premature birth
- Greater risk of chromosome abnormalities is higher

Trauma in Pregnancy

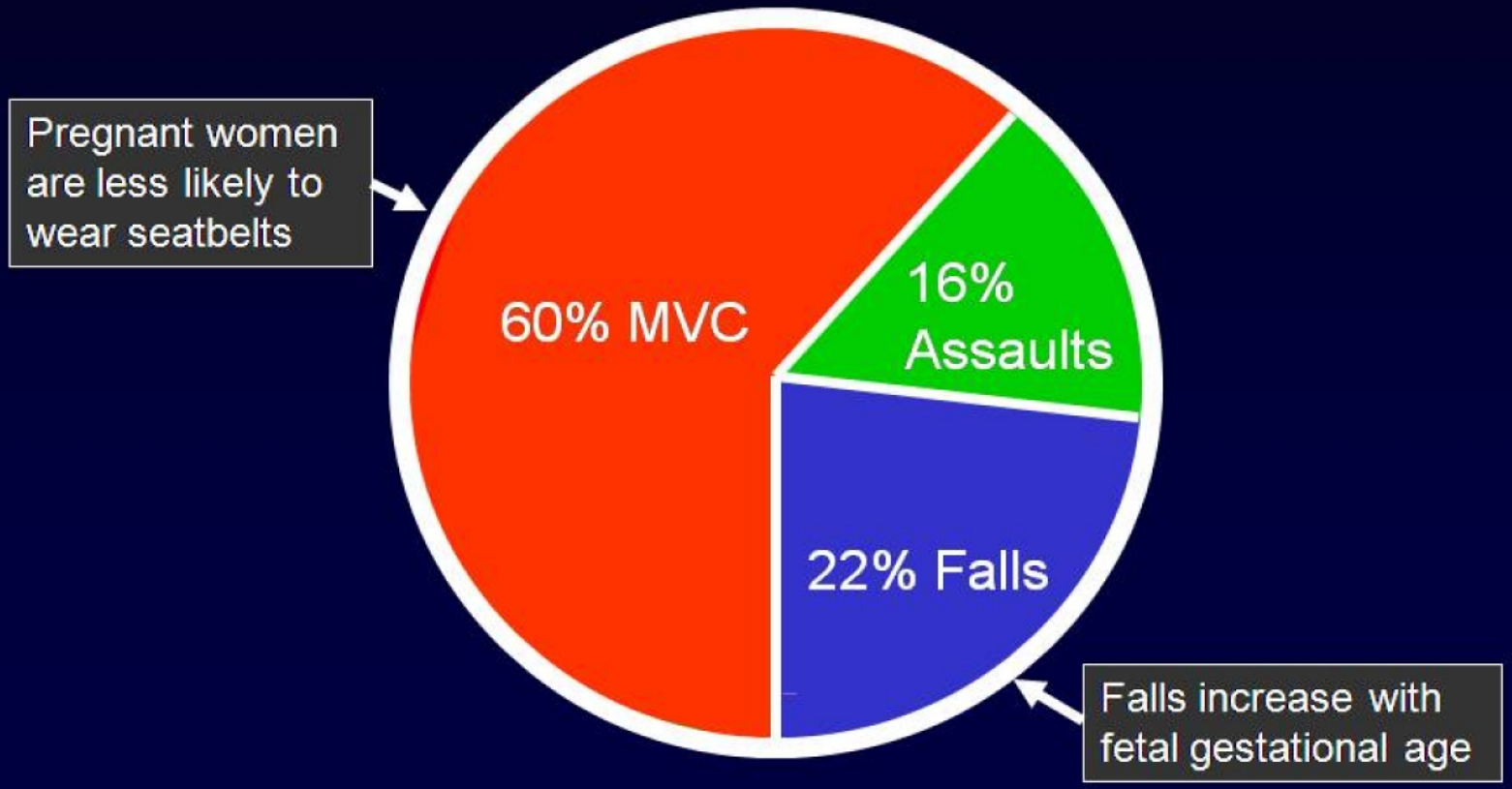
Save MOM - Save Baby

Causes of Trauma In Pregnancy

- Motor vehicle crashes
- Falls
- Intimate partner violence
- Gunshot wounds
- Stabbings
- Burns

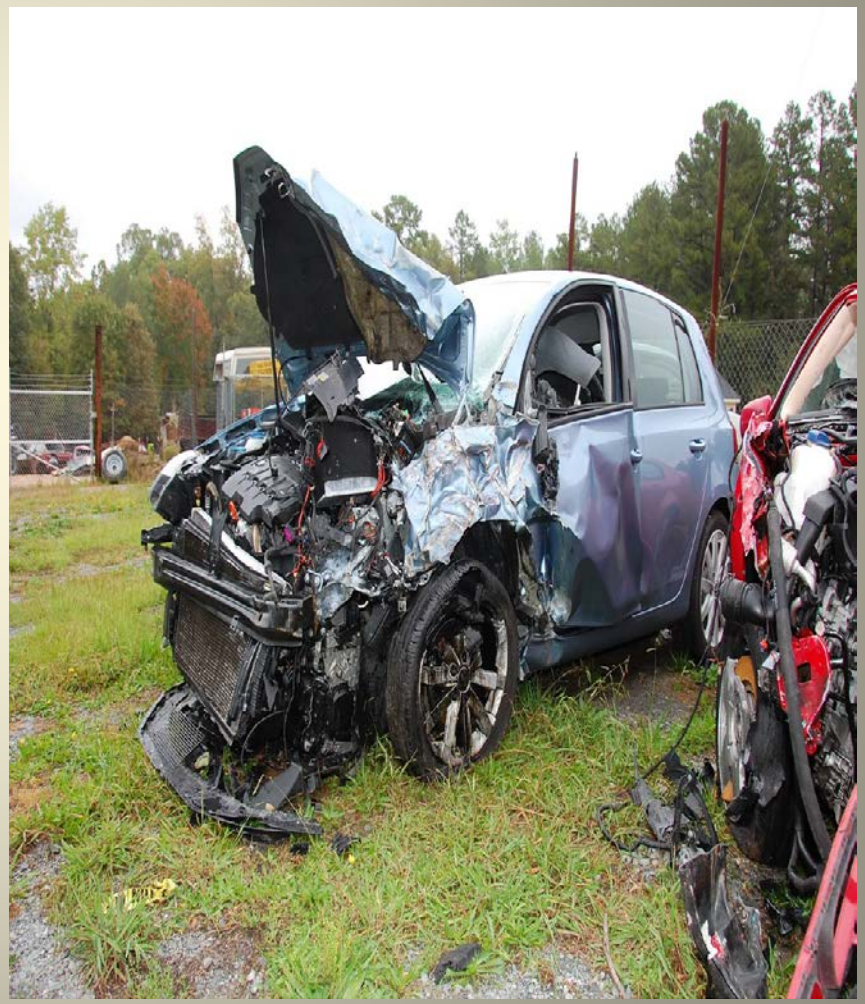
Seatbelt Injury
Should mom's wear a seatbelt?

Blunt Trauma



The Effects of Trauma on the Fetus

- The length of the pregnancy (age of fetus)
- The type of severity of the trauma
- The severity of blood flow and oxygen disruption to the uterus



Effects of Trauma on the Fetus

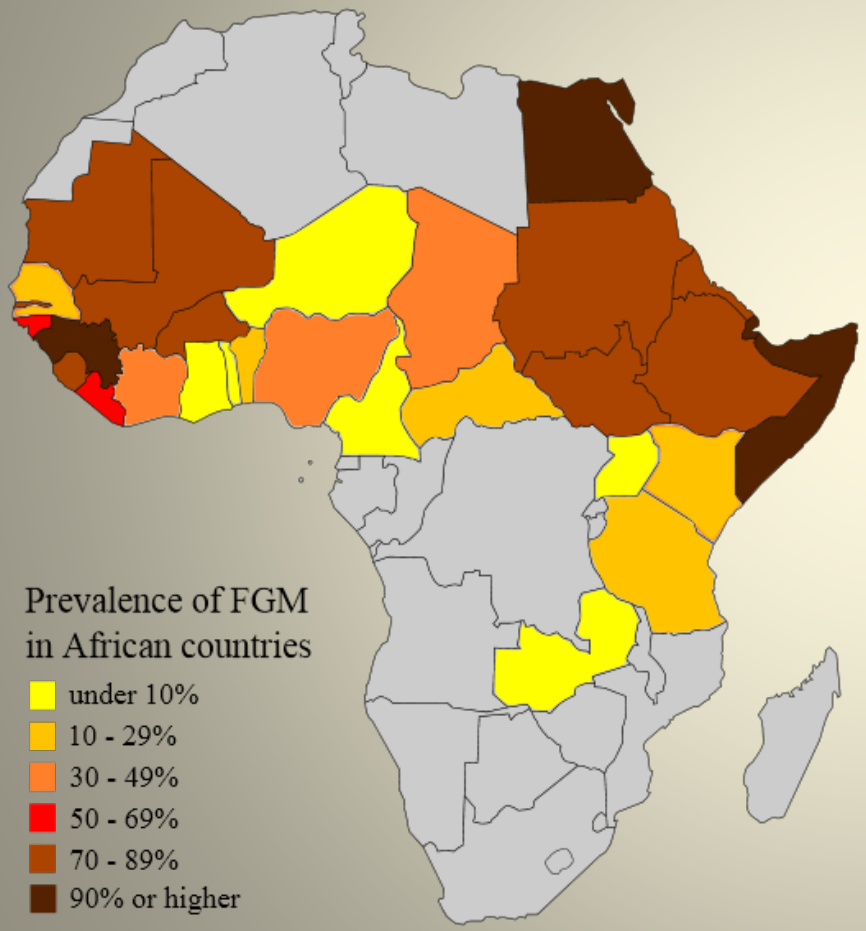
Physical abuse/injury can result in the following condition:

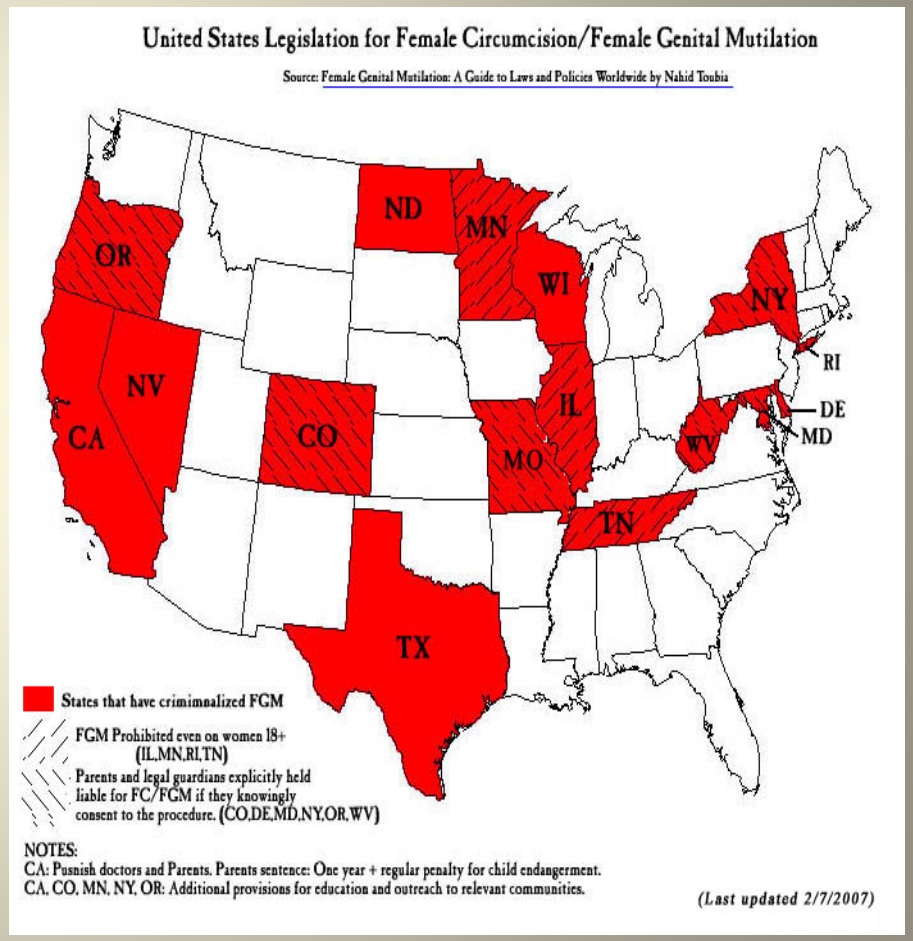
- Blunt trauma to the abdomen
- Severe bleeding
- Uterine rupture
- Miscarriage
- Premature labor
- Premature rupture of the amniotic sac

Special Considerations in Pregnancy

- Thermal burn of more than 20% of mother's body surface area increases the risk of fetal death
- Electrical burns/injury, even with low current is likely to cause fetal death because the baby is floating in amniotic fluid

Female Circumcision and Potential Complications with Child Birth





- http://www.youtube.com/watch?v=OpVwOb7A2Ms

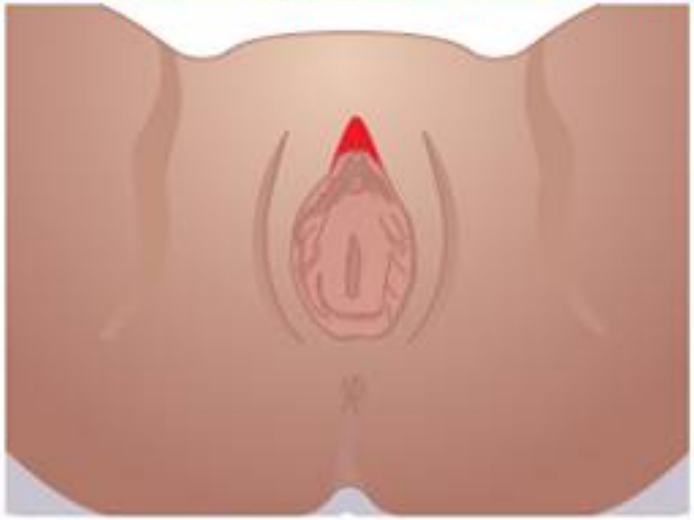
"female circumcision widely practiced in malaylsia"

Female Circumcision/Infibulation

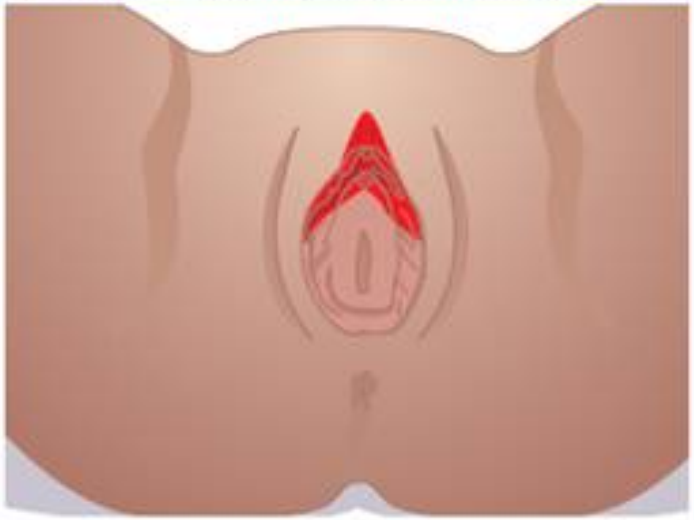
Practice manikin for clinicians

- Infibulation is a cultural practice and not a religious practice
- Infibulation is a surgical modification or mutilation of the genitals, labia majora and minora. This can range from suturing to complete removal, with each done for different reasons
- Not legal in the U.S. however adult women will request the doctor close the infibulation after child birth
- There are three types of infibulation

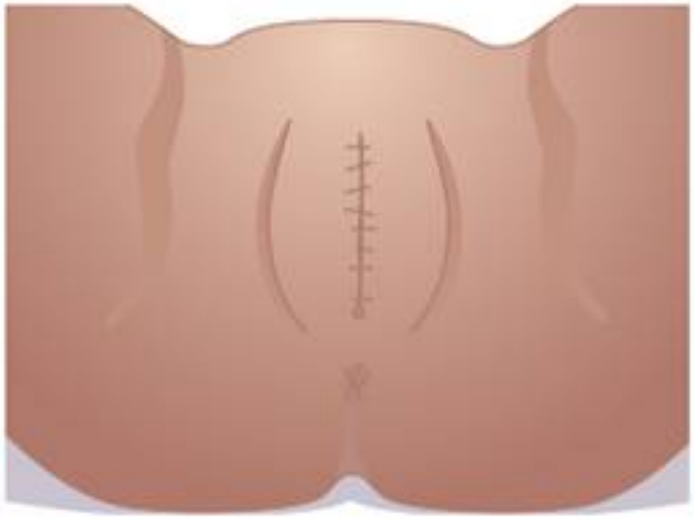
World Health Organization (2008) classification of female genital mutilation



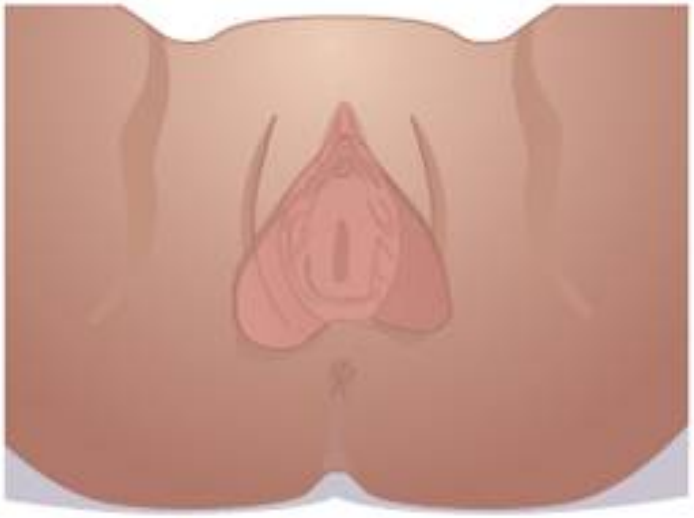
a) Type 1 – clitoridectomy



b) Type 2 – excision



c) Type 3 – infibulation



d) Type 4 – other, for example stretched labia

“World Health Organization” Three types of female genital mutilation (FGM)

- TYPE I
  - Removal of the clitoris by holding it between the thumb and index finger and pulling it out or use of a sharp object.
- TYPE II **(type I and II are the most common, 80 – 85% of FGM)**
  - Removal of the clitoris and labia minora.
  - Often the raw surfaces resulting in a pseudo-infibulation without sutures

“World Health Organization” Three types of female genital mutilation (FGM)

- Type III
  - The most extreme form involves the complete removal of the clitoris and labia minora, together with the inner surface of the labia majora
  - The raw edges of the labia majora are brought together to fuse, using thorns, various devices or stitching.
  - An opening is left to allow for the flow of urine and menstrual blood
  - The opening is 2-3 cm in diameter but may be as small as the head of a matchstick

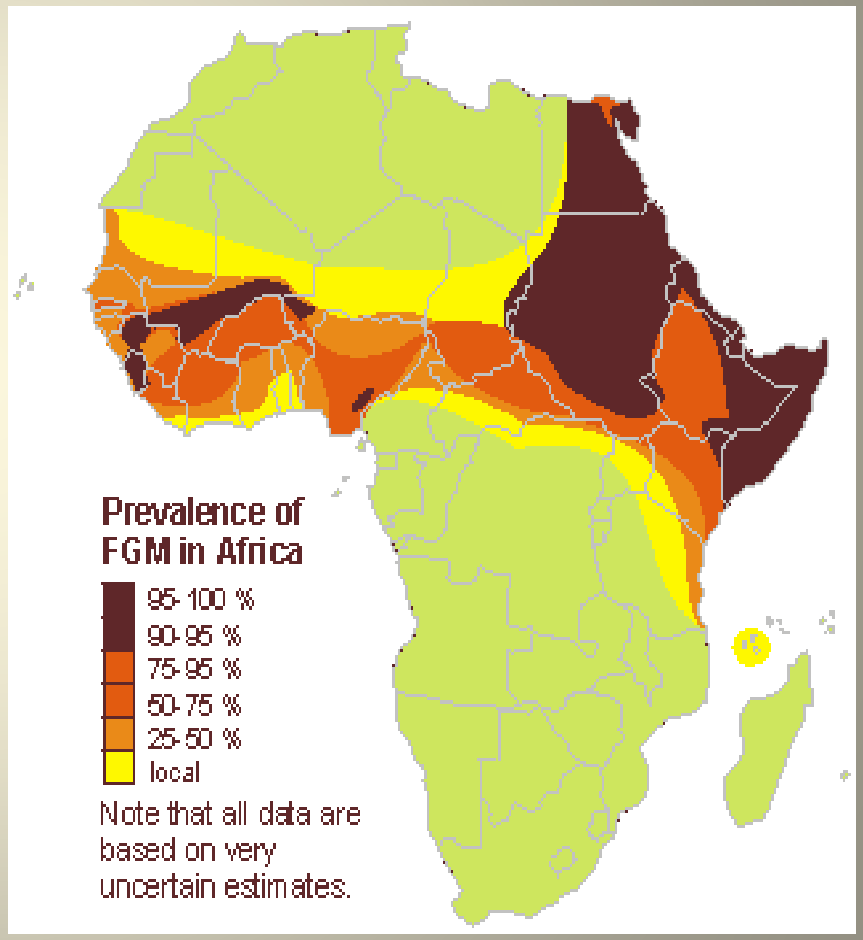
Study Findings

- **The medical complications of the practice of circumcision were studied in 290 Somali women between the ages of 18-54.**
- **Thirty-nine percent of the interviewed women had experienced significant complications after circumcision, most commonly;**
  - **hemorrhage**
  - **infection**
  - **urinary retention.**
- **Thirty-seven of the women reported a late complication of circumcision. Among these complications were;**
  - **dermoid cyst at the site of the amputated clitoris**
  - **urinary problems such as pain at micturition**
  - **dribbling urine incontinence and poor urinary flow**
- **Forty of the women had experienced problems at the time of menarche (first period) and ten of them were operated because of haematocolpos (vagina fills with blood)**

Female Circumcision (FGM)

- The cultural practice to keep a women a virgin until marriage
- Women believe that other women without the procedure are unclean
- FGM is valued by women of the culture

- FGM practices by country and type Country Prevalence Type
- Benin 5-50% excision Burkina Faso up to 70% excision
- Cameroon local clitoridectomy, excision
- Central Afr. Republic 45-50% clitoridectomy, excision
- Chad 60% excision, infibulation Comoros very local excision Côte d'Ivoire up to 60% excision
- DRC (Congo) local excision
- Djibouti 98% excision, infibulation
- Egypt 85-95% clitoridectomy, excision, infibulation Eritrea 95% clitoridectomy, excision, infibulation
- Ethiopia 70-90% clitoridectomy, excision, infibulation
- Gambia 60-90% excision, infibulation
- Ghana 15-30% excision
- Guinea 65-90% clitoridectomy, excision, infibulation
- Guinea Bissau local clitoridectomy, excision
- Kenya 50% clitoridectomy, excision, some infibulation
- Liberia 50% excision Mali 94% clitoridectomy, excision, some infibulation
- Mauritania 25% clitoridectomy, excision
- Niger local excision Nigeria 60-90% clitoridectomy, excision, infibulation
- Senegal 20% excision
- Sierra Leone 90% excision
- Somalia 98% infibulation Sudan 90% infibulation, excision
- Tanzania 18% excision, infibulation
- Togo 12% excision
- Uganda local clitoridectomy, excision



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Most of married women are defibulated naturally by their husbands.

- The infibulation should be opened prior to delivery .
- The preferred scenario would be to open the infibulation when the patients discoveres they are pregnant

FGM and out of Hospital Delivery

- When giving birth, the scar tissue might tear, or the opening needs to be cut to allow the baby to come out
- Women who had undergone FGM, had significantly increased risks for adverse events during childbirth, and that genital mutilation in mothers has negative effects on their newborn babies

FGM

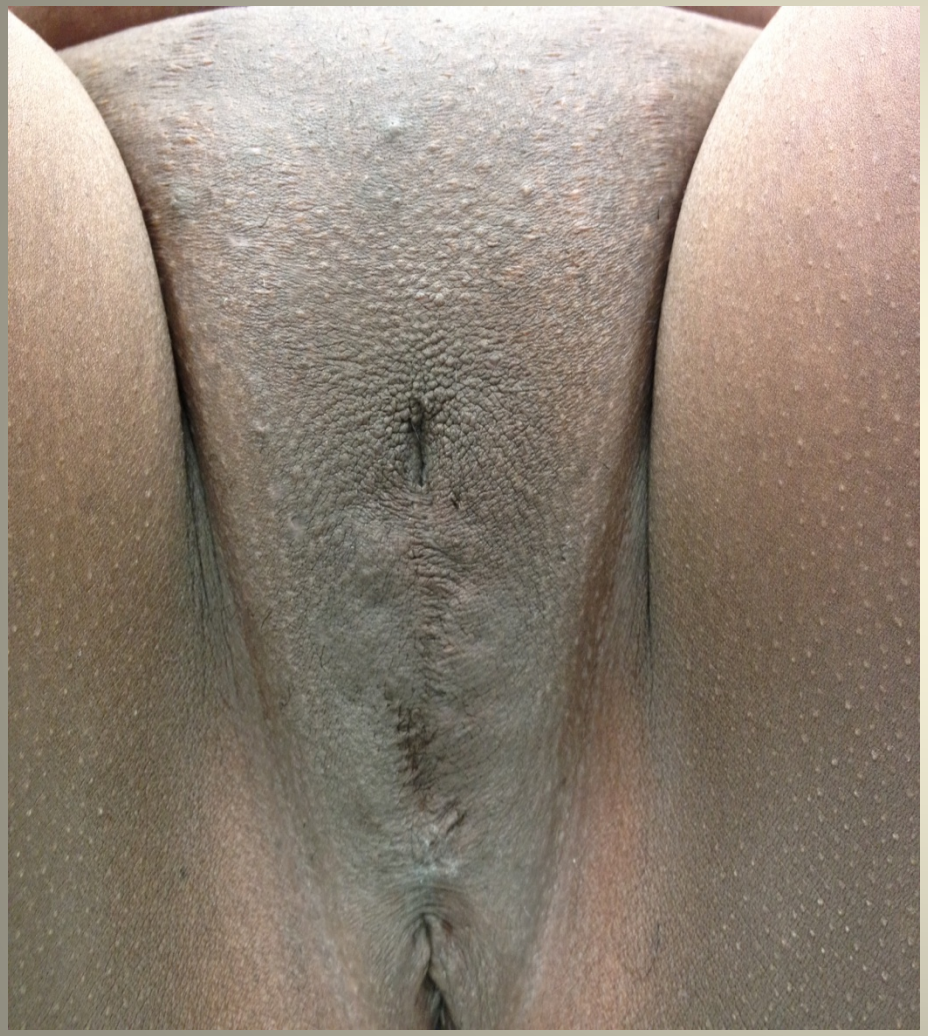
- The procedure can result in death through severe bleeding leading to hemorrhagic shock, Neurogenic shock as a result of pain and trauma, and overwhelming infection and septicaemia
- Additional risks for complications from infibulations include urinary and menstrual problems, infertility, later surgery (defibulation and reinfibulation) and painful sexual intercourse

Type I Clitorectomy

Type II

Type III Infibulation

Type III



Infibulation with Crowning

A large sebaceous cyst developed after the circumsision

Baby Stuck, Skin not taring

Civil Rights Groups in the U.S. and Africa are Trying to put a Stop to F.G.M.

STOP FGM