CAESAREAN SECTION

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WHY CALLED SO??

- According to legend ,julius caesar was born by this operation
- It was a fatal operation until beginning of 20th century.
- Now the most common operation performed worldwide

DEFINITION

- The delivery of a viable fetus through an incision in the abdominal wall and uterus.

- Definition does not include removal of fetus from abdominal cavity in case of rupture uterus.

- WHO recommends an ideal caesarean rate of 15-20%.

- But in most countries it is 15-20%

INTRODUCTION

- An operative procedure that is carried out under anesthesia whereby the fetus, placenta and membranes are delivered through an incision in abdominal wall amd the uterus
- Usually carried out after viability has been reached i.e. 24-48 weeks of gestation onwards.

- The first operation performed on a women is referred to as a primary caesarean section.
- When operation is performed in subsequent pregnancies,it is called repeat caesarean section.(C/S)

WHY RATES INCREASED?

- Increase in repeat caesareans.
- Difficult instrumental delivery and vaginal breech deliveries
- Increased diagnosis of intrapartum fetal distress
- Caesarian on demand
- Identification of risk of mothers and fetuses
- Increase in pregnancies by invitro fertilization

INCIDENCE:

- The incidence of caesarean is steadly raising.
- During the last decade there has been two-three folds rise in the inciddence from the initial rate of about 10%.
- Factors responsible are increased safety of operation due to improved anesthesia, availability of blood transfusion and antibiotics.
- Increased awareness of fetal well being and idenification of risk factors have caused reduction of difficult operation or manipulative vaginal deliveries.

Indication for Caesarean section

. **Absolute:**

- Vaginal Atresia
- Advanced carcinoma of cervix
- Cervical or broad of contracted pelvis.
- Severe degree of contracted pelvis.

. **Relatives:**

- Cephalopelvic disproporton
- Previous uterine scar
- Fetal distress.
- Malpresentations
- Antepartum hemorrhage
- Elderly primigravidae
- Chronic hypertension
- Diabetes
- Pelvis atresia

.Fetal indicaton

- Fetal distress
- Umbilical cord prolapse
- Macrosomia
- Placental insufficiency
- Multiple pregnancy

Time of operation:

A. Elective caesarean section:

- The term elective indicates that the decision to deliver the baby by caesarean has beenmade during the pregnancy anh before the onset of labour.
- It means pre-planning for doing caesarean section.
- Indication:
  - ✓CPD
  - ✓Placenta previa
  - ✓Bad obstetric history

.Fetal indicaton

- Fetal distress
- Umbilical cord prolapse
- Macrosomia
- Placental insufficiency
- Multiple pregnancy

Contraindication:

- Dead fetus
- Baby is too much premature
- Presence of blood coagulation disorder

B. Emergency caesarean delivery

- When the operation is performed due to unforseen complication arising either during pregnancy or labour without wasting time following the decision.
- Indication:
  - Cord prolapse
  - Uterine rupture
  - Eclampsia
  - Prolonged first stage of labour
  - Abnormal uterine contraction
  - Placenta previa diagnosed in labour

Types of operation:

1. Lower segment caesarean section:

- Is lesser muscular than the upper segment of the uterus.
- Transverse incision is made in the lower segment this heals faster and sucessfully than an incision in the upper segment of the uterus.
- There is less muscle and more fibrous tissue in lower segment which reduces the risk of rupture in a subsequent pregnancy.

2. Classical caesarean section:

- In this baby is extracted through an incision made in upper segment of uterus.
- Is rarely performed.
- Operation is done only under forced circumstances, such as:
  - carcinoma of cervix
  - Big fibroid on lower segment
  - constriction ring
  - lower segment is difficult or risky example:placenta previa, adhesion due to previous abdominal operation.

Supplies/ Equipment

1. Extra drape sheet
2. Towels
3. Receiving pack for baby
4. C-section tray
5. Delivery forceps
6. Cord clamp
7. Basin set
8. Blades
9. Neonatal receiving unit
10. Self-contained oxygen
11. I.D bands
12. Suction
13. Bulb syringe
14. Solutions
15. Suture

Operation procedure:

- The non gravid uterus is a pelvic organ closely covered by a layer of pelvic peritoneum.
- As pregnancy advances, the uterus grows up into the abdomen and this peritoneum rises up with the uterus and comes into contact with the abdominal peritoneum. Each of these layers must be incision and repaired.
- The abdominal peritoneum is situated below the abdominal muscles layer.
- The anatominal layers are:

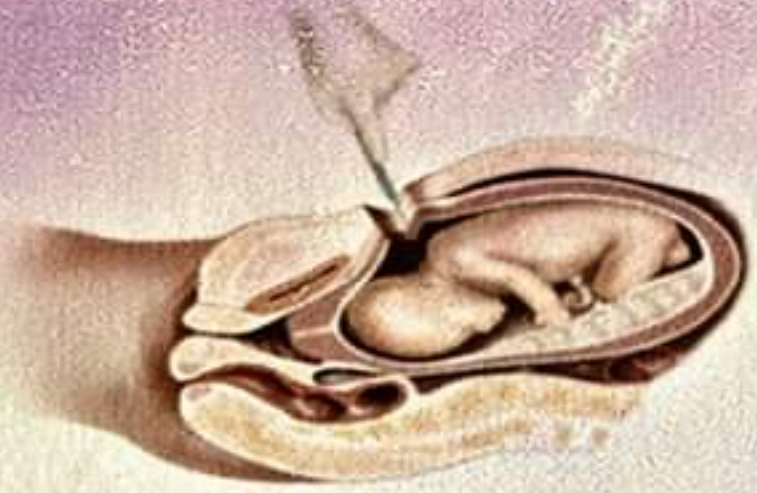
a) Skin
b) Fat
c) Rectus sheath
d) Rectus abdominis
e) Abdominal peritoneum
f) pelvic peritoneum
g) Uterine muscles

- The operation most commonly carried out is the lower segment caesarean section.
- The lower segment incision is in the less muscular and active part of the uterus and heals better.

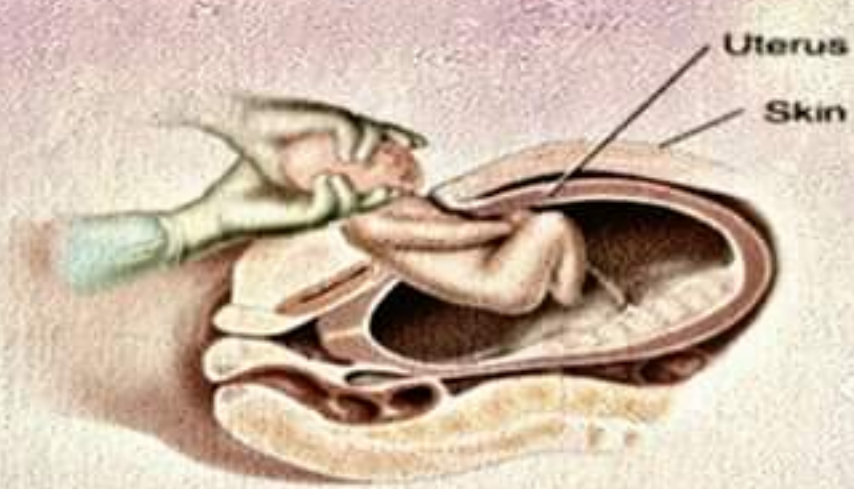
- The main reason for preferring the lower uterine segment technique is the reduced incidence of dehiscent pregnancy.
- The abdomen is opened and the loose folds of the peritoneum over the anterior aspect of the lower uterine segment and above the bladder is incised. The operator continues so incise this further to visualize the fundus of bladder which is then pushed down and away from the surgeon.

- The surgeon direct the fetal head out while the assistant applies fundal pressure to hip the delivery of the baby.
- Oxytocins may be given by the anesthetist after delivery of the baby and clamping the cord.
- When the baby and placental have been delivered the uterus is sutured.
- This is usualy done in two layers. The peritoneum then be clased over uterine wound to exclude it from the peritoneal cavity.
- The rectus sheath is closed then the layers of fat and finally the skin is sutured with the surgeons choice of materials; commonly

Operation procedure:



1. A cut is made in the abdomen and then another one in the uterus.



2. The baby is removed.

3. The placenta is removed.

4. The cuts in the uterus and skin are then closed with stitches.

Nursing Management

A. Pre-operative management:

- Patient should be physically prepared i.e.abdomen,back ,private parts and upper part os thigh are shaved and cleaned.
- Prepare mother psychologically by providing assurance a nd explanning the indication,procedure and need of caesarean section.
- Administration of IV infusion of 50% dextrose to avoid hypotension following spinal anaesthesia,the infusion line is maintained patent by an intra venous cannula.
- Blood grouped and cross matched for emergency requirement.

- Bladder should be empty by inserting foleys catheter.This may be done before and after induction of anaesthesia.
- Mother should be in NPO for about 8 hours.
- Patient should be in clean gown,valuable ornament should be taken off and all make up should be removed.
- If elective caesarean section then Ranitidine 150mg should be given orally in the night before and repeated one hour before surgery to prevent

B. Post operative care :

1. Immediate care (4-6 hours):

- In the immediate recovery period,the blood pressure is recorded in every 2 hourly.
- The wound must be inspected half hourly to detect any blood loss.
- The lochia are inspected and drainage should be small initially Following general anaesthesia, the women is nursed in left lateral or recovery position until she is fully conscious.
- Analgesic is given as prescribed.

2. First 24 hours:

- IV fluids are continued,blood transfusion is helpful in anemia mothers.
- Parental antibiotic is usually given for 1st 48 hours,analgesics is the form of pethidine 75-100mg are given as needed.
- Ambulation is encouraged following day of surgery and baby is given to mother.

3. After 24 hours:

- TPR are usually checked every 4 hourly
- Orally feeding is started with clear liquid and then advanced to normal diet and IV fluid are continued for about 48 hours.
- Catheter may be removed on following day when the women is able to get up to the toilet. She should be helped to get out of bed.
- The mother must be encouraged to take rest and provide care to the baby and should breast feed the baby

Complication:

- Mother:
  - partum hemorrhage related to uterine atony and rarely blood coagulation disorders.
  - Shocks related to blood loss.
  - Anesthesia hazards
  - Sepsis, secondary PPH.
  - Thrombosis
  - Lung infection post.

- Late compilcation:
  - Menstrual irregularity
  - Chronic pelvic pain
  - Backache

- Fetus:
  - Iatrogenic prematurity.
  - Respiratory distress syndrome.
  - Injury to baby due to surgical knife.
  - Birth asphyxia due to anaesthesia.