CAESAREAN SECTION

DEFINITION

It is an operative procedure whereby the fetus after the end of 28^{th} week are delivered through an incision on the abdominal and uterine walls

FACTORS FOR RISING CESAREAN SECTION

- Identification of at risk fetuses before term (IUGR)
- Identification of at risk mothers
- Wider use of repeat CS
- Rising rates of induction of labour and failure of induction.
- Decline in operative vaginal (forceps, vacum) delivery
- Decline in vaginal breech delivery.
- Increased number of women that age >30 and associated medical complications
- Wider use of electronic fetal monitoring and fetal distress.

TYPES OF OPERATION

- Classical or upper segment caesarean section
- Lower segmented caesarean section

Types of Caesarean Sectior

INDICATIONS FOR CS

- Absolute indications
  - Cephalo pelvic disproportion
  - Major degrees of placenta praevia
  - Multiple pregnancy
  - Carcinoma of cervix
  - Fibroids
- Relative indications
  - Malpresentation
  - PIH
  - Medical gynaecological conditions
  - Previous scar
  - APH
  - Bad obstetrical history

TIME OF OPERATION

- Elective caesarean section
- Emergency caesarean section

CONTRAINDICATIONS

- Dead fetus
- Baby, too mature to survive outside the uterus
- Presence of blood coagulation disorders

MANAGEMENT - LSCS

1.Psychological preparation

2.Physical preparation

- Intravenous infusion

Abdomen is prepared as for laparotomy.

- A non particulate antacid (0.3 molar sodium citrate 30 ml) is given orally.

- If the caesarean section is an elective procedure, ranitidine (H_2 blocker) 150 mg is given orally the night before and repeated (50 mg IM or IV)

- Metodopramide (Reglan) 10 mg IV is given to increase the tone of the lower esophageal sphincter as well as to reduce the stomach contents.
- It is administered after about 3 mt of pre oxygenation in the operating room.

- Bladder must be emptied by passing a catheter

Bowel preparation is done the evening before (two glycerine suppositories) for elective caesarian section clients.

Position

The woman is placed in the dorsal position

- **Antiseptic painting.**

The abdomen is painted with 7.5%pavidone iodine solution or Savlon lotion and draped that sterile towels.

Incision on the abdomen.

- A low transverse incision is made about two fingers breath above the symphysis pubis.
- Some obstetrician make a vertical infra umbilical or paramedian incision, which extends from about 2.5 cm below the umbilicus to the upper border of the symphysis pubis

The anatomical layers incisioned are

- Fat
- Rectal sheath
- Muscle
- Abdominal peritoneum
- Uterine Muscle

Delivery of the head

- The uterine cavity is then opened, the membrane are ruptured and the amniotic fluid is aspirated.
- The head is then delivered by hooking the head is the fingers which are carefully inserted between the lower uterine flap and the head until the palm is placed below the head.
- If the head is drawn to the incision line, the assistant in to apply pressure on the fundus.

Delivery of the trunk

- As soon as the head is delivered, the mucus from the mouth, pharynx and nostrils to be sucked out. When the baby is born, an oxytocin drug (methergin 0.2 mg) is administer before the placenta and membranes are delivered.
- The cord is cut in between two clamps and the baby is given to the nurse

Removal of the placenta and membranes

The placenta is extracted by traction on the cord with simultaneous pushing of the uterus towards the umbilicus using left hand (controlled cord traction).

Suturing of the uterine wound

:

- The margins of the wound are picked up by Allis tissue forceps or Green armitage haemostatic clamps.
- The uterine muscle sutured with continuous running sutures, the second of which tends to align the cut edges of the pelvic peritoneum.
- Repair of the rectum sheath brings the rectus abdominin into the alignment.

POSTOPERATIVE CARE

- Fluid administration
- Oxytocin – injection oxytocin 5 units (IM or IV (slow) or methergin 0.2 mg IM is given and may be repeated.
- Prophylactic antibiotic – for all caesarian delivery is given for 2-3 days.
- Analgesic is administered of may be repeated.
- Ambulation –
- Baby is put to the breast for feeding after 1 hour when mother is stable and relieved of pain.

- Day 1 : Oral feeding in the form of plain or electrolyte water or, raw tea may be given. Active bowel sounds are delivered by the end of the day.
- Day 2 : Light solid diet of the patient's choice is given. Bowel care : 3-4 teaspoon of lactulose is given at bed time, if the bowels do not more spontaneously.
- Day 5 or Day 6 : The abdominal skin stitches are to be removed on the 0-5 (in transverse) or0-6 (in longitudinal)

CLASSICAL CAESAREAN SECTION

- Abdominal incision is always logitudinal and about 15 cm in length, 1/3 of which extends above the umbilicus.

Merits and demerits of LSCS over classical caesarean

	LSCS	classical
Techniques	Technically slight difficult Blood loss is less The wall is thin and as such apposition is perfect perfect peritonisation is possible Technical difficulty in placenta previa or transverse lie	Technically easy Blood loss is more The wall is thick & apposition of the margin is not perfect NOT possible comparatively safer in such circumstances
Post operative	Haemorrhage and shock - less Peritonitis is less even in infected uterus because of perfect peritonisation and if occurs, localised to pelvis Peritoneal adhesion and intestinal obstruction are less	more chance of peritonitis is more in presence of uterine sepsis more because of imperfect peritonisation

	Convalescence is better Morbidity & Mortality are much lower	Relatively poor are high
Wound healing	The scar is better healed because of: Perfect muscle apposition due to thin margin Minimal wound hematoma The wound remains quiescent during healing process	The scar is weak because of: Imperfect muscle apposition because of thick margin More wound hematoma The wound in a state of tension due to contraction and relaxation of the upper segment. As a result, stitches may slip or the sutures may become loose
	Scar rupture is less 0.5 - 1.5 %	More risk of scar rupture 4 - 9 %

`COMPLICATIONS

INTRAOPERATIVE

- Extension of incision
- Bladder injury
- GI tract injury
- Haemorrhage

POSTOPERATIVE

Immediate

- PPH- post partum haemorrhage
- Shock
- Anesthesia hazards
- Infection
- Intestinal obstruction
- Deep vein thrombosis
- Wound complications

Remote

- Menstrual irregularities
- Chronic pelvic pain or back pain
- Incisional hernia or obstruction
- Risk for scar rupture in future pregnancy

Fetal complications

- Iatrogenic prematurity
- Respiratory distress

CAESAREAN HYSTERECTOMY

Caesarean hysterectomy refers to an operation where caesarean section is followed by removal of the uterus.

Conditions are

- Atonic uterus or uncontrolled PPH
- Morbid adherent placenta
- Big fibroid
- Extensive laceration
- Infected uterus
- Rupture of uterus with fetus inside