

Cesarean delivery

Prof Omondi Ogutu

Chair

Department of Obstetrics & Gynaecology,

UON

Learning objectives

- What is cesarean delivery
- What is the global, regional and local CD burden
- What are the risk factors of cesarean delivery
- Indications for CD
- Types of CD
- Complications (immediate, delayed) of CD

Ceasarean section

Delivery of the fetus through an abdominal and uterine walls incision after 28th week of gestation

hysterotomy

- **Delivery of a viable foetus before 28 weeks gestation,**
- **By this time the lower segment is not yet formed**

history

- The Roman law *Lex Regis*, dates from 600BC, required that infants be delivered abdominally after maternal death to facilitate separate burial;
- this has been one of the proposal of the origin of the term.
- The specific law was called the *Lex Cesare*.

Laparotomy delivery

- **When the foetus is lying free in the abdominal cavity after uterine rupture**
- **In abdominal pregnancies**

epidemiology

- The CS rates has been rising globally, the previous WHO recommended 15%
- global rate is 185
- Kenya ,10% from KHDS
- Local in KNH 46% Kenya KDHS 10%
- MM per CS ranges from 6 per 100,000 to 22 per 100,000

RISK FACTORS

- **Repeat cesarean sections**
- **Decline in operative vaginal deliveries**
- **Medical conditions in pregnancy**
- **Decline in vaginal deliveries**
- **AVA, VAMA**
- **Peer pressure**
- **CDMR**
- **Fear of litigations**
- **?use of EFM**
- **Inexperience on Breech delivery**
- **Small family size**

MONITORING OF LABOUR

- **Partograph**
- **CTG**
- **Intermittent Auscultation**

Preparations for cs

- **Informed consent**
- **Investigations; Hb/ UEC/ GxM**
- **The vital signs**
- **Confirm Foetal Heart**
- **Review by the Anaesthetist**

Indications for CD

- NRFS (FH abn, msl, abn FM etc)
- ? Multiple gestations
- Placental abnormalities /late pregnancy bleeding
- CPD
- Pelvic masses eg fibroids
- Repeated CD
- Dystocia

Prep for cs

- **Obtain informed consent**
- **FBC / GXM / UEC /**
- **Inform theatre**
- **Inform the anaesthetist**
- **Inform the paediatrician**



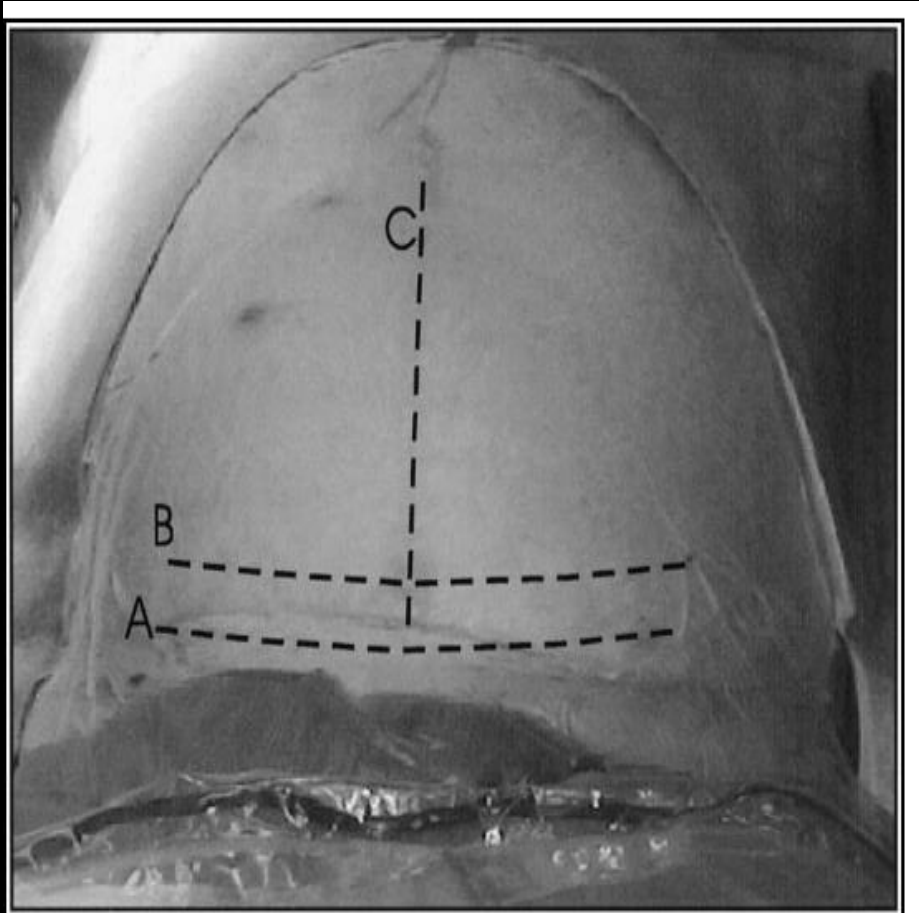
In theatre

- **Recommended is RA**
- **IV line**
- **Catheterize , use betadine to clean the vaginal canal**
- **Pre op analgesia**
- **Clean and drape**

Robson's classification of CS

Group	Obstetric population
1	Nulliparous women with a single cephalic pregnancy, ≥ 37 weeks gestation in spontaneous labour
2	Nulliparous women with a single cephalic pregnancy, ≥ 37 weeks gestation who had labour induced or were delivered by CS before labour
2a	Labour induced
2b	Pre-labour CS
3	Multiparous women without a previous CS, with a single cephalic pregnancy, ≥ 37 weeks gestation in spontaneous labour
4	Multiparous women without a previous CS, with a single cephalic pregnancy, ≥ 37 weeks gestation who had labour induced or were delivered by CS before labour
4a	Labour induced
4b	Pre-labour CS
5	All multiparous women with at least one previous CS, with a single cephalic pregnancy, ≥ 37 weeks gestation
5.1	With one previous CS
5.2	With two or more previous CSs
6	All nulliparous women with a single breech pregnancy
7	All multiparous women with a single breech pregnancy including women with previous CS(s)
8	All women with multiple pregnancies including women with previous CS(s)
9	All women with a single pregnancy with a transverse or oblique lie, including women with previous CS(s)
10	All women with a single cephalic pregnancy < 37 weeks gestation, including women with previous CS(s)

Abdominal incisions



- A. Pfannenstiel 2–3 cm above the pubic symphysis.
- B. Joel-Cohen incision should be made in a linear fashion approximately 2–3 cm above the traditional placement of the Pfannenstiel incision.
- C. Midline vertical incision made in the midline and extend from just below the umbilicus to just above the symphysis

Uterine incisions



should be made through the thin, noncontractile portion of the lower uterine segment in a curvilinear fashion.

Uterine incisions



Uterine incisions

- **The inverted J extension**

Uterine incisions



- In inverted T

Uterine incisions



- **The classical incision**

Complications (immediate)


- **Heamorrhage, hypovolemic shock**
- **Anaesthetic complications**
- **Embolization,**
- **Bowel complications , ilieus
,Ogilviles syndrome,**
- **infection**

late

- **Embolization**
- **Chronic pelvic pain mostly
Neuralgia**
- **Incisional hernias**
- **Menstrual irregularities**
- **RDS**

management

- **Haemorrhage**
- **Identify the cause**
- **Blood products transfusion**
- **Medications; use uterotonics,
Tranexamic acid**

- 
- **Surgical: compression sutures,**
 - **EP Hysterectomy(EPH) partial or total**
 - **In PAS; uterine surgery with preservation of the uterus**

REDUCE CS

- **Good ANC**
- **ECV?**
- **TOLACD**
- **OVD**
- **Practice of vaginal breech deliveries**
- **Avoid unnecessary CD**



- **THANK YOU**



