

Cesarean Section (CS)

By

Prof. Dr. YASSER A. HELMY

Prof. of Obst & Gynecol.



Definition:

Operative procedure performed to deliver a fetus through an abdominal wall incision (laparotomy) and uterine incision (hysterotomy) after the age of viability.



Common Indications:

- Repeat Cesarean section
- Dystocia or failure to progress
- Breech presentation
- Fetal distress
- Failed induction
- CPD



Common Indications (continued):

--Placenta previa

--Active genital herpes infection

--Umbilical cord prolapse

--Abdominal cerclage

--Transverse lie

--Persistent occipitoposterior & mentoposterior



Contraindications:

THERE ARE NO ABSOLUTE CONTRAINDICATIONS

CS is better avoided in cases of:

--Fetal death

--Major anomalies incompatible with life

--Some maternal diseases as cardiac diseases

--Coagulopathy.



Incidence and Trends:

CS has also become more safe due to :-
Better anesthesia, more availability of blood transfusion, better antibiotics, better suture material etc. Hence CS is more frequently done, even at a trivial indication

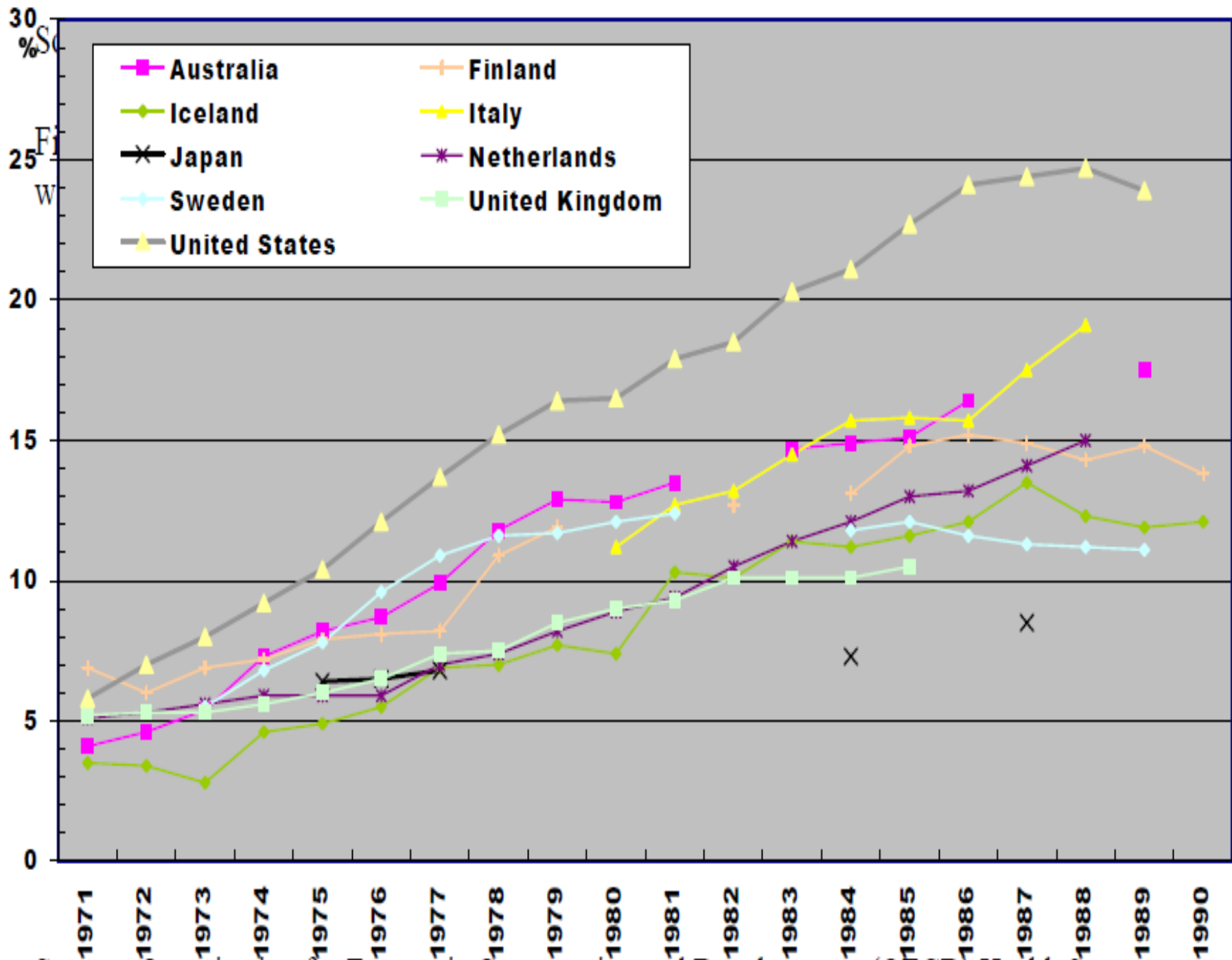
For many years, the incidence of the procedure was stable (3-5%) yet since 1960s, the rate of CS was rising steadily reaching (20-25%) in late 1980s & now it is 25% to even as high as 50%.




Incidence and Trends:

Rising incidence is probably due to:

- Expanding the fetal indications e.g. in breech presentation.
- There is a trend to do repeat C.S. without giving trial in Pt. with previous CS.
- Fear of medico legal problems.



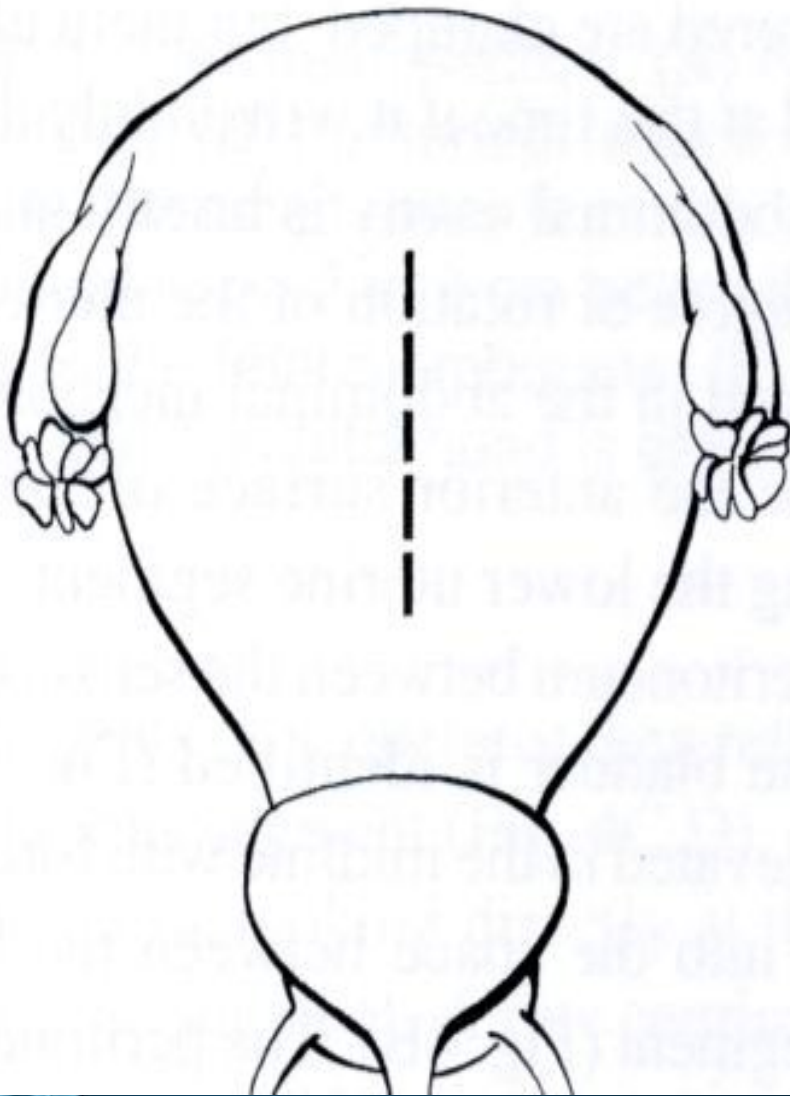


Types of Cesarean Section (classification):

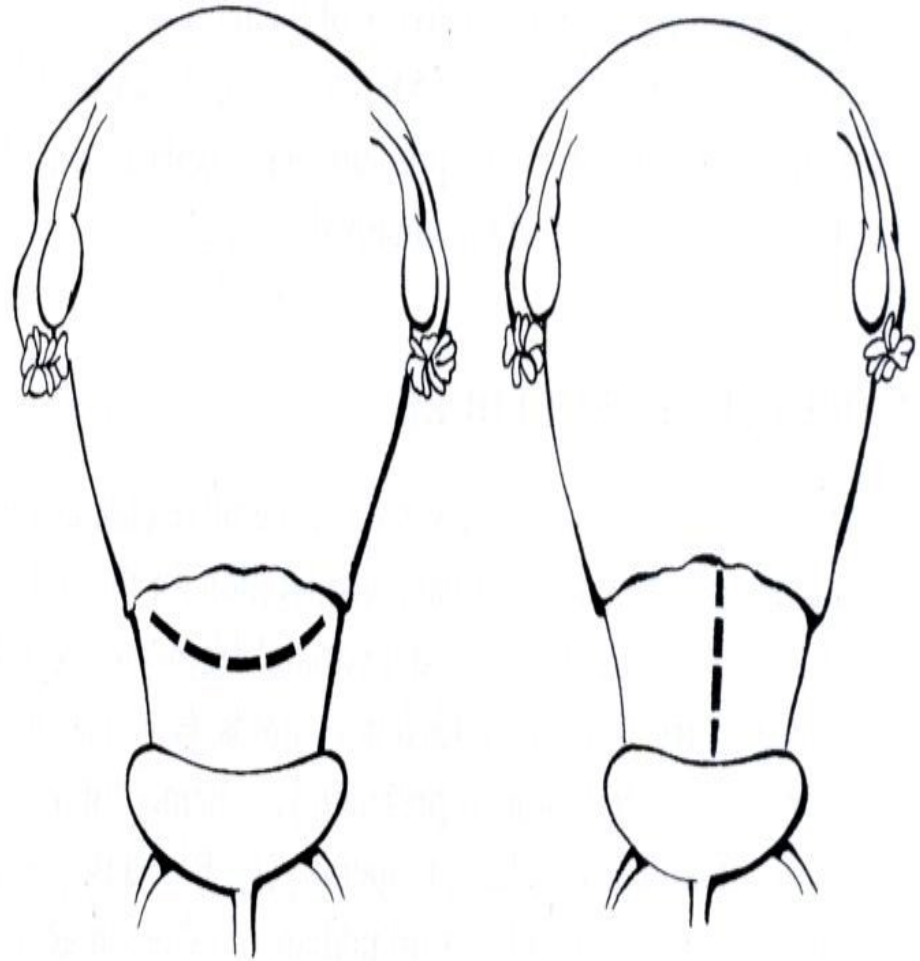
--Primary (first performed) or Repeat CS.

--According to timing and indications: elective or non-elective (emergency CS)

--According to uterine incision: lower segment (LSCS) or upper segment (USCS).



Classical uterine incision



Lower uterine incision

Elective Cesarean section (Planned operation):


Advantages are:

--The patient has empty stomach.

--Best anestheologist, assistant nursing staff are available.

--Best operative time.

Mortality and morbidity are significantly lower




Elective Cesarean section (Planned operation):

Disadvantages are:

--Risk of prematurity.

--Poor drainage of lochia (cervix may not be dilated).


--Lower segment is not formed and hence uterine incision in lower part of upper segment.



Lower Segment Cesarean Section (LSCS):

Advantages are:

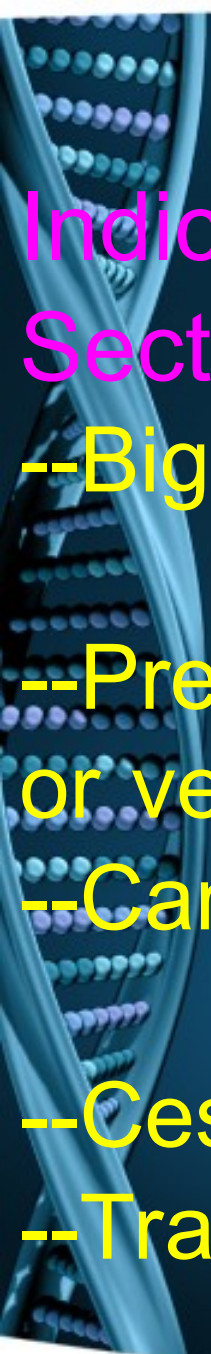
- Lower segment edges are thin, hence suturing is better.
- Lower segment is a passive segment so does not contract, so healing is better.
- Lower segment is covered with peritoneum, It remains so there is less chances for adhesions formation.



Lower Segment Cesarean Section (LSCS):

Advantages are:

- Chances for ruptures of the uterine scar In next pregnancy much less.
- Less blood loss.



Indications for Upper Segment Cesarean Section (USCS):

- Big myoma on the lower uterine segment.
- Previous successful repair of vesicovaginal or vesicouterine fistula.
- Cancer cervix.
- Cesarean hysterectomy.
- Transverse lie with the back inferior.



Complications of CS:

Maternal Mortality:

20 per 100,000 CS births in USA compared with 2.5 per 100,000 for vaginal deliveries. The main causes are anesthetic accidents, including aspiration hemorrhagic complication, and thromboembolic accidents.



Complications of CS:

Maternal Morbidity:

- Visceral injury (bowel, bladder, ureter).
- Bleeding with consequent anemia.
- Sepsis
- Thromboembolic complications.
- Remote morbidity including adhesive intestinal obstruction, ruptured uterine scar in next pregnancy, placenta accreta adherent to previous scar and incisional hernia.



Complications of CS:

Fetal & Neonatal Morbidity:

- Elective cesarean sections are the major cause of iatrogenic preterm delivery.
- Fetal injuries.



Vaginal birth after CS (VBAC):

--VBAC have become increasingly supported by the medical community. The success rate for VBAC has been reported to be from 60% - 70%.

--The advantages include decreased maternal and neonatal morbidity as well as decreased hospital time for both mother and baby.



Vaginal birth after CS (VBAC):

Trial of labor is attempted when :

- Non permanent indication of previous CS
- Previous LSCS with uneventful recovery.
- Average size child.
- Good trained staff to monitor the patient.



Vaginal birth after CS (VBAC):

Trial of labor is attempted when :

- Efficient emergency operative facility is available at vary short time.
- No malpresentation macrosomia, malposition, or multiple gestation.
- Well engaged head.



Vaginal birth after CS (VBAC):

Conduct of labor :

Similar to the conduct of normal labor:

Observe for:

- Progress of labor
- Fetal wellbeing
- Maternal wellbeing



Vaginal birth after CS (VBAC):

Conduct of labor :

Similar to the conduct of normal labor:

- Epidural & other analgesics may be used
- Ability to perform CS within 30 minutes (available operative theater, anesthesia, neonatal resuscitation, & surgical personnel).



Vaginal birth after CS (VBAC):

Indications of scar rupture:

- Fetal distress
- Ease of fetal palpation
- Cessation of contractions



Vaginal birth after CS (VBAC):

Indications of scar rupture:

- Elevation of presenting part
- Scar pain
- Bleeding / shock



THANK

YOU