



**King saud university medical city
department of obstetrics & gynecology
course 482**

***OPERATIVE VAGINAL DELIVERIES AND
CAESAREAN SECTION***

Reem alanazy

Assistant prof. & Gynecological consultant



- ❖ ***Definition***
- ❖ ***Indications of operative delivery***
- ❖ ***Trial of instrumental delivery***
- ❖ ***Caesarean Section***
- ❖ ***Complications of C/S***
- ❖ ***Measures to reduce C.S. RATE***
- ❖ ***Post Delivery Care***



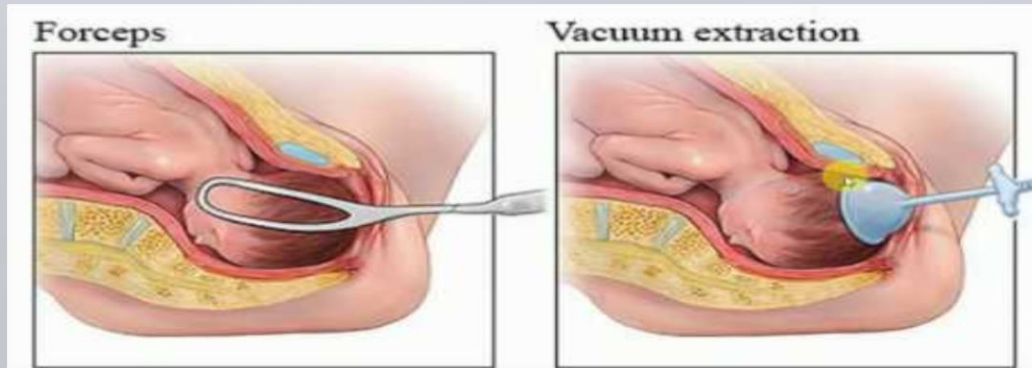
Definition

- **It is the delivery of the fetus using an instrument through the vaginal route.**

Instruments could be : → Forceps

→ Vacuum

- **Incidence of operative deliveries is 3.5 %**



Indications of operative delivery

MATERNAL

- Prolonged or arrested 2nd stage
- Poor maternal effort
- Maternal cardiac disease
- Patients with retinal detachment or post op for similar ocular conditions

FETAL

- Fetal distress
- Prematurity (Forceps only)
- Certain malpositions

PRE-REQUISITE FOR FORCEPS AND VENTOUSE

- ✓ **Cervix has to be fully dilated**
- ✓ **Membranes ruptured**
- ✓ **Head has to be engaged**
- ✓ **Vertex presentation**
- ✚ **Head position known (forceps can be applied on the head for cephalic presentation or after coming head for breech presentation)**

- ✚ **Ventouse can only be applied on the head.**
- Conditions to be fulfilled**
- ✓ **Adequate analgesia**
- ✓ **Empty bladder**
- ✓ **Adequate episiotomy**

Complications Of Instrumental Delivery

Maternal

- Genital tract lacerations, Cx,,vagina
- Hemorrhage
- Extensions of episiotomy
- Sphincter lacerations
- Fecal and flatus incontinence
- injury to rectal mucosa

Fetal

- Skull fractures
- Cephalohematoma
- Caput succedaneum
- Facial Palsy
- Scalp laceration
- Intracranial hemorrhage
- Infant death

Trial of instrumental delivery

- **Should be performed in O.R. with anesthetist present + pediatrician to resuscitate.**
- **All teams ready to proceed to C.S. in case failed instrumental delivery**

Caesarean Section

- **Rate** \approx **25%**
- **Maternal mortality** **5 – 6 / 100,000 C/S**
- **Perinatal mortality** **3/1000 USA**
7/1000 U.K

C. S. Could be:

- ❖ **Elective C/S** **→ Planned and timed**
- ❖ **Emergency C/S** **→ Unplanned during labor or before the onset of labor**

Different Methods Of Performing Different Types Of C/S

SKIN INCISION

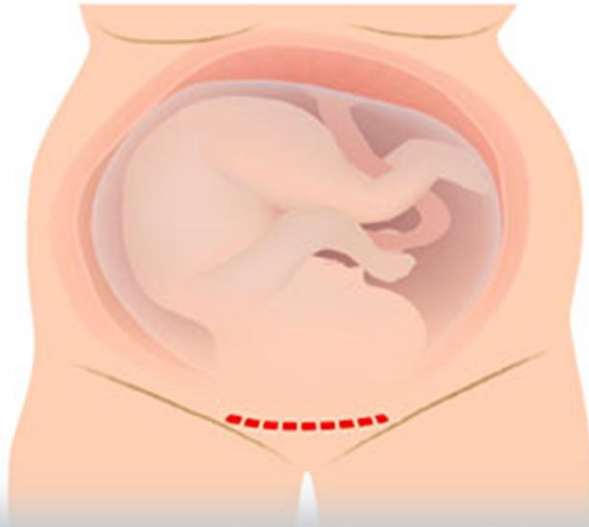
- Low transverse
- Midline

UTERINE INCISION

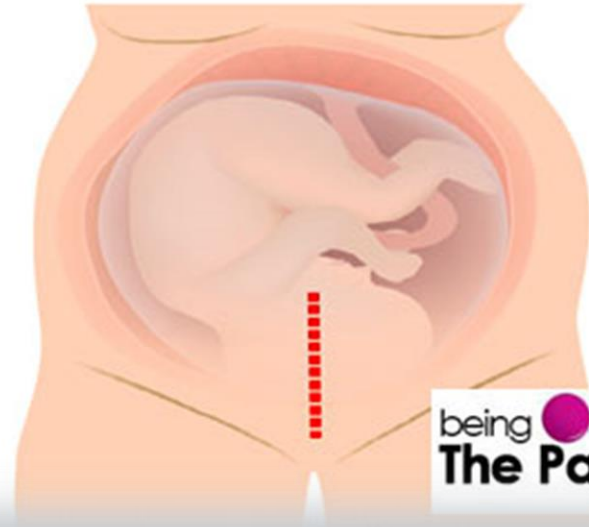
- Upper Segment (Classical)
 - transverse
 - vertical
- Lower segment
 - transverse
 - vertical

C-Section

Horizontal incision



Vertical incision



COMPLICATIONS OF UPPER SEGMENT C/S

- ✓ **Bleeding ↑↑**
- ✓ **Organ injury → Bowel**
 - **Bladder**
 - **Ureter**
- ✓ **Adhesions formation**
- ✓ **Rupture scar in future pregnancy higher than lower segment scar**
- ✓ **More difficult to repair**

COMPLICATIONS OF LOWER SEGMENT

- ✓ **Haemorrhage**
- ✓ **Extension of incision → Lateral
→ Downwards**
- ✓ **Organ injury → Bladder
→ Bowel
→ Ureter**
- ✓ **Rupture scar**
- ✓ **Abnormal placentation in future pregnancy**
 - Low lying placenta**
 - Accreta, increta, perceta**
- ✓ **Adhesions specially bladder**

Estimated **Risks for Uterine Rupture** in Women
with a Prior Cesarean Delivery

Prior Uterine Incision	Estimated Rupture (%)
Classical	4 – 9
T-Shaped	4 – 9
Low Vertical	1 – 7
Low Transverse	0.2 – 1.5

COMMON POST OP COMPLICATIONS

- **Atelectasi**
- **Infection → Endometritis**
 - **Wound**
 - **UTI**
 - **Pneumonia**
- **DVT & PE**

When can a trial of labor be offered after C.S.

1. **VBAC can be offered for non recurrent indications e.g., fetal distress, cord prolapse, placental abruption, breech presentation.**
2. **Pelvic adequacy is confirmed by proper clinical radiological methods as needed.**
3. **Lower Segment scar**
4. **Placental localization**

5. **Scar integrity is assured by taking proper post op history**
6. **Standard of care is to offer VBAC after one previous C/S and not multiple**
7. **Safe set up: Tertiary care center which can perform emergency C.S as needed.**
8. **Patients approval**

Measures to reduce C.S. RATE

- ❖ **Proper antenatal care ,for early detection and management of conditions that lead to ↑ C.S. rate**
 - e.g. controlling macrosomia in diabetes
 - early detection of HTN
 - Post term
 - Performing ECV for breeches

- ❖ **Prevent infections:**
 - **Prophylactic Ab + Aseptic technique**
 - **Prevention of anemia**

- ❖ **To prevent DVT**
 - **TEDS stocking**
 - **Thromboprophylaxis**
 - **Early ambulation**

POST Delivery CARE

- **VS hourly x 4 hours**
- **I.V. fluids**
- **Analgesia**
- **Checking Fundus + Lochia**

- **Urine output + catheter care**
- **Wound care**
- **Early ambulation**



- **Antibiotics**
- **Thromboprophylaxis**
- **Breast care and breast feeding**

Questions?

