<u>Arabian Gulf University – Kingdom of Bahrain</u> <u>Year 5 – Gynecology and Obstetrics – 3rd Week</u> <u>Salmanya Medical Complex – Dr. Zainab Al-Juffairi – Cesarean Section (CS)</u>



- Definition of CS:

- It is a surgery to deliver a baby through the mother's abdomen. It is done when a vaginal birth is not safe.
- Indications of CS:
 - **Fetal**: malpresentation (breech), abnormal lie, macrosomia (heavy baby), multiple gestation (twins), fetal distress or cord prolapse.
 - **Placental**: placenta previa.
 - Maternal: cervical cancer, genital herpes or severe pre-eclampsia.
 - Abnormal labour (not progressing well).
 - Why is it called cesarean section (history)?
 - Gaius Julius Caesar certainly wasn't the first person born via C-section. The procedure, or something close to it, is mentioned in the history and legend of various civilizations -from Europe to the Far East- well before his birth. He wasn't even the first Roman born that way. By the time Caesar entered the world, Romans were already performing C-sections and Roman law reserved the operation for women who died in childbirth (so that the woman and her baby could be buried separately) and as a last resort for living mothers in order to save the baby's life during deliveries with complications.
- In Salmanya Medical Complex, incidence of CS is increasing (5% in 1970; 30% in 2012!) → why?:
 - Breech presentation (3%).
 - Difficult procedures are abandoned.
 - \downarrow morbidity and mortality with CS (although it is still higher than vaginal delivery).
 - Increased repeated C-section (which can result in higher risk of uterine rupture, adhesions, bowel and bladder injury, placenta previa and placenta accreta).
- What are the types of CS?
 - Lower Segment Cesarean Section (LSCS): risk of uterine rupture is 1:200
 - Classical CS: risk of uterine rupture is 8%!
 - Low-vertical CS.

Notes:

- ✓ Upper segment of the uterus is thick and muscular while the lower segment of the uterus is fibrous and less muscular.
- ✓ *Classical and low-vertical CS are done when:*
 - There is a transverse lie and the back of the fetus is posterior.
 - There are things occupying the lower uterine segment such as: fibroid, adhesions or fistula.
- Other classifications of CS:
 - Primary or repeated.
 - Elective or emergency.
- What are the complications of CS:
 - Anesthesia-related: aspiration syndrome, hypotension and spinal headache.
 - Wound infection.
 - Endometritis.
 - Urinary tract and GI injuries.
 - **Thromboembolism**: due to endothelial injury with CS, stasis and hypercoagulable state associated with pregnancy.
 - **Hemorrhage**: to control it after delivering the baby \rightarrow oxytocin, ergometrine or misoprostol can be given.

- Management of previous CS:

- **Previous classical or inverted CS** (T-shaped) \rightarrow elective CS.
- Recurrent indication (e.g. a female with a very short-stature) \rightarrow CS.
- $\geq 2 \text{ CS} \rightarrow$ there is debate but usually CS
- **Non-recurrent indication** \rightarrow trial of vaginal delivery:
 - ✓ 60-80% success rate.
 - ✓ Risk of uterine rupture is present.

