Malpresentation and malposition

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- Contents :
- Definitions
- Incidents
- Managements
- Complications

Objectives

- *1.definections*
- *2.known risk and complications*
- *3.risk factors and causes*
- *4.management and counseling*

Definitions

- Attitude:
- the relationship of parts of the fetus to one another –normally complete flexion
- Dipping:
- the presenting part has passed the pelvic inlet but is not yet engaged
- Engagement:
- the widest diameter of the presenting part has passed through the pelvic inlet

Definitions

- Lie:
- The relationship of the long axis of the fetus to the long axis of the mother
- Caput:
- Edematous swelling of the scalp – compression from the pelvis or cervix
- Molding :
- alternation of the relationship of the fetal cranial bones to each other

Definitions

- synclitism : The parietal diameter of the head is parallel to the pelvic inlet
- Asynclitism ??
- Position: the relationship of the dominator of presenting part to the maternal pelvis.

Malpresentation

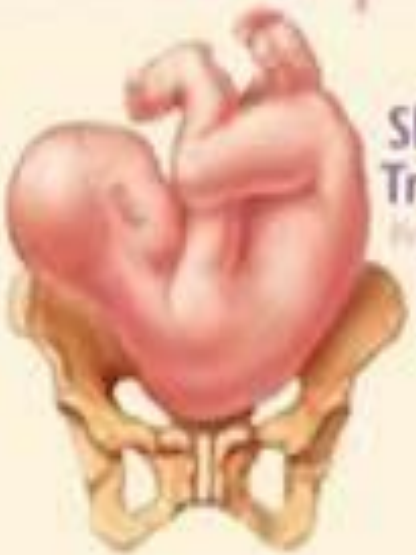
- Presentation : the lowest fetal part that descends first through the birth canal
- Denominator: arbitrary part of the presentation ex: cephalic-occiput….face-mentum…..breech—sacrum…transverse-sholuder
- the only normal presentation is
- Cephalic--- longitudinal Lie ---completely flexed head and the occiput forming the presenting part

- Anything other than that mentioned is a
  - Malpresentation or
    - Malpostion

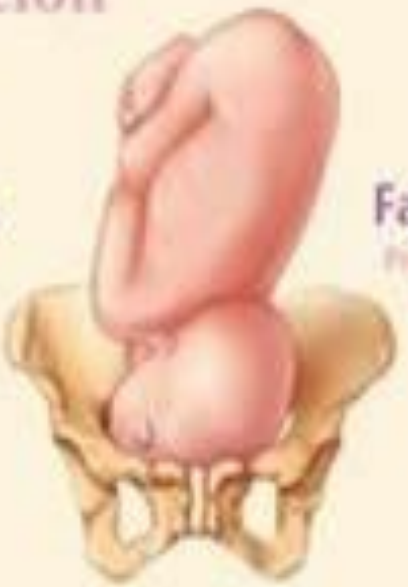
Variations in Presentation

Variaciones en presentación

Normal



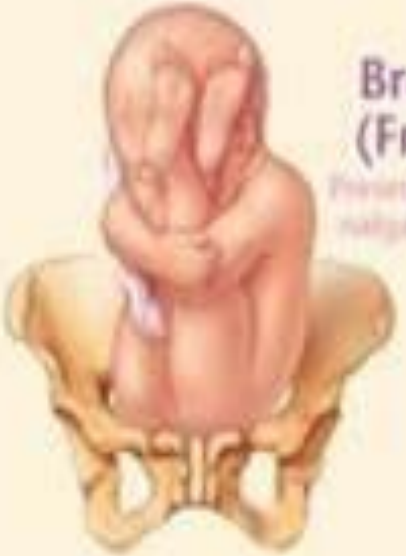
Shoulder/
Transverse



Face/Brow

Breech
(Complete)

Breech
(Footling)



Breech
(Frank)

Examples

- Face
- Brow
- Breech
- Compound
- Shoulder
- Occiput posterior or transverse
- ***malposition can occur with normal presentation

Engagement diameters

- The smallest is
- Suboccipitobregmatic =9.5 cm normal presentation
- Occiput posterior=occipito-frontal 11.5 cm
- Mento-vertx in brow 13.5 cm
- Submento-bregmatic in face anterior =9.5 cm

Risk factors

- Pelvic block :
- 1.pelvic tumor
- 2.fibroids
- 3.pelvic shape
- 4.placenta previa

Risk factors

- **2. decreased uterine polarity**
- Grand multiparty .Uterine malformation
- **3.altred fetal mobility**
- IUGR
- Prematurity
- Macrosomia
- Polyhydramnios or oligohydramnios
- Multiply gestation
- Fetal abnormality
- Short umbilical cord

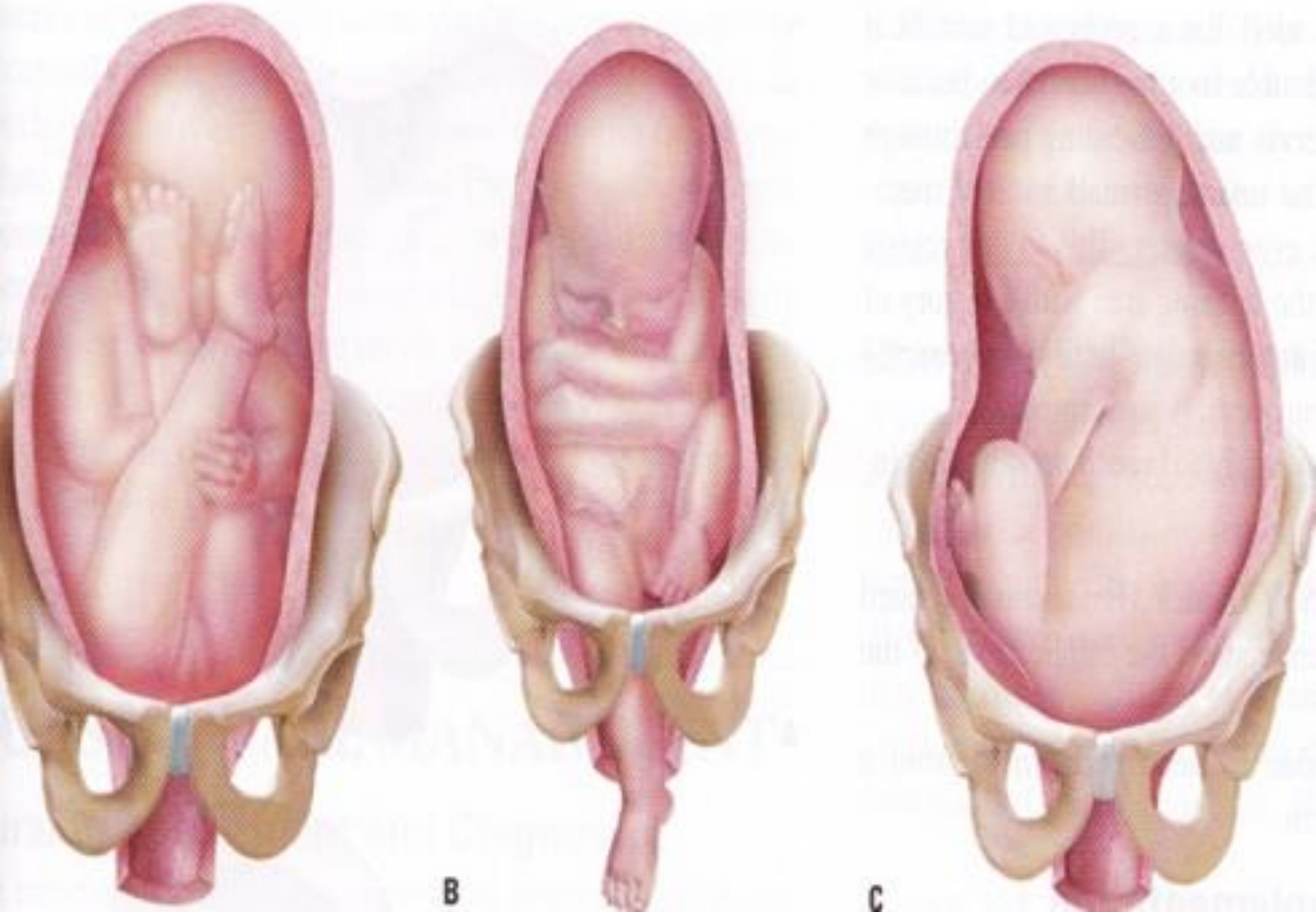
Breech

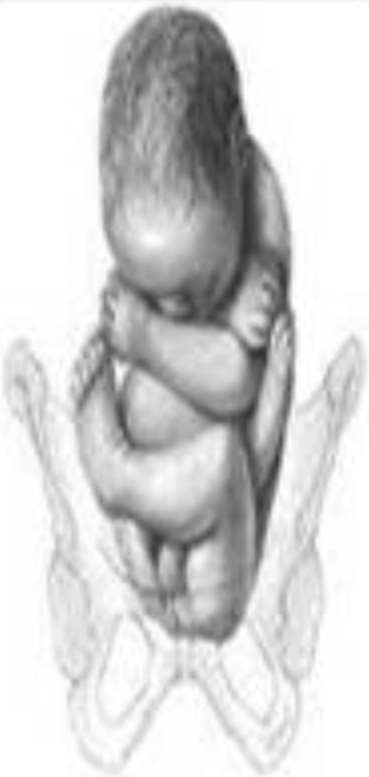
- The buttock forms the presenting part
- The sacrum is the denominator
- The bitrochanteric diameter (10cm) is the engagement diameters
- Types of breeches:
- A. complete (flexed 10%) both legs flexed at hip and knee
- B. Frank (Extended 65%) both legs flexed at hip and extended at knee
- C. Footling or(incomplete 25%) one or both legs extended at the hip

Question

- What type had the lowest risk of cord prolapse??

- ……


B
C

Frank Breech (65%)	Complete Breech (10%)	Incomplete Breech (25%)	
		Footling Breech	Kneeling Breech
			
The baby's hip joints are flexed and knee joints are extended.	The baby's hip and knee joints are flexed.	The baby's hip and knee joints extended on one or both sides.	The baby's hip joints are extended and knee joints are flexed on one or both sides.

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Incidence

- Incidence: decreases with increasing gestational age
- Before 28 weeks around 20-30%
- At term only 3 %
- 4% of breeches delivery fetuses with congenital anomalies
- (hydrocephaly, anencephaly … cystic hygromas)
- 40% undiagnosed breeches before labour
- The breech vaginal delivery at least 2 fold increase in perinatal mortality VS cephalic presentation

Clinical evaluation

- **History**
- **Examination :**
- Ballotable head at fundus
- Soft presenting part
- Fetal heart auscultated more commonly above umbilicus
- Often mistaken as Deeply engaged head at term
- Meconium seen ”mostly” in Labour
- **Investigations**
- Ultrasound

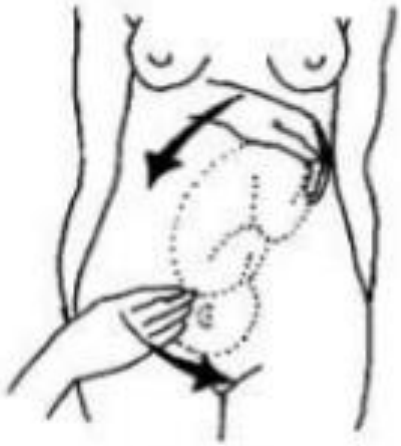
Management

- **External cephalic version (ECV)**
- Indications and contraindications (absolutely and relative)
- (placenta previa .uterine malformation, rupture membrane, previous cs ,APH, PET ,IUGR, oligohydramnios)
- There is no role for pelvimetry
- Q…… the best test to assess the pelvic is ……
- ……. Trial of labour……
- Discuss CS VS Vaginal delivery

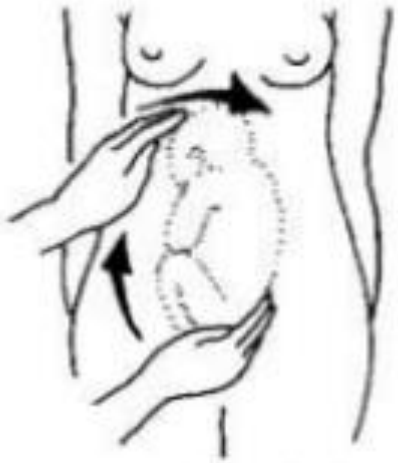
ECV

A. Mobilization of the breech

B. Manual forward rotation using both hands, one to push the breech and the other to guide the vertex



C. Completion of forward roll



D. Backward roll

The Term Breech Trial

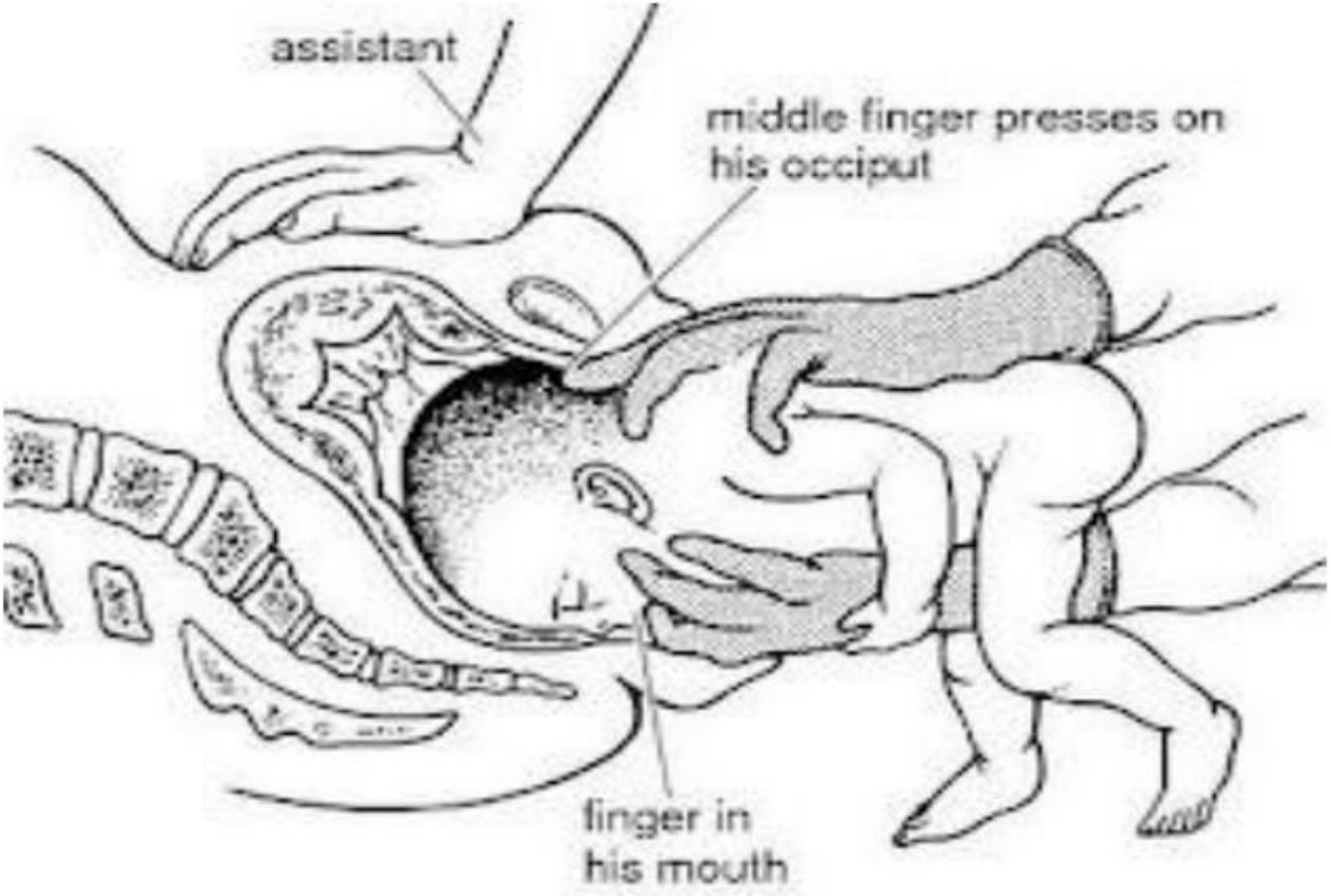
- Study design 2088 women with singleton frank or complete breech at 121 centers in 26 countries were randomized cs vs vaginal delivery 38 weeks ++
- **OUTCOMEs**
- The trial stopped in 2000 women
- The serious morbidity cs 1.6% vs 5% in vaginal breech
- The mortality was 0.3% vs 1.3% vaginal breech
- No significant difference in maternal mortality or serious morbidity was shown between the two groups

RCOG recommendations

- Women should be informed that planned cesarean section carriers a reduced perinatal mortality and early neonatal Morbidity for babies with breech presentation at term compared with planned breech vaginal delivery

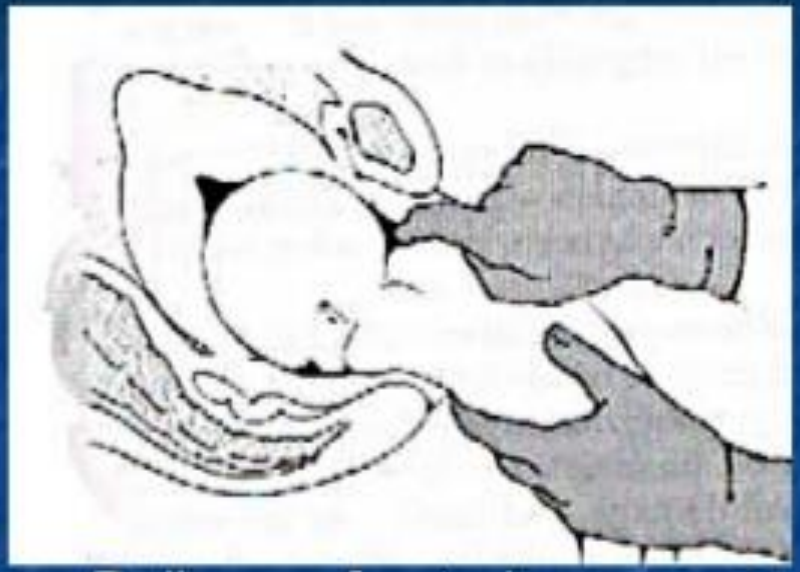
Breech vaginal delivery

- Consultation
- No contraindication to use oxytocin
- Only flank or complete breech
- Normal fetal growth>2kg <4 kg
- Experience attendant
- (Lovsetts manoeuvre and mauriceau – smellie veit manoeuvre)
- We can use forceps after coming head (piper)

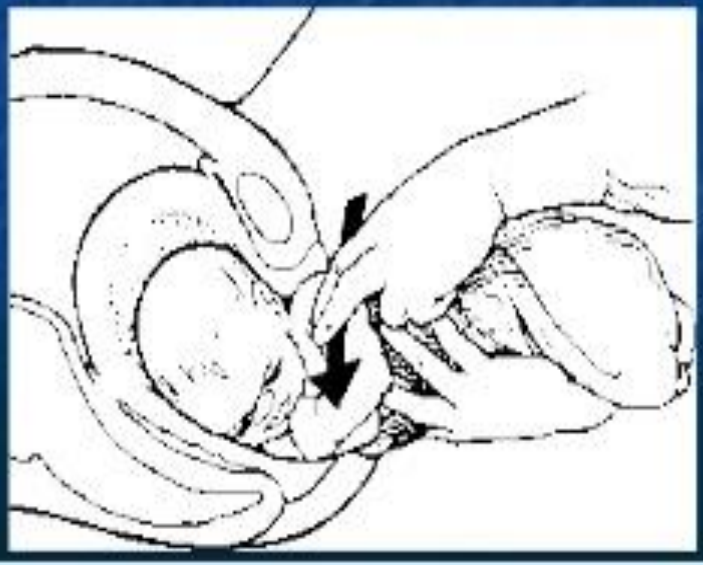


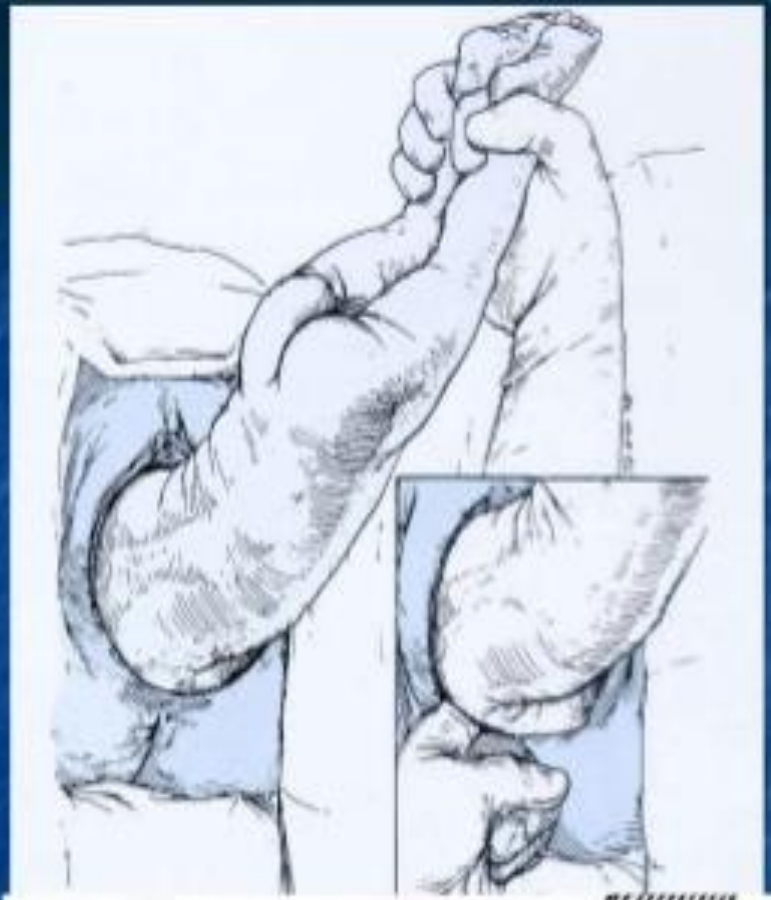
Mauriceau-Smellie-Veit manouvre

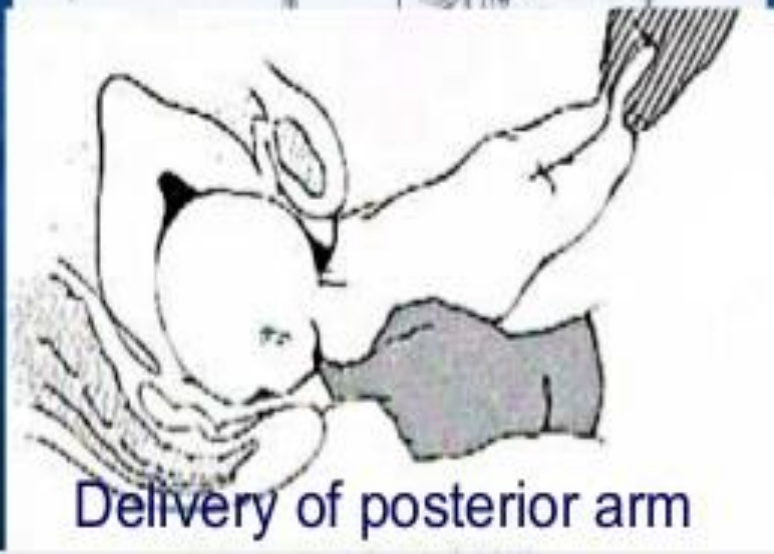
Delivery: arm & shoulders



Delivery of anterior arm







Delivery of posterior arm

Face presentation

- **Incidence 2 %**
- Fully extended head
- The denominator is the chin
- Submento-bregmatic in mento-anterior 9.5 cm
- Face mento posterior bregma-sternal diameter 18 cm
- **By examination :**
- you feel supraorbital ridges .nose and mouth
- Vaginal delivery allowed only for face mento anterior (can used forceps only)
- Mento-posterior only by cs

Brow presentation

- The head is midway between extension and flexion
- The denominator of the brow is the brow
- The engagement diameter is mento-vertical 13 cm
- IF persist brow presentation the only mode of delivery is by CS

Transverse Lie

- Shoulder presentation
- Denominator is the shoulder
- Obstructed labor will occur
- The oblique lie is a type of transverse presentation (the axs of the fetus is oblique to the axis of the mother)
- High risk for cord prolapse
- Mode of delivery only by CS

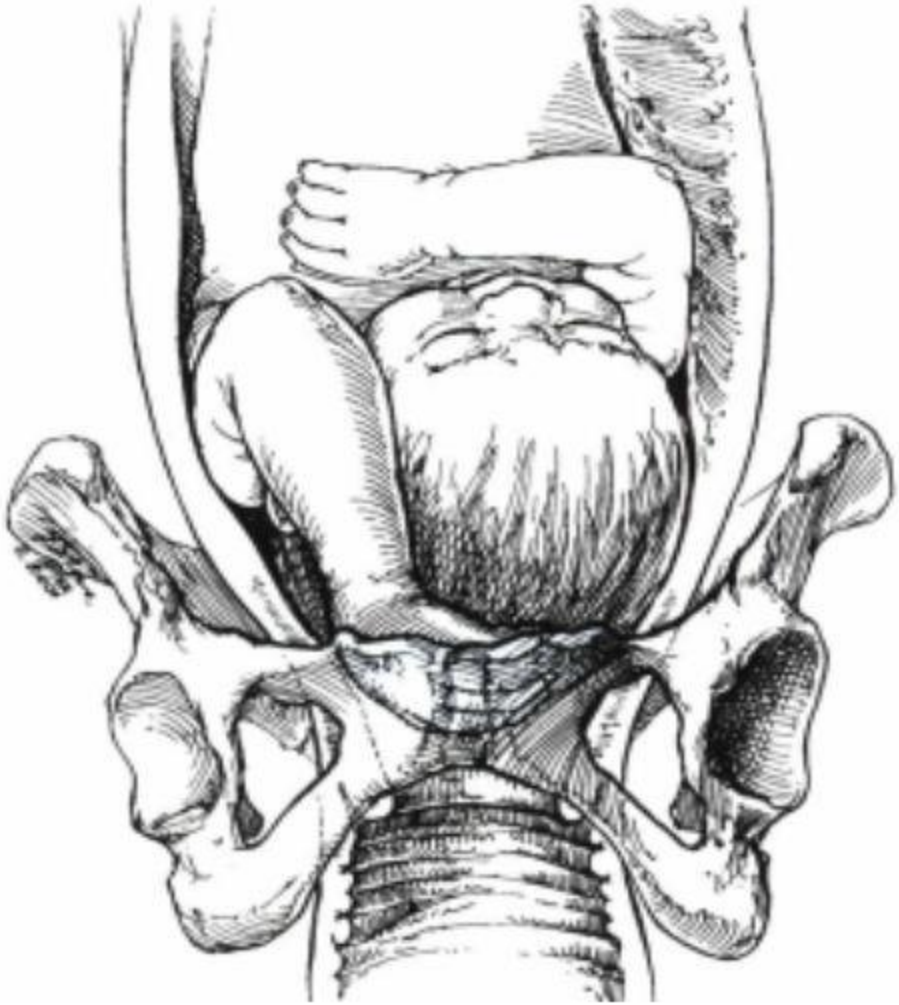
Complex presentation

- Compound presentation
- Hand with head, cord with hand……
- cephalic presentation with prolapse of a limb alongside the presenting part
- Mode of delivery according to complex parts

Complex presentation

Extremity +presenting part entry the pelvic

- Most commonly head +hand
- Very common in premature babies
- majority of the time not a problem baby can delivered with or without hand on head
- Many time they retract spontaneously



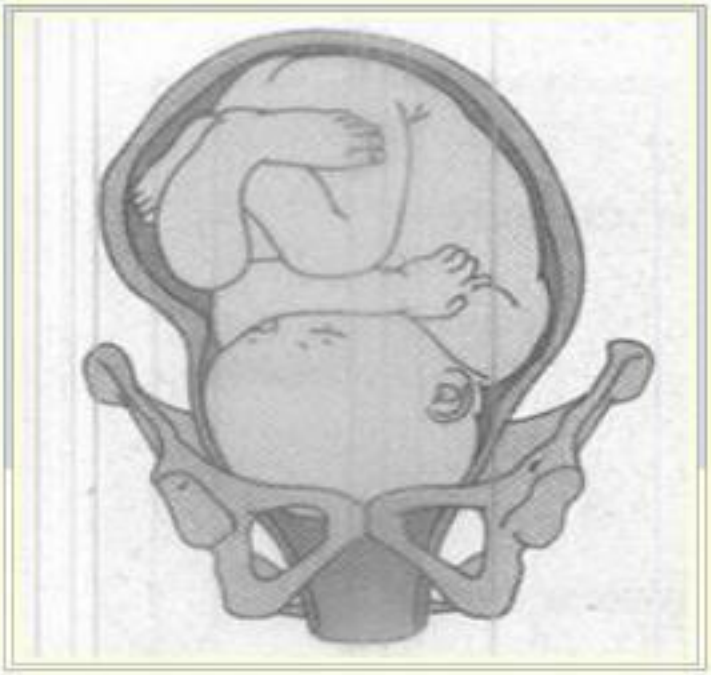
COMPOUND PRESENTATION

Malposition

- Occiput posterior position incidence 10 % of cephalic presentation
- Malposition but not Malpresentation
- Vertex presentation’
- Occiput lies in the posterior part of the pelvis
- The engagement diameter
- -suboccipito-frontal 10 cm
- Occipito -frontal 11 cm
- Mode of delivery can be vaginally ,assisted and possible CS

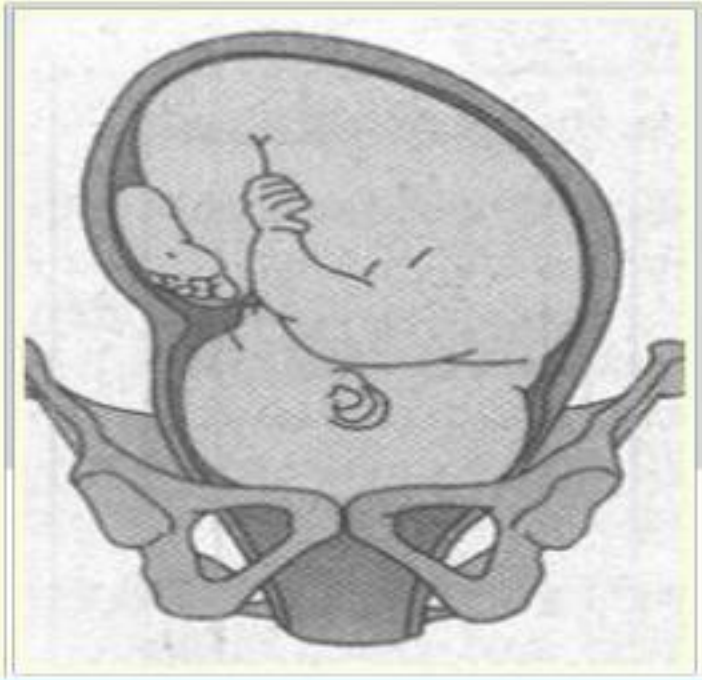
MALPOSITION

Malpositions include occipitoposterior and occipitotransverse positions of fetal head in relation to maternal pelvis.



Occiput Posterior

Arrested labor may occur when the head does not rotate and/or descend. Delivery may be complicated by perineal tears or extension of an episiotomy.



Occiput Transverse

It is the incomplete rotation of OP to OA results in the fetal head being in a horizontal or transverse position (OT).

Malposition

- ROP Is 3 times as common as LOP
- **Risk factors**
- Grand multipara
- Android or anthropoid pelvic
- Flat sacrum
- Pendulous abdomen
- Anterior placenta

Occiptoposterior position

- Diagnosis:
- Palpation fetal back to one side
- Limbs to the front &give hollowing above the head
- Auscultation: fetal heart is heard best in the flank
- PV exam: anterior fontanel is felt in the anterior part of the pelvis deflexed head

Managements

- 1st stage of labor:
- Good hydrations
- Ambulation
- Good analgesia
- Avoid pushing before full cervix

Managements

- 2nd stage
- 90 % delivered as OA
- 6% delivered as OP
- 4% failure to rotate
- Vacuum vs. CS

- Thank you