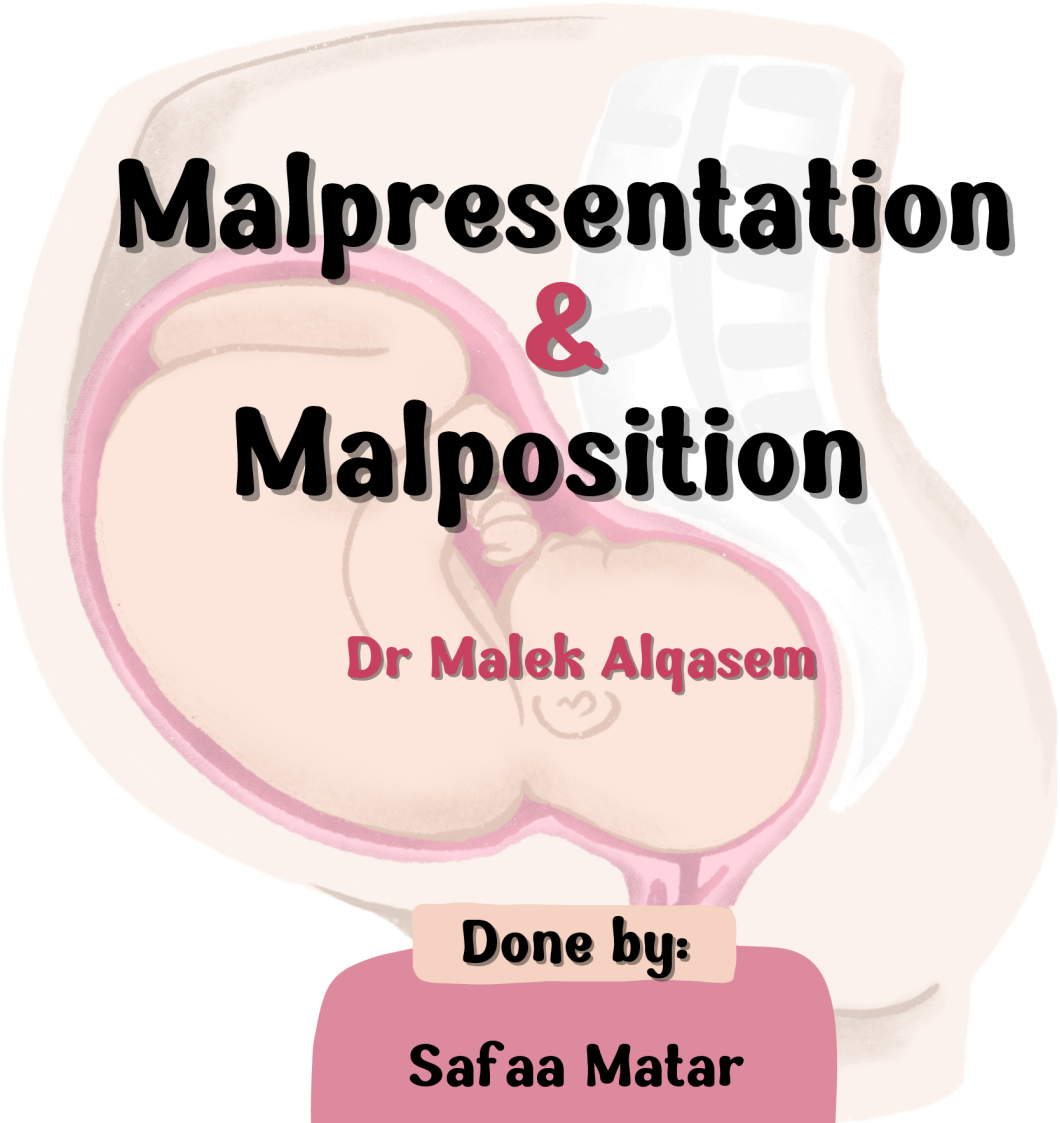
Obstetrics & Gynecology

Doctor 2019 - نبض - Medicine - MU

Malpresentation & Malposition



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This sheet contains:

- lecture slides
- Doctors notes
- additional notes and pictures from OBS & GYN books .

Definitions

Normal vaginal delivery: spontaneous regular uterine contractions(not induced or augmented), cephalic presentation, full-term baby, singleton baby, with or without episiotomy, with or without epidural anesthesia, with no postpartum complications & no ICU admission and his weight (2.5-4.2) kg.

normal vaginal delivery (confirmed cephalic) differ from vaginal delivery which maybe breech ! *انتبهوا لصيغة السؤال

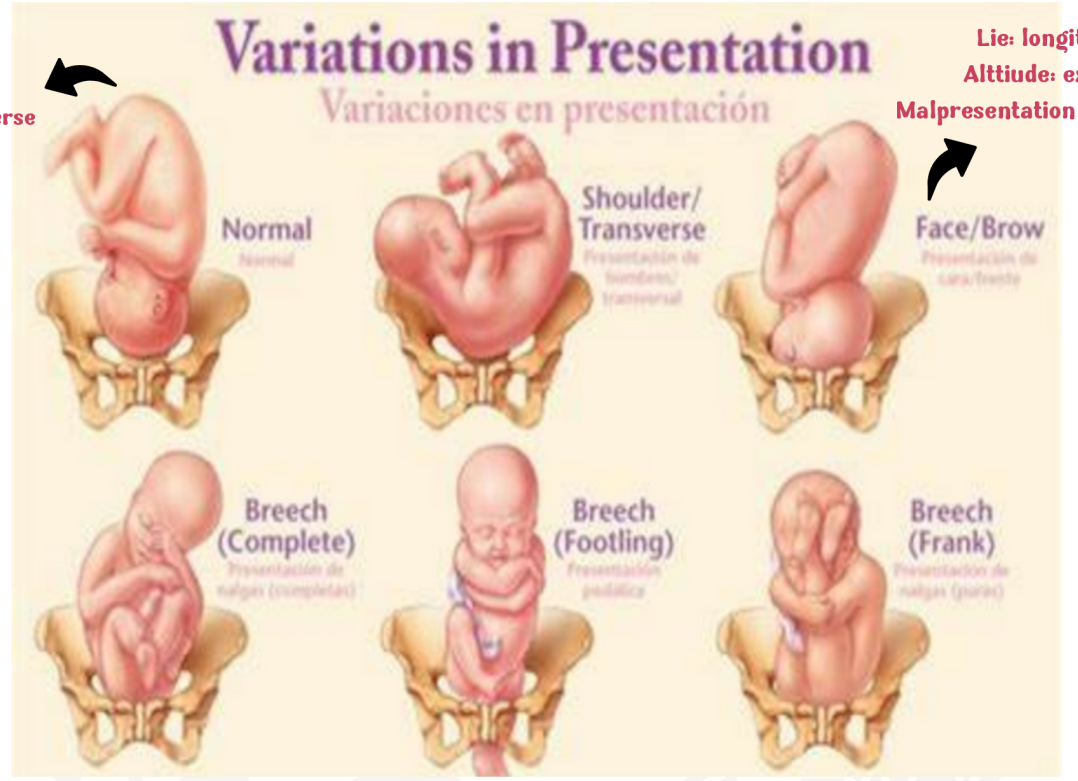
- **Attitude**: the relationship of parts of the fetus to one another normally complete flexion
  normally: complete flexed baby
- **Dipping:** the presenting part has passed the pelvic inlet but is not yet engaged
- **Engagement:** the widest diameter of the presenting part has passed through the pelvic: inlet
- **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 (large: (caput during delivery is a sign of obstruction**
- **Molding: alternation of the relationship of the fetal cranial bones to each other , two : types reducible or irreducible (irreducible molding is a sign of obstructed labor)**
- **synclitism: The parietal diameter of the head is parallel to the pelvic inlet**
- **Asynclitism: (the biparietal diameter isn't parallel to the pelvic inlet, it is abnormal (presentation**
- **Position**: the relationship of the dominator of presenting part to the maternal pelvis
  Normal position: occipito-anterior
- **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- shoulder (the most important part of the presenting part)

the only normal presentation is:

Cephalic--- longitudinal Lie ---completely flexed head (vertex) and the occiput forming the presenting part (occipitoposterior)

Anything other than that mentioned is :Malpresentation or Malpostion

Lie: longitudinal
Alttiude: flexion
Position: occipito-tranverse
Malposition



Lie: longitudinal
Alttiude: extention
Malpresentation & malposition

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 (occipitomental) in brow 13 cm

Submento-bregmatic in face anterior =9.5 cm

If the diameter of the presenting part <10.5 the baby will pass through the pelvis

if it > 10.5 the baby can't pass through the pelvis.

**most women have interspinous diameter = 10.5 .

Risk factors for malposition & malpresentation

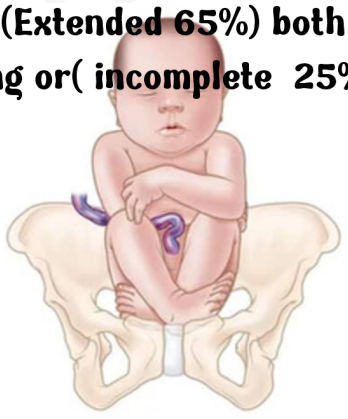
1.Pelvic block :
pelvic tumor
fibroids
pelvic shape
placenta previa mostly come in breech .presentation

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 (normally= 50-80 cm)

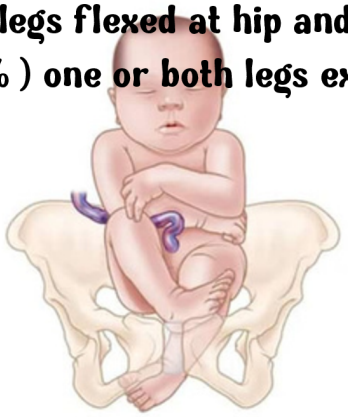
Breech

***Most common malpresentation is BREECH**
***Most common type of breech is FRANK**
The presenting part: buttock
The denominator: sacrum
engagement diameters: The bitrochanteric diameter (10cm)
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



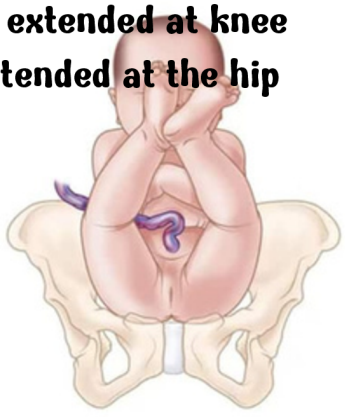
Complete

Presentation: complete breech
Can be delivered vaginally



Footling

Presentation: footling breech
More complications
***most with cord prolapse**
Cant be delivered vaginally



Frank

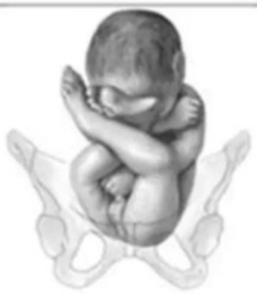
Presentation: frank breech
Can be delivered vaginally

Findings on examination:
Fundal height corresponding with the gestationl age

Ballotable head at the fundus

Soft presenting part (third grip)

Fetal heart auscultated above the umbilicus

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.

Incidence

Incidence: decreases with increasing gestational age

Before 28 weeks around 20-30%

At term only 3% in this case you should search for a cause

4%of breeches delivery fetuses with congenital anomalies

40%undiagnosed breeches before labor

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 the umbilicus

Often mistaken as Deeply engaged head at term

Meconium is seen "mostly" in Labour

Investigations

Ultrasound

Management

Cesarean delivery is recommended for most breech presentations unless delivery is imminent.

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
the best test to assess the pelvis is a Trial of labor

Discuss CS VS Vaginal delivery

Risks of ECV

.Placental abruption
.Premature rupture of the membranes
.Cord accident
Transplacental haemorrhage (remember anti-D administration to rhesusnegative
.(women
.Fetal bradycardia

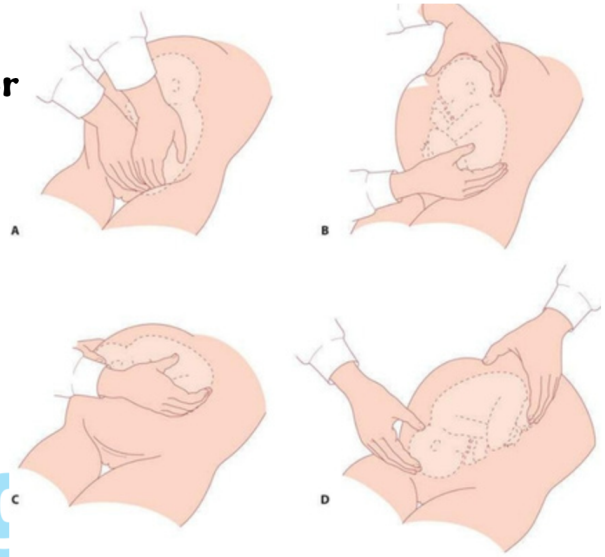


Figure 6.4 External cephalic version. **(A)** The breech is disengaged from the pelvic inlet; **(B)** version is usually performed in the direction that increases flexion of the fetus and makes it do a forward somersault; **(C)** on completion of version, the head is often not engaged for a time; **(D)** the fetal heart rate should be

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

EXAM TIP

A pregnant patient presents at 31 weeks' gestation with a breech presentation. What is the next step? Recheck fetal presentation at 36 weeks and then offer external cephalic version if persistently breech. *Note:* If <34 weeks, malpresentation not uncommon and not significant.

Breech vaginal delivery

Consultation

No contraindication to use oxytocin

Only flank or complete breech

Normal fetal growth>2kg <4 kg

Experience attendant

May cause descend on incomplete cervical dilatation which will cause head entrapment >> inj to the cervical branch of uterine artery >> profuse bleeding and death

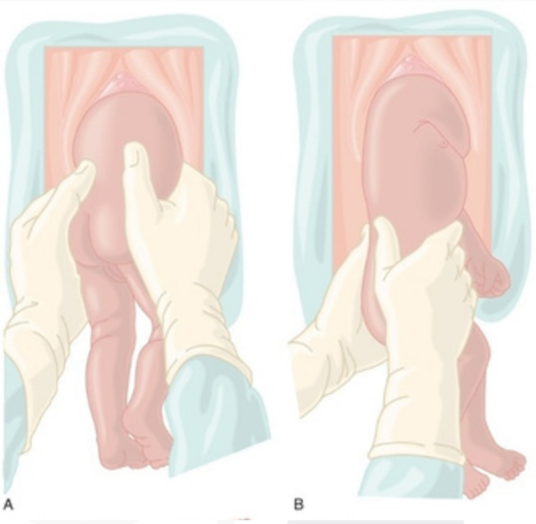
(Lovsetts manoeuvre and mauriceau -smellie veit manoeuvre)

We can use forceps after coming head (piper)

*vaccum is contraindicated in breech.

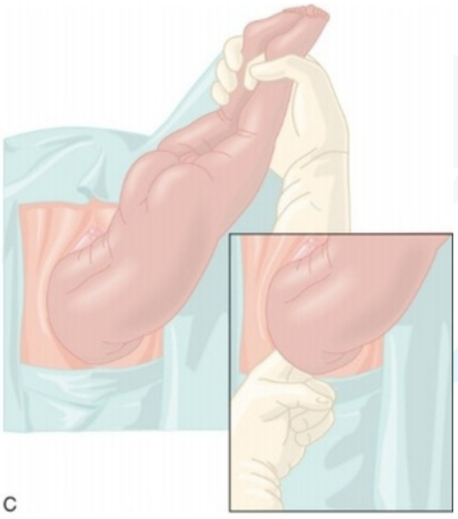
*In breech never use piper except after coming the head, we can use forceps as piper or keilland.

Loveset's manoeuvre



When the scapulae are visible, rotation of the trunk allows delivery of the .anterior shoulder

Delivery of the anterior shoulder by downward .traction

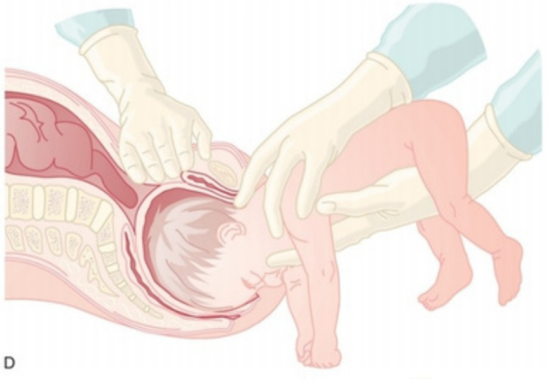


Delivery of the posterior shoulder by upward traction.

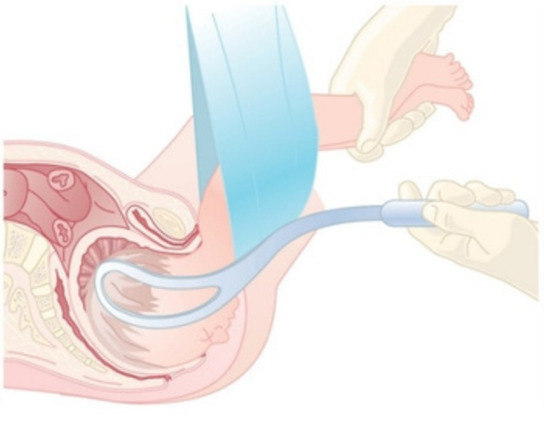
The posterior arm is freed digitally by splinting the fetal humerus

Delivery of the after coming head by using either:

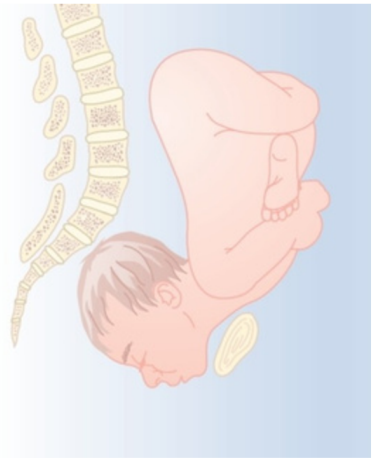
Mauriceau-Smellie-Veit manoeuvre



Piper forceps

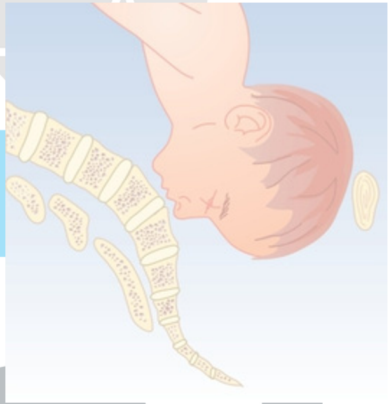


Face presentation



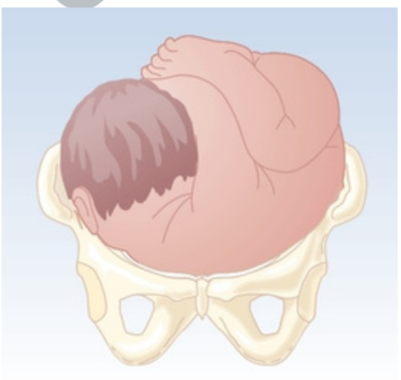
Incidence 2 %
Fully extended head
The denominator is the chin
Submento-bregmatic in mento-anterior 9.5 cm
Face mento posterior bregma-sternal diameter 18 cm
: By examination
you feel supraorbital ridges .nose and mouth
Vaginal delivery allowed only for face mento anterior (can used forceps only)
Mento-posterior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

Brow presentation



The head is midway between extension and flexion (deflexed head)
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
If brow in advanced labor (persistent brow) mx is CS only
If brow in early labor we should wait until to decide to deliver the baby vaginally or cs
*75% spontaneous convert to face or vertix presentation.

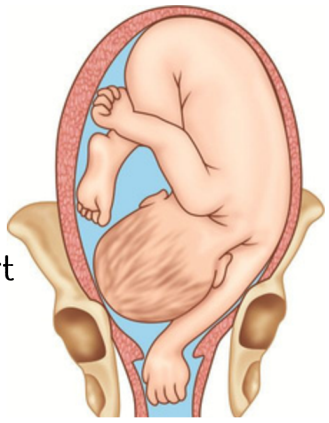
Transverse Lie



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

*Transverse Lie (abnormal shoulder presentation) differ from occipitotransverse (normal lie).
*Transverse lie more common in multigravida and multipara than nullipara. because the abdomen and uterus would be more lax.

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

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

In this case

Don't touch fetal part > give oxytocin

If the hand delivered first = CS

If the head delivered first = continue VD

Malposition

Occiput posterior position incidence 10 % of cephalic presentation

Malposition but not Malpresentation

'Vertex presentation

Occiput lies in the posterior part of the pelvis

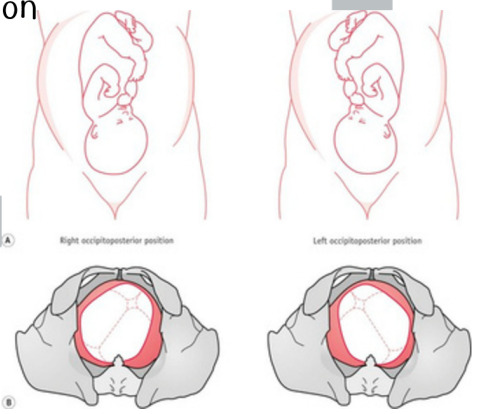
The engagement diameter

suboccipito-frontal 10 cm-

Occipito -frontal 11 cm

Mode of delivery can be vaginally ,assisted and possible CS

ROP Is 3 times as common as LOP



Risk factors :

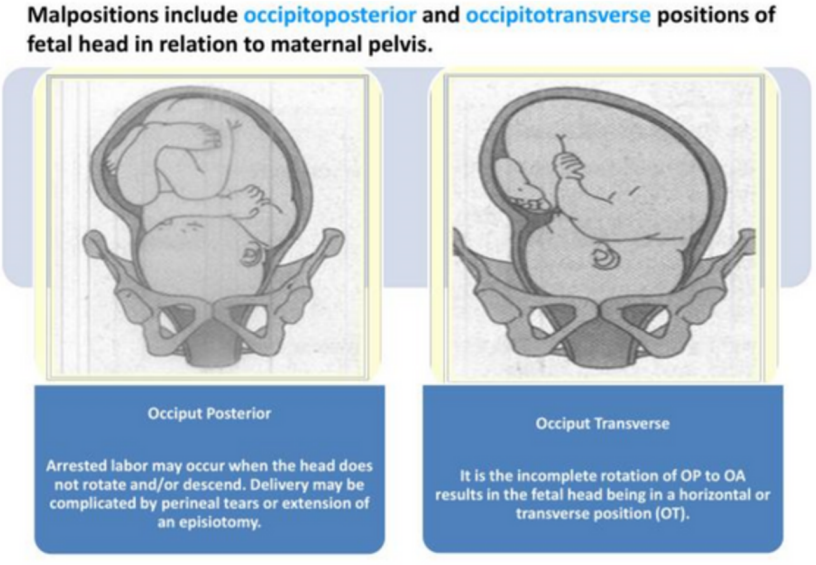
Grand multipara

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

2nd stage:

delivered as OA % 90

delivered as OP 6%

failure to rotate 4%

Vacuum vs. CS

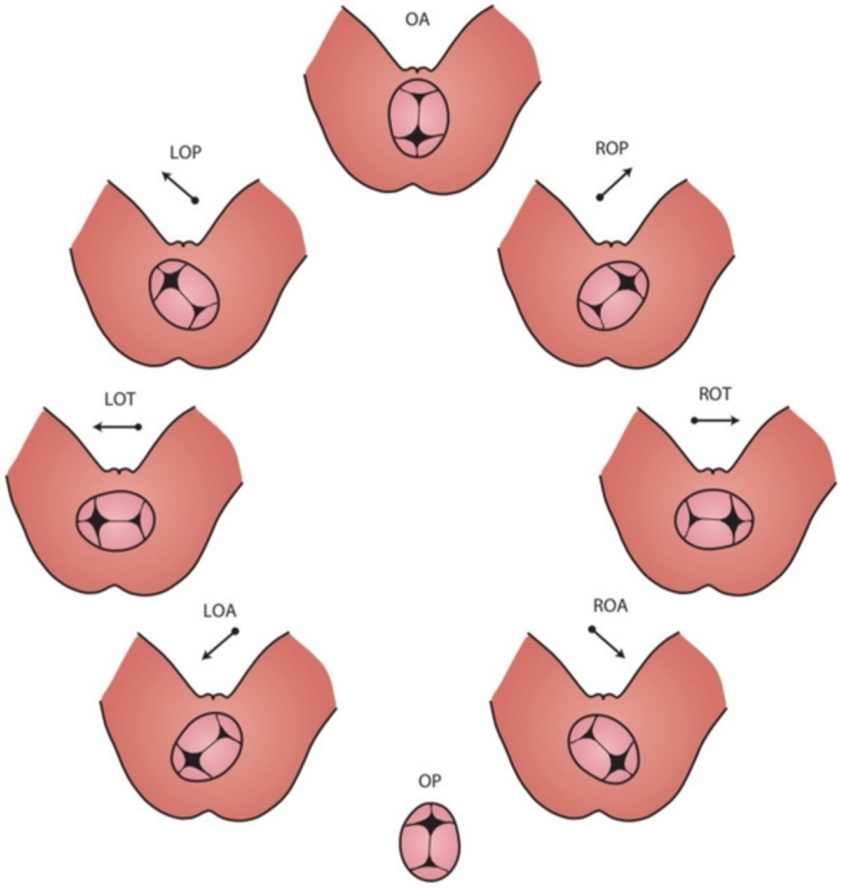


FIGURE 5-4. Vertex positions.

MANAGEMENTS ::

*** 1st stage of labor:**

- Good hydrations

-Ambulation

- Good analgesia

-Avoid pushing before full cervix

*** 2nd stage :**

- 90 % delivered as OA

- 6% delivered as OP

-4% failure to rotate

-Vacuum vs. CS

****Translabial US ::**

لما تكون مثلا الحامل obese و ما اقدر اشوف الجنين او الطفل

بدخل الUS من الvagina و بشوفه interna

**** Eye to pubic = occipitoposterior**

لما يكون brow و يكون OP

بتكون العين قبال الsymphesis pubis

=sinciput