

malposition



Position of the presenting part is the relationship of the denominator to the fixed points of the maternal pelvis, i.e. sacrum posteriorly, pubic symphysis anteriorly, sacro-iliac joints posterolaterally, and ileo-pectineal eminences anterolaterally.

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In the vertex presentation more than 90% present in the occipitoanterior position, i.e. the occiput is in the anterior half of the pelvis and is called the normal position.

If the occiput is pointing laterally or is in the posterior half of the pelvis, it is **called malposition** and is associated with deflexed head presenting a larger anteroposterior diameter of the vertex (11.5cm) and, hence, difficulties with progress of labour

So malposition refers to the relationship between the denominator & the maternal pelvis that make spontaneous delivery unfavorable, e.g. occipito-posterior, occiput transverse in vertex presentation, sacro-posterior in breech presentation & mento-posterior with face presentation

Occipito-posterior position

Incidence

Occipitoposterior positions are the most common type of malposition of the occiput approximately 10% of labours (at onset of labour)

A persistent occipitoposterior position results from a failure of internal rotation prior to birth.

The vertex is presenting, but the occiput lies in the posterior rather than the anterior part of the pelvis. As a consequence, the fetal head is deflexed and larger diameters of the fetal skull present.

Occiput transverse position

Occurs when the fetal occiput is transverse to maternal pelvis.

If an occiput transverse position persists into the later part of first stage of labour , it should be managed as an occiput posterior position

Aetiolog

- The shape of the pelvis: anthropoid & android pelvises are the most common cause of occipito-posterior due to narrow fore-pelvis.
- A flat sacrum or a head that is poorly flexed may be responsible
 - epidural analgesia relax the pelvic floor to an extent that the fetal occiput sinks into it rather than being pushed to rotate in an anterior direction.
 - _Poor uterine contraction.
- Most of them no obvious cause(idiopathic)

Types

1. Right occiput posterior(ROP)
2. left occiput posterior(LOP)
3. Direct occipitoposterior

ROP is more common than the LOP due to

- The left oblique diameter is reduced by presence of sigmoid colon.
- The right oblique diameter is slightly longer than the left one
- Dextro-rotation of the uterus favours occipitoposterior in right occipito_anterior position.



ROP

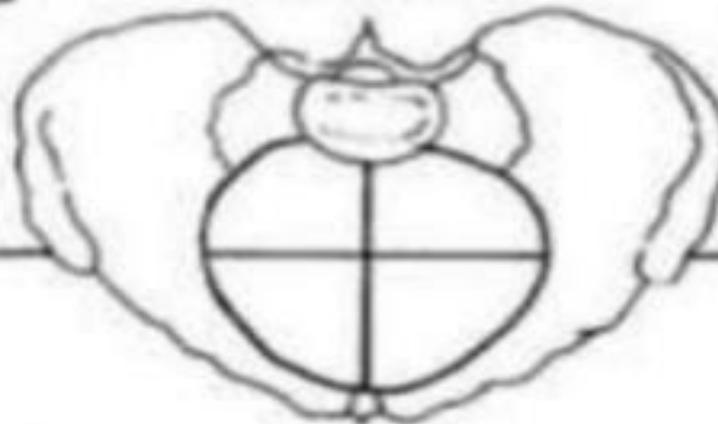


LOP

Posterior

Right

Left



Anterior

Diagnosis

1 - **Listen** to the mother The mother may complain of backache & she may feel that her baby's bottom is very high up against her ribs. She may report feeling movements across both sides of her abdomen

2-**Inspection:**

The abdomen looks flattened below the umbilicus due to absence of round contour of the fetal back.

A groove may be seen below the umbilicus corresponding to the neck.

Fetal movement may be detected near the midline.

3. Abdominal Palpation

Aslight flattening of the lower abdomen may be observed & limbs are easily felt. Deflexion is revealed when the prominence of occiput & sincipit can both felt at the same level above symphysis pubis & the head will be felt relatively large from side to side

4-Vaginal examination:

Early in labour it may be difficult to reach the presenting part & the membranes may rupture early ,

when the head enters pelvic cavity the anterior fontanelle is only felt behind symphysis pubis in poorly flexed head, in less poorly flexed head both fontanelles can be felt, in well flexed head only posterior fontanelle can be felt posteriorly

Fate of OPP

OPP

Engaging diameter :- occipito-frontal 11.5cm or sub-occipitofrontal 10cm.

Favorable (90%)

3/8th rotation

occipit comes under symphysis pubis (rt/lt occipito anterior)

Normal vaginal delivery

Unfavorable (10%)

Mild deflexion

Occiput rotate by 1/8th circle

Deep transverse arrest

Moderate deflexion

Non-rotation

Oblique posterior arrest

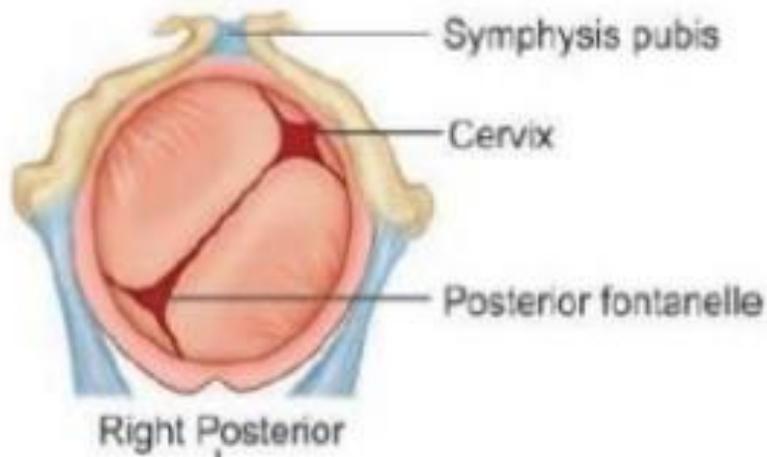
Face to pubis delivery

Severe deflexion

Occiput rotate posteriorly by 1/8th

POPP/ occipito-sacral position

Arrest



Favorable

Unfavorable



Management of labour:

-The best management is to await events, preparing the woman and staff for a long labour.-Progress should be monitored by abdominal and vaginal assessment, and the mother's condition should be watched closely.-Good pain relief with an epidural and adequate hydration are required.

First stage

The first stage is managed as in normal position with partogram & analgesia.

Inefficient uterine contraction is managed with syntocinon drip.

If prolonged labour or fetal distress occur c/s is performed.

Second stage:

In most cases provided that uterine contractions are strong & the patient is able to make good expulsive efforts the occiput rotate forward & normal delivery take place.

In other cases the baby may be delivered face to pubis with great risk of perineal tear.

The indication of interference are:

- 1-failure of presenting part to descend.
- 2-fetal distress.
- 3-maternal distress

- Manual rotation

With epidural or general anesthesia or pudendal block the head is rotated with the hand in the vagina till it directed anterior, the shoulder girdle is rotated at the same time by pressure through abdominal wall with the external hand & delivery is completed with obstetric forceps.

2 - Kielland forceps

This forceps used for rotation of the fetal head until the occiput lies anteriorly & then for traction.

3 - Vacuum extraction

If the extractor is applied near the occipital end of the vertex & traction is applied, forward rotation of the head often occurs.

Caesarian section and ventouse delivery are the safer form of obstetric intervention

Complication of occipitoposterior

Maternal complications

Prolonged labour (increased duration of both first and second stage)

Obstructed labour

Infection, increased incidence of perineal tear.

Increase obstetric intervention

Fetal complications

High perinatal mortality and morbidity

Cord prolapse

Premature rupture of membrane

labour Dystocia (abnormal labour)