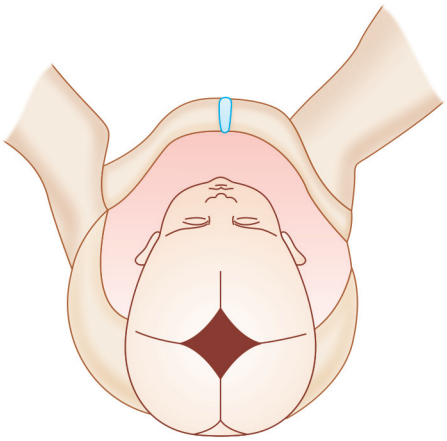
Chapter

5

Occipito-Posterior Position

QUESTION 1

1.1 What is this fetal position?



1.2 How do you diagnose this abnormality?

1.3 What is the presenting diameter?

1.4 What is the outcome of labour in a woman with this abnormality?

Answer 1.1

Occipito-posterior position

Answer 1.2

Consider occipito-posterior position, if the following physical signs are present.

- Non-engaged fetal head at term.
- Flattening of the abdomen below the umbilicus.
- The fetal back will be felt in the mother's flank and the limbs in the midline.
- Fetal heart sounds will be heard in the midline and in the flank

However, it can be confirmed only by performing a vaginal examination after onset of labour, when the cervix is dilated to 4–5 cm. In an occipitoposterior position the anterior fontanelle will be felt.

Answer 1.3

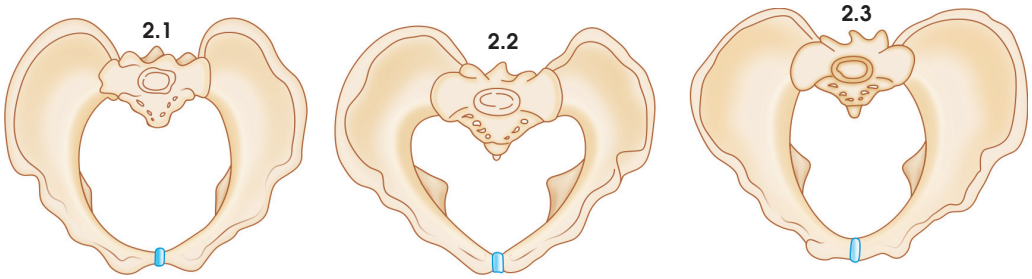
Occipito-frontal diameter measuring 11.5 cm.

Answer 1.4

- Progress will be slow.
- If the pelvis is adequate and good contractions are provided, rotation to the occipitoanterior position will occur, resulting in normal vaginal delivery.
- In an anthropoid pelvis with a large anteroposterior diameter, delivery can occur in the occipitoposterior position.
- Labour can become obstructed at the brim or in the midcavity in an android pelvis with narrow diameters.
- Delay can occur in the second stage, due to persistence of the occipitoposterior position or partial rotation to the transverse position especially in an android pelvis. If the spines are prominent arrest can occur (deep transverse arrest).

QUESTION 2

Name the following pelvic types. What is the outcome of labour in a woman with an occipitoposterior position in each of these pelvic types?



Answer 2.1

- Gynaecoid pelvis.
- The fetal head will undergo rotation to the occipitoanterior position and normal vaginal delivery will occur. Augmentation with oxytocin may be necessary if labour is slow, as good uterine contractions are required for rotation to occur.

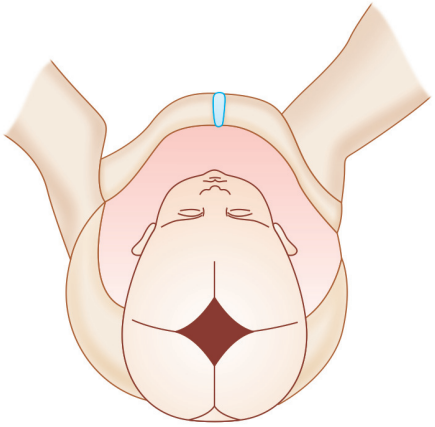
Answer 2.2

- Android pelvis.
- Obstruction can occur at the brim or in the mid-cavity. Deep transverse arrest can occur at the level of the ischial spines during the second stage as the spines are prominent.

Answer 2.3

- Anthropoid pelvis.
- Delivery can occur in the occipitoposterior position, as it has a large antero-posterior diameter.

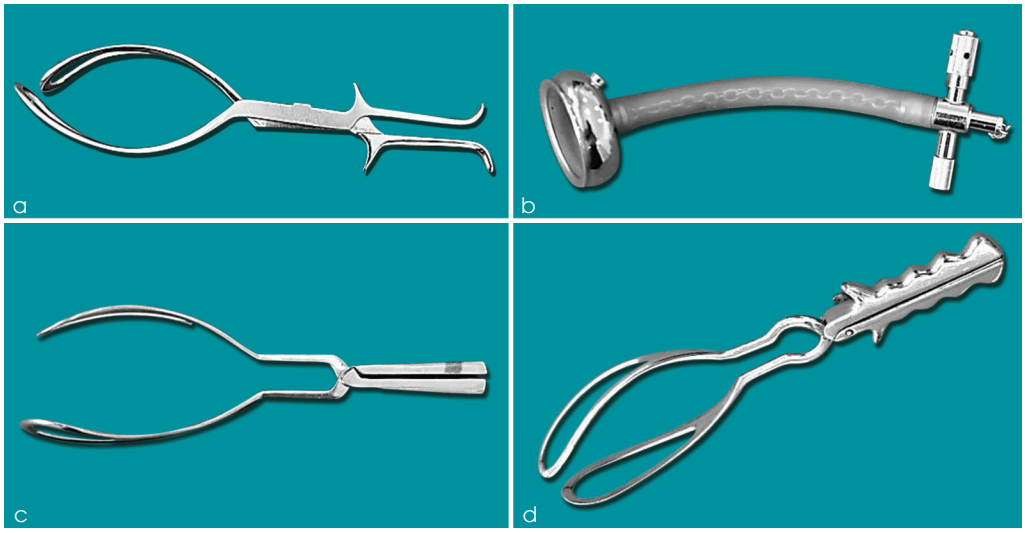
QUESTION 3



3.1 What are the methods available to manage prolonged first stage of labour, in a woman with the above abnormality?

3.2 Which of the following instruments can be used to complete the delivery, if the malposition persists, causing delay in the second stage?

3.3 State 4 criteria which should be satisfied to apply these instruments.



Answer 3.1

If labour is prolonged only due to the malposition and inadequate contractions in the absence of a scarred uterus, cephalopelvic disproportion (CPD) or fetal distress, labour can be augmented with amniotomy followed by an oxytocin infusion. Adequate pain relief should be provided with epidural analgesia.

Continuous fetal heart rate monitoring should be carried out. Progress should be reviewed after 2 hours. A caesarean section should be performed if CPD is suspected.

Answer 3.2

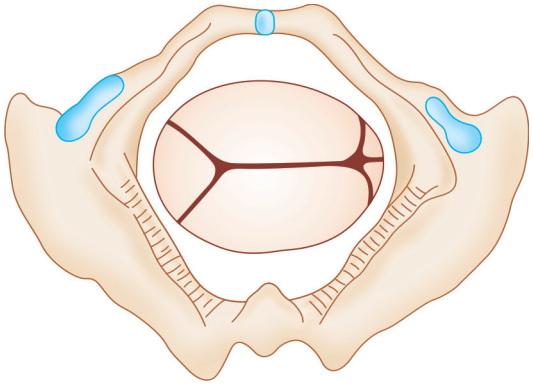
a and b

Answer 3.3

- The pelvis should be adequate.
- Cervix should be fully dilated.
- The head should be at or below the level of the ischial spines.
- The patient should be suitably anaesthetized. Vacuum extraction can be performed under pudendal block, while epidural or spinal analgesia is required for application of Kielland's forceps.

QUESTION 4

4.1 What is this abnormality?
4.2 What is the cause for its occurrence?
4.3 In which pelvic type is it most likely to occur?
4.4 How can you diagnose this condition?
4.5 What is the best management option?



Answer 4.1

Deep transverse arrest

Answer 4.2

It occurs during the second stage of labour due to partial rotation of an occipito-posterior position into the transverse diameter and arrest at the level of the ischial spines.

Answer 4.3

It is most likely to occur in an android pelvis with prominent ischial spines.

Answer 4.4

- The second stage will be prolonged in the presence of strong uterine contractions.
- The head will be at or just above the level of the ischial spines.
- The sagittal suture will be in the transverse plane with the anterior and posterior fontanelles on either side. However, diagnosis may be difficult in the presence of a large caput and moulding.

Answer 4.5

- The safest management option in most cases is to perform a caesarean section.
- Kielland's forceps delivery or vacuum extraction can be tried, if the spines are not prominent and the head is at or below the level of the spines.

References for Questions 1 to 4:

- *SBA Questions in obstetrics, Chapter 5*
- *Munro Kerr's Operative Obstetrics, 12th edition, pp 103–111*