

PERINATAL EDUCATION PROGRAMME
EXAMINATION OF THE ABDOMEN IN LABOUR
SKILLS WORKSHOP 8-1

OBJECTIVES

When you have completed this skills workshop you should be able to:

1. Assess the size of the fetus.
2. Determine the fetal lie and presentation.
3. Determine the descent of the head.
4. Grade the uterine contractions.

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8-1 A WHEN SHOULD YOU EXAMINE THE ABDOMEN OF A PATIENT WHO IS IN LABOUR?

The abdominal examination forms an important part of every complete physical examination in labour. The examination is done:

1. On admission.
2. Before EVERY vaginal examination.
3. At any other time when it is considered necessary.

8-1 B WHAT IS TO BE ASSESSED ON EXAMINATION OF THE ABDOMEN OF A PATIENT WHO IS IN LABOUR?

1. The shape of the abdomen.
2. The height of the fundus.
3. The size of the fetus.
4. The lie of the fetus.
5. The presentation of the fetus
6. The fetal heart rate pattern.
7. The descent and engagement of the head.
8. The presence or absence of hardness and tenderness of the uterus.
9. The contractions.

The detailed method of palpating the abdomen during the antenatal period is dealt with in skills workshop 1-2 of this PEP manual.

8-1 C SHAPE OF THE ABDOMEN.

It is helpful to look at the shape and contour of the abdomen.

1. The shape of the uterus will be oval with a singleton pregnancy and a longitudinal lie.
2. The shape of the uterus will be round with a multiple pregnancy or polyhydramnios.
3. A "flattened" lower abdomen suggests a vertex presentation with an occipito-posterior position (ROP or LOP).
4. A suprapubic bulge suggests a full bladder.

8-1 D HEIGHT OF THE FUNDUS.

It is important to ask yourself whether the height of the fundus is in keeping with the patient's dates and the findings at previous antenatal attendances.

8-1 E SIZE OF THE FETUS.

It is important, on palpation, to assess the size of the fetus. This is best done by feeling the size of the fetal head. Is the size of the fetus in keeping with the patient's dates and the size of the uterus? A fetus which feels smaller than expected is likely to be associated with:

1. Incorrect dates.
2. Intra-uterine growth retardation.
3. Multiple pregnancy.

8-1 F LIE AND PRESENTATION OF THE FETUS.

The lie and presentation of the fetus is decided on abdominal palpation by using the 4 steps described in skills workshop 1-2, sections 1-2 G and 1-2 H of this PEP manual.

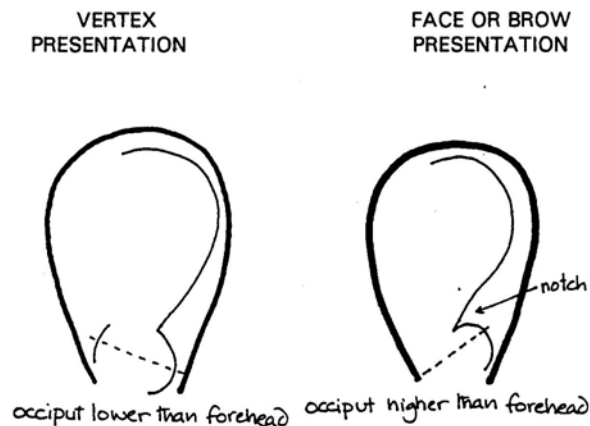
It is important to know whether the lie is longitudinal (cephalic or breech presentation), oblique, or transverse. With an abnormal lie, there is an increased risk of umbilical cord prolapse. An abnormal lie may suggest that there is a multiple pregnancy or a placenta praevia.

It is also important to know the presentation of the fetus. If a breech presentation is present, it must be decided whether a vaginal delivery is possible. With breech presentation, there is an increased risk of cord prolapse or a placenta praevia.

8-1 G PRESENTATION OF THE FETUS.

If the presentation is cephalic, it is sometimes possible when palpating the abdomen to determine the presenting part of the fetal head (vertex, face or brow). The following figure indicates some features that can assist you in determining the presentation:

Figure 8-1 A. Vertex, face and brow presentations.



8-1 H FETAL HEART RATE PATTERN.

Fetal heart rate patterns are fully discussed in unit 7 and skills workshop 8-3 of this PEP manual.

8-1 I DESCENT AND ENGAGEMENT OF THE HEAD

This assessment is an essential part of EVERY examination of a patient in labour. The descent and engagement of the head is an important part of assessing the progress of labour and must be assessed before each vaginal examination.

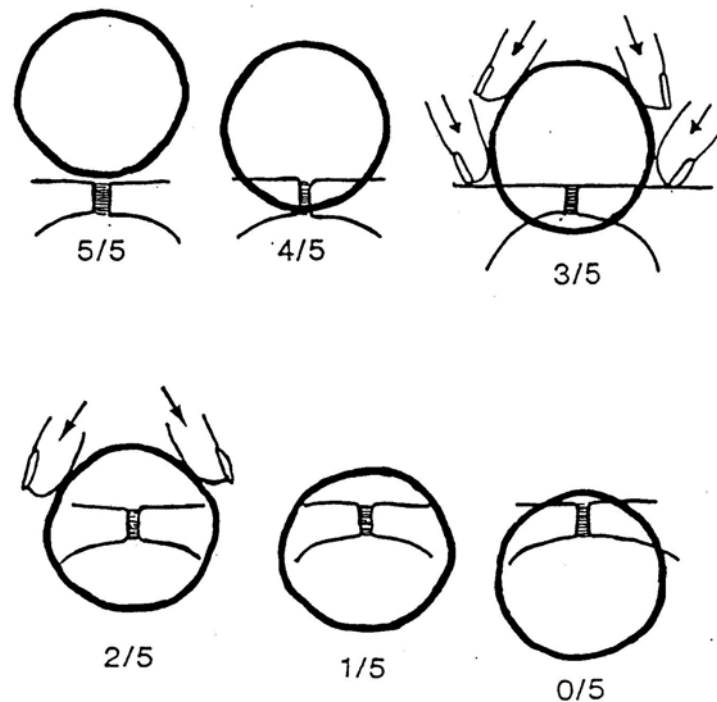
The amount of descent and engagement of the head is assessed by feeling how many fifths of the head are palpable ABOVE the brim of the pelvis:

1. 5/5 of the head palpable mean that the whole head is above the brim of the pelvis.
2. 4/5 of the head palpable means that a small part of the head is below the brim of the pelvis and can be lifted out of the pelvis with the deep pelvic grip.
3. 3/5 of the head palpable means that the head cannot be lifted out of the pelvis. On doing the deep pelvic grip, your fingers will move outwards from the neck of the fetus, then inwards before reaching the pelvic brim.
4. 2/5 of the head palpable means that most of the head is below the pelvic brim, and on doing the deep pelvic grip, your fingers only splay outwards from the fetal neck to the pelvic brim.
5. 1/5 of the head palpable means that only the tip of the fetal head can be felt above the pelvic brim.

It is very important to be able to distinguish between 3/5 and 2/5 head palpable above the pelvic brim. If only 2/5 of the head is palpable, then engagement has taken place and the possibility of disproportion at the pelvic inlet can be ruled out.

DESCENT AND ENGAGEMENT OF THE HEAD ARE ASSESSED ON ABDOMINAL AND NOT ON VAGINAL EXAMINATION

Figure 8-1 B. An accurate method of determining the amount of head palpable above the brim of the pelvis.

**8-1 J HARDNESS AND TENDERNESS OF THE UTERUS.**

A uterus may be regarded as abnormally hard:

1. When it is difficult to palpate fetal parts.
2. When the uterus feels harder than usual.

This may occur:

1. In some primigravidas.
2. During a contraction.
3. When there has been an abruptio placentae.
4. When the uterus has ruptured.

When there is both hardness and tenderness of the uterus, without period of relaxation during which the uterus is not tender, the commonest causes are:

1. An abruptio placentae.
2. A ruptured uterus.

Therefore, there is likely to be a serious problem if the uterus is harder than normal AND there is also tenderness without periods of relaxation. Hardness or tenderness of the uterus must be recorded on the partogram and reported immediately to the responsible doctor.

8-1 K CONTRACTIONS.

Contractions can be felt by placing a hand on the abdomen and feeling when the uterus becomes hard, and when it relaxes. It is, therefore, possible to assess the length of the contractions by taking the time at the beginning and end of the contraction. The strength of contractions is assessed by measuring their duration, and also the frequency with which they occur in a period of 10 minutes.

8-1 L GRADING THE DURATION OF CONTRACTIONS.

1. Contraction lasting less than 20 seconds ("weak contractions").
2. Contractions lasting 20-40 seconds ("moderate contractions")
3. Contractions lasting more than 40 seconds ("strong contractions").

Figure 8-1 C. Method of grading the duration of uterine contractions for recording on the partogram.

