



## CLINICAL PRACTICE GUIDELINE

# Abdominal Examination

This document should be read in conjunction with the [Disclaimer](#)

## Aims

- To assess the fetal size and growth
- To detect deviations from the normal
- To locate the fetal parts to indicate position and presentation
- To auscultate the fetal heart

## Equipment

- Doptone
- Aqueous gel
- Non-stretching tape measure
- Wedge as required

## Preparation

Perform hand hygiene before and after contact with the woman.

See [Infection Control Manual- Hand Hygiene](#).

Ensuring the practitioner has warm hands may reduce maternal discomfort and risk for causing contraction of the uterine or abdominal muscles.<sup>1</sup>

Explain the procedure and gain permission to proceed.

Confirm that the woman has emptied her bladder prior to the procedure.

A full bladder will make the examination uncomfortable and can reduce the accuracy of the fundal height measurement.<sup>1</sup>

Position the woman in the semi recumbent dorsal position on the bed.

The woman should be encouraged to lie with her arms by her sides to aid relaxation of the abdominal muscles.<sup>1</sup>

Place a wedge under the right buttock if the gravid uterus is of a size likely to compromise maternal and/or fetal circulation.

Pelvic tilt prevents occurrence of supine hypotension resulting from the weight of the gravid uterus obstructing the inferior vena cava – reducing venous return and hence cardiac output.

Ensure the woman is appropriately covered.

The woman's modesty and privacy is respected.<sup>2</sup>

## Visual Inspection

Note the abdominal size.

A full bladder, distended colon, or maternal obesity may effect estimation of fetal size.<sup>1</sup>

Observe the abdominal shape.

An abdominal shape that is longer than it is wide indicates a longitudinal lie. However, a shape that is low and broad may point to a transverse lie.<sup>1</sup>

The primigravid uterus is ovoid in shape compared to the multigravid uterus, which is a rounded shape. Dips and curves in the uterus may indicate fetal position.<sup>3</sup>

Inspect the abdomen for scars.

Presence of scars may indicate previous abdominal or obstetric surgery.<sup>1</sup>

Examine the skin.

Hormonal influences in pregnancy can cause striae gravidarum, hyperpigmentation, changes in nails, hair, and the vascular system.<sup>4</sup>

Striae gravidarum caused by physical and hormonal influences is more common in younger women, those with higher body mass indices, and in women carrying larger babies.<sup>4</sup> Daily massage may prevent stretch marks, however there is no evidence to indicate the use of which creams, emollients and oils prevent occurrence.<sup>5</sup>

Observe for fetal movements.

**Estimating gestational age**

Palpate of the abdomen by using the physical landmarks of the xiphisternum, the umbilicus and the symphysis pubis.

Macrosomia, multiple pregnancy and small for gestation age may be detected by palpation and measurement of fundal height.

Current evidence does not indicate that either the palpation method, or measurement of fundal height method, is superior to each other for detection of abnormal fetal growth.<sup>6</sup>

If a small for gestational age fetus is suspected, then confirmation of the estimated gestational age should be revisited.<sup>1, 7</sup>

Measure the fundal height with the tape measure from 24 weeks gestation.

See Clinical Guideline [Fundal Height: Measuring with a Tape Measure.](#)

Between 20 to 34 weeks gestation the height of the uterus correlates closely with measurements in centimetres, however maternal obesity has been shown to distort the accuracy of these measurements<sup>8</sup>

**Palpation Summary*****Fundal Palpation***

Both hands are gently placed around the fundus to determine contours of the fetus.

Aids determination of presentation, whether cephalic or breech. This will aid diagnosis of the lie and presentation of the fetus.<sup>1</sup>

***Lateral Palpation***

Hands are placed at umbilicus level on either side of the uterus. Gentle pressure is used with each hand to determine which side offers the greatest resistance. 'Walking' the fingers over the abdomen can also locate the position of the back and distinguish fetal body parts.<sup>1</sup>

Location of the fetal back can help determine the fetal position.<sup>1</sup>

***Pelvic Palpation***

Ask the woman to bend her knees slightly and encourage gentle breathing exercises.

A woman in a relaxed position is less likely to tense abdominal muscles.<sup>1</sup>

To confirm presentation and engagement the midwife:

- faces towards the woman's feet
- Places both hands on either side of the presenting uterine pole and palpate gently starting at least 10cm above the symphysis pubis moving downwards towards it.
- Identifies the level and side of the occiput and sinciput when the presentation is vertex. In a normal vertex presentation the head is flexed and the sinciput will be palpated at a higher level than the occiput.

Assess engagement of the presenting part of the fetus (defined as no more than 2/5ths palpable above the pelvic brim).

A midwife should notify the Obstetric Team if a primigravid woman has a high vertex presentation at term and risk of CPD is suspected.

### **Auscultation**

Locate the fetal heart by identifying the fetal position and presentation.

Identify the maternal pulse.

Auscultate the fetal heart rate for one minute and record in the woman's medical record.

Report any deviation or irregularity in the FHR to the medical staff.

Pawlik's manoeuvre should only be used if necessary to judge size, flexion and mobility of the head.<sup>1</sup>

This will help identify fetal position, degree of flexion and how many fifths of the presenting part is palpable above the pelvic brim.

If the head does not engage (3 or more fifths above the pelvic brim) in a primigravid woman at term, it may indicate malpresentation or cephalopelvic disproportion (CPD).<sup>1</sup> However, non-engagement is not definitive of CPD. Risk factors should be discussed with the woman.

Use of a hand held Doppler allows the woman to hear the fetal heart rate (FHR).<sup>7</sup>

The maternal pulse should be identified to confirm the abdominally detected rate is that of the fetus, not the woman.<sup>3</sup>

The fetal heart rate varies according to gestational age and activity.

A reassuring heart rate is between 110 and 160 beats per minute, with no irregularities.<sup>3</sup>

## Amniotic Fluid Estimation

Discuss with the Obstetric Team if there is suspicion about the presence of oligo/poly hydramnios.

With **oligohydramnios** the uterus may feel small and compact and the fetal parts may be easily palpated.

It may be associated with renal agenesis or Potter's syndrome, fetal abnormality, and pre-labour rupture of membranes.<sup>9</sup>

With **polyhydramnios** the uterus may be larger than expected, the skin may appear stretched and shiny, and the uterus feels tense to palpate.

Polyhydramnios may be associated with oesophageal duodenal atresia, multiple pregnancy, open neural tube defects, diabetes mellitus and an anencephalic fetus.<sup>1</sup>

## Documentation

Document the findings from the abdominal examination, including inspection, palpation and auscultation of the FHR in the woman's medical records.

## References

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## Related WNHS policies, procedures and guidelines

[Fundal Height: measuring with a Tape Measure](#)

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