

PERINATAL EDUCATION PROGRAMME
VAGINAL EXAMINATION IN PREGNANCY
SKILLS WORKSHOP 1-3

OBJECTIVES

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

1. List the indications for a vaginal examination.
2. Perform a bimanual vaginal examination.
3. Insert a bivalve speculum.
4. Take a cervical smear.

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A vaginal examination is the most intimate examination a woman is ever subjected to. It must never be performed without:

1. A careful explanation to the patient about the examination.
2. Asking permission from the patient to perform the examination.
3. A valid reason for performing the examination.

1-3 A INDICATIONS FOR A VAGINAL EXAMINATION IN PREGNANCY.

1. AT THE FIRST VISIT:

- (i) The diagnosis of pregnancy during the first trimester.
- (ii) Assessment of the gestational age.
- (iii) Detection of abnormalities in the genital tract.
- (iv) Investigation of a vaginal discharge.
- (v) Examination of the cervix.
- (vi) Taking a cervical (Papanicolaou) smear

2. AT SUBSEQUENT ANTENATAL VISITS:

- (i) Investigation of a threatened abortion.
- (ii) Confirmation of preterm rupture of the membranes with a sterile speculum.
- (iii) To confirm the diagnosis of preterm labour.
- (iv) Detection of cervical effacement and/or dilatation in a patient with a risk for preterm labour, e.g. multiple pregnancy, a midtrimester abortion, previous preterm labour or polyhydramnios.
- (v) Assessment of the ripeness of the cervix prior to induction of labour.
- (vi) Identification of the presenting part in the pelvis.
- (vii) Performance of a pelvic assessment.

3. IMMEDIATELY BEFORE LABOUR:

- (i) Performance of artificial rupture of the membranes to induce labour.

1-3 B CONTRA-INDICATIONS TO A VAGINAL EXAMINATION IN PREGNANCY.

1. ANTEPARTUM HAEMORRHAGE. However, there are 2 exceptions to this rule:

- (i) A cephalic presentation with the fetal head palpable 2/5 or less above the pelvic brim (i.e. engaged), thereby, excluding a placenta praevia.
- (ii) Obvious signs and symptoms of abruptio placentae.

2. Preterm rupture of the membranes without contractions (except with a sterile speculum to confirm or exclude rupture of the membranes).

1-3 C PREPARATION FOR VAGINAL EXAMINATION.

1. The bladder must be empty.
2. The procedure must be carefully explained to the patient.
3. The patient is put in the dorsal or lithotomy position:
 - (i) The DORSAL position is more comfortable and less embarrassing than the lithotomy position and does not require any equipment. This is the position most often used.
 - (ii) The LITHOTOMY position provides better access to the genital tract than the dorsal position. Lithotomy poles and stirrups are required.

A VAGINAL EXAMINATION MUST ALWAYS BE PRECEDED BY AN ABDOMINAL EXAMINATION

1-3 D EXAMINATION OF THE VULVA.

The vulva must be carefully inspected for any abnormalities, e.g. scars, warts, varicosities, congenital abnormalities, ulcers or discharge.

1-3 E SPECULUM EXAMINATION.

1. A speculum examination is always performed at the first antenatal visit. At subsequent antenatal visits this examination is only done when indicated, e.g. to investigate a vaginal discharge or in the case of preterm or prelabour rupture of the membranes.
2. The Cusco or bivalve speculum is the one commonly used.

1-3 F INSERTION OF A BIVALVE SPECULUM.

1. The procedure must be explained to the patient.
2. The labia are parted with the fingers of the gloved left hand.
3. The patient is asked to bear down.
4. The closed speculum is gently inserted posteriorly into the vagina. Great care must be taken to avoid undue contact with the anterior vaginal wall at the introitus as this causes great discomfort, or even pain, from pressure on the urethra.
5. As soon as the speculum has passed through the vaginal opening, the blades must be slightly opened. The speculum is now inserted deeper into the vagina. When the cervix is reached, the speculum is fully opened. This method allows for inspection of the vaginal walls during insertion and ensures that the cervix is found.
6. Any vaginal discharge must be identified. Where needed, a sample is taken with a wooden spatula.
7. The vagina is inspected for congenital abnormalities such as a vaginal septum, a vaginal stenosis or a double vagina and cervix.
8. The cervix is inspected for any laceration or tumour. A smooth, red area surrounding the external os that retains the normal smooth surface, is normal during the reproductive years and is called ectopy.
9. If there is a history of rupture of the membranes, the presence of liquor is noted and tested for.
10. A cervical (Papanicolaou) smear must be taken if a smear has not been taken recently.
11. At the end of the examination the speculum is gently withdrawn, keeping it slightly open, so that the vaginal walls can again be inspected all the way out.

1-3 G TAKING A CERVICAL SMEAR.

1. A cervical (Papanicolaou) smear is taken to detect abnormalities of the cervix, e.g. human papilloma virus infection, cervical intra-epithelial neoplasia or carcinoma of the cervix.
2. Ideally the first cervical smear should be taken when the patient becomes sexual active. In practice the first smear is usually taken when the patient first attends a family planning or antenatal clinic.
3. If the cervical smear is normal, it should be repeated at 30, 40 and 50 years of age.
4. The technique of taking a cervical smear is as follows:
 - (i) The name, folder number and date must be written on the slide with a pencil before hand. Also make sure that a spray can is close at hand to fix the slide.
 - (ii) A vaginal speculum is inserted.
 - (iii) The cervix must be clearly seen and is carefully inspected.
 - (iv) A suitable spatula is inserted into the cervix and rotated through 360 degrees, making sure that the whole circumference is gently scraped. It is important that the smear is taken from the inside of the cervical canal as well as from the surface of the cervix. An Ayres (Aylesbury) or tongue spatula must be used and not a brush with sharp or long points such as an spatula, Cervibrush or Cytobrush.
 - (v) The material obtained is smeared onto a glass slide and IMMEDIATELY sprayed with Papanicolaou's fixative.
 - (vi) When the slide is dry, it is sent to the laboratory for examination.

1-3 H PERFORMING A BIMANUAL EXAMINATION.

1. First one and then, where possible, 2 gloved and lubricated fingers are gently inserted into the vagina.
2. If a vaginal septum or stenosis is present, the patient should be referred to a doctor to decide whether delivery will be interfered with.
3. The cervix is palpated and the following are noted:
 - (i) Any dilatation.
 - (ii) The length of the cervix in cm, i.e. whether the cervix is effaced or not.
 - (iii) The surface should be smooth and regular.
 - (iv) The consistency.
4. Special care must be taken, when performing a bimanual examination LATE in pregnancy and in the presence of a high presenting part, not to damage a low lying placenta. If the latter is suspected, a finger must not be inserted into the cervical canal. Instead, the presenting part is gently palpated through all the fornices. If any boggy is noted between the fingers of the examining hand and the presenting part, the examination must be immediately abandoned and the patient must be referred urgently for ultrasonography.
5. Where possible the presenting part is identified.
6. A most important part of the bimanual examination is the determination of the gestational age, by estimating the size of the uterus and comparing it with the period of amenorrhoea. This is only really accurate in the first trimester. Thereafter, the fundal height and the size of the fetus must be determined by abdominal examination.
7. The uterine wall is palpated for any irregularity, suggesting the presence of a congenital abnormality (e.g. bicornuate uterus) or myomata (fibroids).
8. Lastly, the fornices are palpated to exclude any masses, the commonest of which is an ovarian cyst or tumour.

1-3 I EXPLANATION TO THE PATIENT.

Do not forget to explain to the patient, after the examination is completed, what you have found. It is especially important to tell her how far pregnant she is, if that can be determined, and to reassure her, if everything appears to be normal.