Miscarriage

The purpose of this leaflet is to provide the patient with information about the causes, diagnosis and management of miscarriage.

Miscarriage is defined as the loss of an intrauterine pregnancy before the 22nd week of pregnancy. Around 10-20% of miscarriages occur before the 20th week of pregnancy; 80% of them occur within the first 12 weeks.

Medical terms doctors use in the context of miscarriage

- Missed abortion – the foetal cardiac activity and development has stopped; however, the woman may not have any symptoms (abdominal pain, bleeding).
- Spontaneous miscarriage (spontaneous abortion, *abortus incompletus*) – the foetus has usually died and spontaneous expulsion of the foetus from the uterus has begun; the symptoms include pain in the lower abdomen and vaginal bleeding.
- Septic abortion – an infection in the uterus may occur, characterised by fever, chills, flu-like symptoms, abdominal pain, bleeding and foul-smelling vaginal discharge.

Risk factors for miscarriage

- Age (risk increases with age)
- Smoking
- Alcohol consumption
- High fever (above 37.8 °C)
- Previous miscarriages
- Trauma
- Exposure to chemicals, infections, radiation or medications as well as stress

Possible causes of miscarriage

The most common cause of miscarriage (accounting for around 50-60% of cases) is a random genetic abnormality (e.g. the wrong number of chromosomes) in the embryo. A miscarriage also occurs when an embryo forms but stops developing and dies.

Causes of miscarriage may also include chronic conditions (e.g. uncontrolled diabetes, thyroid diseases), uterine malformations and uterine fibroids.

In most cases, it is very difficult to determine a specific cause in a particular case.

Diagnosis of miscarriage

A pelvic exam (to determine the presence and extent of bleeding) and an ultrasound are necessary to diagnose a miscarriage. During the examination, the presence of an intrauterine pregnancy, the size of the foetus, the presence of a foetal heartbeat and the amount of amniotic fluid are determined.

A miscarriage

Unfortunately, nothing can be done to stop a miscarriage once it has started. If a miscarriage has occurred or is about to occur, the pregnancy tissue may pass on its own; however, medical intervention is sometimes necessary.

Management of miscarriage

To ensure the safe termination of the pregnancy and to reduce the risk of complications, you must inform your doctor or midwife:

- About the status of your health;
- Of any illnesses and medications you take on a regular basis;
- Of any known hypersensitivity to medications.

The management of a miscarriage depends on the size of the pregnancy, the presence of bleeding or infection and the woman's preference.

1. Expectant management

Usually, the pregnancy tissue passes out of the uterus within two to four weeks of a miscarriage. This is checked by ultrasound at a time prescribed by the doctor. Expectant management is possible if there is no heavy bleeding and no signs of infection. Signs of infection include fever, foul-smelling discharge and uterine tenderness upon examination. The period of expectant management is long and bleeding or infection may occur during this time. In this case, it may be necessary to switch to medical or surgical management.

2. Medical management

Medications that induce uterine contractions are administered to encourage the emptying of the uterine cavity and stop bleeding. With medical management, the process of passing the pregnancy tissue evolves more quickly. Medical management involves taking a medication called Cytotec (misoprostol). Cytotec is well tolerated by most patients, causing only temporary side effects such as nausea, abdominal pain, fever and chills. Following the administration of misoprostol, the uterus may empty within a day, but it may take longer and it may be necessary to use different combinations of medications.

Depending on the size of the pregnancy and your comorbidities, misoprostol will be administered to you at an outpatient appointment or in a gynaecology day care or inpatient unit. In 90% of cases, the process of a miscarriage is completed within 24 hours of taking misoprostol. During the process, you will experience painful uterine contractions and vaginal bleeding. For severe pain, analgesics (ibuprofen 400 mg every six hours and/or paracetamol 1000 mg every six hours) may be used.

If necessary, you will be issued a certificate of incapacity for work.

If the pregnancy was terminated on an outpatient basis, the termination of the pregnancy is confirmed two to four weeks later at a doctor's appointment. If the pregnancy was terminated in an inpatient or day care setting, the termination of the pregnancy is confirmed in the department before discharge from the hospital. If the pregnancy does not terminate or terminates partially, a second dose of misoprostol is prescribed or surgical intervention is required.

If you are rhesus negative and your pregnancy has lasted more than nine weeks, you will be given a medication called Rhesonativ after the termination of pregnancy to prevent Rh incompatibility in subsequent pregnancies.

A small amount of misoprostol may pass into breast milk during breastfeeding. It is recommended to take misoprostol immediately after breastfeeding. The medication is quickly eliminated from the body. The next breastfeeding session can take place six hours after taking misoprostol.

Contraindications to medical termination of pregnancy

- Suspected ectopic pregnancy or tumours of unknown cause in adnexa of uterus
- Intrauterine contraceptive device
- Adrenal insufficiency
- Long-term hormone therapy with corticosteroids
- Hypersensitivity to the active ingredient
- Anticoagulant therapy or coagulation disorders (von Willebrand disease)
- Porphyria (metabolic disorder)
- Decompensated hypertension or coronary artery disease
- Severe anaemia

Possible complications

- Medical termination of a pregnancy may cause severe and extended vaginal bleeding. The bleeding is most intense three to six hours after taking misoprostol. In approximately 1% of cases, the uterine cavity needs to be surgically cleaned to stop the bleeding. Blood transfusions are required rarely (in less than 0.1-0.2% of cases).
- Fever and chills may onset one to two hours after taking misoprostol. If you are feverish for more than four hours or become feverish on the following days, consult a doctor.
- Around half of patients report nausea and a third of patients vomit. These symptoms can also be a sign of a continuing pregnancy.
- Less than one-fourth of patients may experience light and temporary diarrhoea after taking misoprostol. Generally, this does not require treatment.
- Temporary headaches, dizziness and feeling faint may occur and are treated symptomatically.
- In rare cases, there are reports of inflammation of the uterus or adnexa of uterus. If an inflammation of internal reproductive tracts is diagnosed and the pregnancy has not yet been terminated, the uterine cavity is emptied surgically and a course of antibiotics is prescribed.
- It is possible that the pregnancy tissue has not been expelled from the uterus despite treatment. This means that the procedure must be repeated – either surgically to empty the uterine cavity or by administering misoprostol for a second time.
- In the case of partial termination of the pregnancy where serious bleeding and inflammation is not present, expectant management may be considered. In many cases, the uterine cavity empties spontaneously. An examination is recommended after the next menstruation. In 5% of patients, partial termination of the pregnancy may require surgical intervention or administration of misoprostol for a second time.

1. **Surgical management** or cleaning of the uterine cavity (dilation and curettage)

Dilation and curettage is performed under general anaesthesia in a gynaecology day care or inpatient surgery unit. During the procedure, the cervix is dilated with instruments and the pregnancy tissue is removed. Surgical management is necessary in the case of heavy bleeding, infection or incomplete emptying of the uterus. With dilation and curettage, there is always a risk of infection and injury to the cervix or uterus. In rare cases, it is necessary to repeat the procedure.

After termination of pregnancy

- Bleeding may occur for one to three weeks (this is not menstruation).
- During bleeding, it is not allowed to have sexual intercourse, take a bath, go to the sauna, swim or use vaginal tampons.
- A gynaecological examination should be performed within two to four weeks after the termination of pregnancy.
- If you experience heavy bleeding, fever (over 38 °C) or severe pain in the lower abdomen, immediately seek emergency medical care at the Women’s Clinic of East Tallinn Central Hospital (open 24/7).
- After the termination of the pregnancy, the next expected menstruation should start within one to two months. If menstruation has not started, consult a gynaecologist or midwife.
- The termination of the pregnancy does not prevent a new pregnancy during the following month.
- A new pregnancy can be planned as soon as you have had a gynaecological examination and your menstruation has started.
- If you do not plan to become pregnant right away, an effective method of contraception must be started. Hormonal contraceptives (pills, minipills, implant, injected progestogens) can be started on the day of taking misoprostol or having surgical termination of the pregnancy. Vaginal rings and patches should be started on the day of terminating the pregnancy. Termination of the pregnancy must be confirmed before inserting an intrauterine contraceptive device. Consult your gynaecologist or midwife regarding suitable contraceptives.

Having a miscarriage can be a tragic experience for any woman. Therefore, pregnancy crisis counselling is available to you while in the hospital. If the need for counselling arises at home, the pregnancy crisis counsellor is ready to consult you by phone on 800 2008 every day from 09:00 to 21:00. If you wish, your doctor can also refer you to a psychologist.

ITK1108

Approved by the decision of the Care Quality Commission of East Tallinn Central Hospital on 05.10.2022 (protocol no. 14-22)