Summary of the management options for miscarriage

	Expectant	Medical	Surgical
What does it involve?	Wait for the pregnancy tissue to pass out spontaneously	Taking medications (via oral and/ or vaginal route) to expedite the miscarriage process	'Evacuation of the uterus' – A minor surgery to remove the pregnancy tissues from the womb, usually carried out under general anaesthesia
When should this option be avoided?	• Significant vaginal bleeding or infection • Medical problems or being on medications which increase the risk of bleeding • Suspicion of an ectopic pregnancy or molar pregnancy	• Significant vaginal bleeding • Medical problems or being on medications which increases your risk of bleeding • Previous allergic reaction or hypersensitivity to Mifepristone or Misoprostol tablets • Kidney, liver, or adrenal impairment, or severe asthma • Suspicion of an ectopic pregnancy or molar pregnancy	May be complicated in women with uterine abnormalities (abnormal womb structure), morbid obesity and/or poorly controlled medical conditions
Success rate	50% - 80%	73% - 91%	95% - 99%
Advantages	• Avoids hospitalisation, surgery and anaesthesia • Perception of being a more "natural" treatment • Outpatient management	• Avoids surgery and anaesthesia • Higher success rate compared to expectant option • Pregnancy tissue can be sent for histology or karyotyping (if required) • Options of both outpatient and inpatient management	• Highest success rate amongst all the available options • Usually, shortest duration of pain and bleeding • More predictable and controlled timing of treatment • Standard of care for severe bleeding, septic miscarriage (infection in the womb), and molar pregnancy • Pregnancy tissue can be sent for histology or karyotyping (if required)
Disadvantages	• Unpredictable time until resolution and longer follow up • Lower success rate amongst all available treatment options with increased risk of retained pregnancy tissue • Increased risk of blood loss and unplanned minor surgery in some cases • Longer duration of bleeding • No tissue for histology or karyotyping* (if required)	• If incomplete, may require surgical procedure • Associated with slightly increased pain compared to the expectant option • Medication side effects such as nausea, vomiting, and diarrhea	• Surgical risks such as - perforation of the womb - damage to surrounding organs such as bowel, bladder or blood vessels - intrauterine adhesions which may affect future fertility - cervical incompetence (weak cervix which can increase the risk of miscarriages or preterm birth in the future) • Anaesthetic risks • Higher cost than the other two options • Fasting is required
Follow up	Follow up in a few weeks with a urine pregnancy test and/or an ultrasound scan	Follow up in a few weeks with a urine pregnancy test and / or an ultrasound scan	Follow up in 3-4 weeks

*Karyotyping – a genetic test to help identify the possible causes of fetal chromosomal abnormalities.

If you have a rhesus negative blood type (for example, "O negative"), you may be offered an anti-D injection to help prevent problems in the future pregnancies. If you do not know your blood type, you will need a blood test.

Useful contact details:

An appointment to see a doctor:	
Service	**Contact**
Central Appointments Monday to Friday, 8.30am to 5.30pm Saturday, 8.30am to 1.00pm (Closed on Sunday & Public Holidays)	6294-4050
Emotional Support Service	
Service	**Contact**
Medical Social Worker Monday to Friday, 8.30am to 5.30pm (Closed on Saturday, Sunday & Public Holidays)	6394-1028 / 6394-1029

- If you require an urgent consultation and management pertaining to miscarriage, please go to the **Urgent O&G Centre (UOGC)** located at KKH, Women's Tower, Basement 1.

KK Women's and Children's Hospital
SingHealth

100 Bukit Timah Road
Singapore 229899
Tel: 6-CALL KKH (6-2255 554)
Fax: 6293-7933
Website: www.kkh.com.sg
www.facebook.com/kkh.sg

Reg No 198904227G OOGmep1123

KK Women's and Children's Hospital
SingHealth

Miscarriage In Early Pregnancy

Why do early pregnancy miscarriages happen?

Early pregnancy or first-trimester miscarriages (<12 weeks) occur in up to one in five pregnancies. In most cases, there is no identifiable cause for the miscarriages. About half of all early miscarriages are associated with a problem with the baby's chromosomes (genetic material inherited from one's parents).

A miscarriage is NOT caused by eating any specific food, stress, strenuous activities, working, travelling, exercise, or sexual intercourse. Bed rest and hospitalisation have not been shown to reduce the risk of a miscarriage and therefore are not routinely recommended. The use of hormonal treatment such as progesterone tablets or injections may not necessarily prevent an early pregnancy miscarriage from occurring.

The risk of a miscarriage may be increased in certain circumstances, such as:

- Maternal age – The risk of miscarriage is one in five (20%) up to the age of 35, and increases to one in two (50%) when over the age of 40
- Medical problems such as poorly controlled diabetes, poorly controlled thyroid problems, infections, or autoimmune diseases such as lupus
- Abnormally shaped womb
- Lifestyle factors such as smoking, heavy alcohol consumption, being very underweight or overweight

What are the symptoms of a miscarriage?

The common symptoms of a possible miscarriage include abdominal cramps and vaginal bleeding. However, these symptoms are experienced by many pregnant women in their first trimester with no adverse outcomes. Some women may not have any symptoms and may be diagnosed with a miscarriage based on the progress of the pregnancy on an ultrasound scan ("missed miscarriage"). A miscarriage with symptoms of fever and/or offensive vaginal discharge warrants immediate medical attention.

What should I expect during my consultation?

The doctor will ask you some questions to understand your condition better and perform an abdominal and vaginal examination. An ultrasound scan may be performed, either transabdominally (where the ultrasound probe is placed on your abdomen) or transvaginally (where the probe is inserted in your vagina) or both. A transvaginal scan (Fig 1) may be recommended as it gives a clearer image.

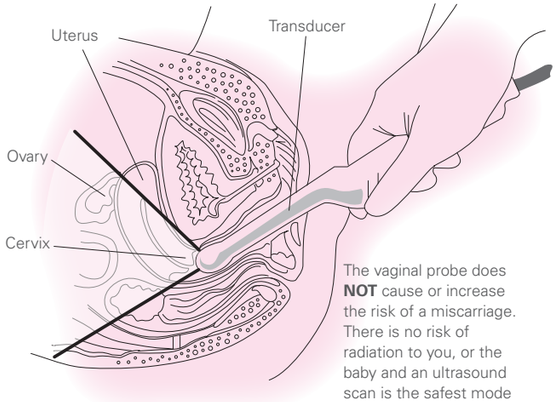

Figure 1. Transvaginal ultrasound scan

The vaginal probe does **NOT** cause or increase the risk of a miscarriage. There is no risk of radiation to you, or the baby and an ultrasound scan is the safest mode of imaging in pregnancy.

What are the treatment options if a miscarriage is confirmed?

Once the diagnosis of a miscarriage has been confirmed, your doctor will discuss the suitable treatment options. Sometimes, you may require follow up with ultrasound scans or blood tests to confirm the diagnosis of a miscarriage.

If your ultrasound scan confirms that you have miscarried completely and the womb is clear (complete miscarriage), you may not need any further treatment. If some or all the pregnancy tissues are still retained inside your womb (missed or incomplete miscarriage), your doctor will discuss various treatment options with you. You may choose to wait and allow nature to take its course, use medications or have a minor procedure done under anaesthesia.

Do I need to be admitted to the hospital?

- This will depend on your symptoms and pregnancy duration. If the bleeding is light and pain is not severe, your doctor may ask you to rest at home, but to return should you experience an increase in vaginal bleeding and abdominal pain.
- You may require admission if you have heavy bleeding or severe pain, or if you choose medical or surgical management for the miscarriage.
- Less commonly, a miscarriage may be accompanied by an infection in the womb. This condition is very serious and can be potentially life-threatening. If your doctor suspects that you may have this condition, you will be admitted to the hospital and started on antibiotics. You may require an urgent surgery (evacuation of the uterus) as a life-saving measure.

Emotional recovery

A miscarriage affects every couple differently. Some may be emotional for a short time after, while others may take much longer to come to terms with the loss. Reach out to your friends and family, or your doctor for support. If you feel you may need additional emotional support, inform your doctor and you may be put in touch with a medical social worker or our mental wellness team.

When can we try for another baby?

You can have sex as soon as you and your partner both feel ready. It is important that you are feeling well and that any pain or bleeding has significantly reduced.

Your next period will usually be in 4-6 weeks' time. Ovulation may occur before this so you may conceive in the first month after a miscarriage. You can try for a baby as soon as you and your partner feel physically and emotionally ready. Preconception folic acid of at least 400 mcg per day is recommended for 3 months prior to pregnancy. Some women may require up to 5mg.

If you are not ready for another pregnancy, you can discuss contraception with your doctor. Most contraceptive methods can be started immediately after your miscarriage.

Will I miscarry again?

You are usually not at a higher risk of another miscarriage. Most miscarriages occur as a one-off event and there is a good chance of having a successful pregnancy.

A small percentage of women may have conditions that make them more likely to miscarry. If you have had three or more miscarriages, you may be advised to seek further specialist attention.