

Ministry of Health Sickle Cell Anemia and Pregnancy

Introduction:

Women suffering from sickle cell anemia are able to get pregnant normally. However, it is important to consult with your doctor enough time beforehand in your pregnancy plans to reduce the possibility of complications. It is also important to know whether or not your spouse is a carrier of the trait to assess the baby's chances of being affected by the disorder.

Tests to be completed before pregnancy:

- Complete examination by the treating physician.
- Blood pressure examination and close follow-up.
- Blood test, in particular hemoglobin test.
- Cardiography and heart sonar.
- Renal function test and urine protein test
- Retinal examination by a specialist

Treatment during pregnancy:

- Sickle cell anemia patients are often at risk of bacterial infections, which means they are often taking antibiotics. Therefore, it's important to consult your doctor if you are planning for pregnancy to make sure none of your medicines are contraindicated.
- If you regularly take Hydroxyurea, you should stop taking it three months before you plan to conceive or as soon as you are aware of your pregnancy. Ask your doctor for safe alternatives.
- Take a high dose of folic acid (5mg) every day throughout your pregnancy to strengthen blood cells.
- Take a low dose of aspirin (75mg) every day throughout your pregnancy to reduce the risk of toxaemia of pregnancy.
- You can take painkillers such as Paracetamol.
- Avoid painkillers such as Ibuprofen since they can harm the fetus.



Risks to mother and baby:

- Pregnant women suffering from sickle cell anemia are at a higher risk of giving birth to preterm babies or babies with a low birth weight. However, most women are able to have healthy children if they are properly monitored and guided before, during and after their pregnancies.
- Sickle cells may cause frequent pain episodes during a pregnancy, especially when care is not taken to avoid the causes of such episodes, such as: Cold weather, strenuous physical activity, or dehydration.
- During the later stages of pregnancy, you may experience eclampsia or spasms (high blood pressure and presence of protein in the urine).
- During the last months of pregnancy, the risk of suffering from thoracic outlet syndrome (TOS) becomes higher. Head to the nearest hospital if you have difficulty breathing or experience chest pains.

Fetus health test:

- Amniotic fluid test: This test is conducted between the 15th and 18th weeks of pregnancy.
- A small sample is taken from the placenta to conduct a DNA test between the 10th and 12th weeks of pregnancy.
- A blood sample is taken from the umbilical cord during the 16th week of pregnancy.

The choice of conducting these tests remains that of the mother since these tests involve a low risk of miscarriage.

Medical care during pregnancy:

- Check that annual vaccines are valid (e.g. Hepatitis B, influenza, pneumonia)
- Make sure you visit the doctor every week after your 24th week of pregnancy and until your birth date. You will receive general examinations as well as other tests (e.g. blood pressure, urinoscopy, fetal growth)
- Blood transfusions are not usually conducted for sickle cell patients, but if necessary, the issue will be discussed.



Additional medical care:

- A blood clotting risk assessment (deep vein thrombosis in the legs or lungs) should be done early on in the pregnancy to check for risk factors (e.g. excess weight).
- Heparin injections, a safe treatment, may be prescribed throughout the pregnancy and must continue 6 weeks after childbirth.

Labor and childbirth:

- The birth must take place in a hospital to limit complications.
- The necessary blood transfusion units will be prepared in case they are needed.
- The fetus' heart rate will be closely monitored during labor.
- In case a Caesarean section is required, an anesthesiologist should be consulted before the birth to discuss sedation solutions.
- It is usually advised to conduct a blood transfusion before the C-section, especially when haemoglobin levels are low.

Breastfeeding:

Breastfeeding should not pose any risk to the mother or the baby. On the contrary, breastfeeding is encouraged.

Contraception:

Sickle cell anemia patients are advised to use a contraception method such as:

- Progesterone pills, Depo-Provera, birth control implant, hormonal IUD, condoms.
- Estrogen pills and copper IUDs may be used only if the previously mentioned methods are deemed inappropriate.

Clinical Health Education Department

For more information, please contact us by email on: Hpromotion@moh.gov.sa