

Fetal Blood Sampling

Patient Information Series – What you should know, what you should ask.

What is fetal blood sampling?

During pregnancy, doctors use special techniques to investigate the baby's health and administer necessary treatment. With fetal blood sampling, using a needle under ultrasound guidance, a small amount of blood is taken from the baby's vessels and analysed. The needle is put into the either the baby directly or the blood vessels supplying the baby which they access very carefully through the mother's abdomen. The process can look similar to an amniocentesis

Why is fetal blood sampling performed?

The doctor looking after you will discuss the reasons for offering this test. The most common reason for a doctor to want to offer fetal blood sampling is concern that the baby is anemic (a low level of red cells) usually due to antibodies or a recent viral infection. Very often the plan will be to test the baby and if the test shows the baby is anaemic a blood transfusion can be given immediately without you needing to have an additional procedure. There are other reasons why a doctor may offer fetal blood sampling such as to check the baby's kidney function or platelet count but they are less common.

What to know before?

The procedure will be explained in depth by the doctor looking after you. The risks and benefits will be covered as part of that discussion. Though your doctors will have a lot of skill and experience in performing this procedure there are some serious risks that can come with it including the small chance that a baby may not survive. The magnitude of these risks may be influenced by the condition of the baby when the procedure is performed. It is worth asking your doctor if there is anything you should avoid prior to the procedure. If the procedure is happening later in the pregnancy the doctor may ask you to avoid eating or drinking in advance of it. Sometimes steroid injections will be given in advance of the procedure if the doctor is concerned the baby may need to be delivered prematurely. For this reason some doctors will perform this procedure in an operating theatre.

What should I expect during the procedure?

Most often this procedure is performed with the mother awake. Pain relief will be provided. A very small needle is used, local anaesthetic may be the only thing required. This means the insertion of the needle into the abdomen is much more comfortable but you should still expect a sharp and cramping sensation when the needle enters the uterus (womb). Sometimes your doctor will recommend you have sedation and additional pain relief from the anaesthetics team. This would all be discussed with you in advance of the procedure. The procedure can take a little while particularly if a blood transfusion is then needed afterwards so you should try and get as comfortable as possible prior to the procedure starting. Depending on the position of the baby and placenta, a temporary sedative may be administered to the baby as well to prevent the baby from moving or dislodging the needle during the procedure. The effects of this sedative will wear off within a short time.

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What should I expect after the procedure?

After the procedure, patients may feel some mild discomfort or the urge to urinate. Monitoring of the fetal heart rate and movements will be carried out following the procedure and you will be assessed to ensure that you are not contracting. Very often a follow up scan will be done before you leave the department. The doctor will give instructions on the follow-up care needed. There might be mild bruising or soreness at the puncture site afterward, and the doctor will offer instructions for any additional care required including problems to look out for such as vaginal bleeding or fluid leaking from the vagina.

Is there any Follow-up appointment?

Yes, and It's important to attend your appointments as advised by your doctor. This allows you to talk to your healthcare provider about the results of your procedure and any next steps or treatments that might be needed.

Last updated February 2024