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Cord blood testing

Cord blood refers to a sample of blood collected from the umbilical cord when a baby is born. The umbilical cord is the cord connecting the baby to the mother's womb (uterus).

Cord blood testing can be done to evaluate a newborn's health.

How the Test is Performed

Right after the birth of your baby, the umbilical cord is clamped and cut. If cord blood is to be drawn, another clamp is placed 8 to 10 inches (20 to 25 centimeters) away from the first. The section between the clamps is cut and a blood sample is collected into a specimen tube.

How to Prepare for the Test

No special steps are needed to prepare for this test.

How the Test will Feel

You will not feel anything beyond the normal birthing process.

Why the Test is Performed

Cord blood testing is done to measure the following in your baby's blood:

- Bilirubin level
- Blood culture (if an infection is suspected)
- Blood gases (including oxygen, carbon dioxide, and pH levels)
- Blood sugar level
- Blood type and Rh
- Complete blood count (CBC)
- Platelet count

Normal Results

Normal values mean that all items checked are within normal range.

What Abnormal Results Mean

A low pH (less than 7.04 to 7.10) means there are higher levels of acids in the baby's blood. This might occur when the baby does not get enough oxygen during labor. One reason for this could be that the umbilical cord was compressed during labor or delivery.

A blood culture that is positive for bacteria means your baby has a blood infection.

High level of blood sugar (glucose) in the cord blood may be found if the mother has diabetes. The newborn will be watched for hypoglycemia (low blood sugar) after delivery.

High level of bilirubin in the newborn has many causes, which could be due to infections the baby gets.

Note: Normal value ranges may vary slightly among different laboratories. Talk to your health care provider about the meaning of your specific test results.

Considerations

Most hospitals routinely collect cord blood for testing at birth. The process is fairly easy and this is the only time when this type of blood sample can be collected.

You can also decide to bank or donate cord blood at the time of your delivery. Cord blood can be used to treat certain types of bone marrow-related cancers. Some parents may choose to save (bank) their child's cord blood for this and other future medical purposes.

Cord blood banking for personal use is done by both cord blood banks and private companies. There is a charge for the service if you use a private service. If you choose to bank your infant's cord blood, you should talk to your health care provider about the pros and cons of different options.

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