

# Ultrasound-Guided Procedures

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

## **What are ultrasound-guided procedures?**

In utero ultrasound-guided fetal procedures are like special check-ups for babies inside the mom's tummy. Ultrasound-guided procedures provide valuable insights into the baby's health and development during pregnancy. They are performed using ultrasound technology to ensure accuracy and safety for both the baby and the mother. If your healthcare provider suggests any of these procedures, they will explain the specific reasons and potential benefits to you.

## **What procedures are included in ultrasound guided procedures?**

Using a special imaging technique called ultrasound, doctors can perform these check-ups to learn about the baby's health and, if necessary, provide treatment. Here are some examples: Amniocentesis involves taking a tiny sample of the special water (amniotic fluid) around the baby, helping doctors gather important information about the baby's health. Chorionic Villus Sampling (CVS) involves collecting a small piece of tissue from where the baby is growing (placenta) to check for certain things early in development. Cordocentesis, or Fetal Blood Sampling, is a check-up where a small amount of blood is taken from the baby through the umbilical cord to ensure the baby's blood is healthy. Fetal Shunt Placement is a therapeutic intervention where a small tube (shunt) is gently placed inside the baby to address specific conditions, like excess fluid around the baby.

## **What to know before?**

Before any procedures are done, a specialist doctor caring for pregnant moms and their unborn babies will take a good look at your baby with ultrasound to understand how everything is developing and to assess your baby's health before birth. It's important to talk to the doctor about what's going on and what to expect. This discussion would clarify the following issues:

- An understanding the ultrasound results and what they mean for the baby's health.
- An explanation of why the procedure is being done: for example, it could be to rule out genetic issues, chromosome problems, or infections (for diagnostic procedures); or to potentially make things better for the baby (for therapeutic procedures).
- Details about the procedure itself: when it will happen, how it works, how long it takes, and what will happen afterward.
- The benefits and risks of the procedure, particularly regarding miscarriage or preterm delivery, or procedure failure.

## **Do I need any special preventive measures before or after the procedure?**

**Rhesus Prophylaxis:** In some situations, invasive procedures can mix the baby's and mom's blood, increasing the risk of the mother producing antibodies that can cross the placenta and cause low blood in the baby. To lower this risk, preventive treatment with a special product, called RhoGam or WinRho is recommended for RhD-negative women carrying an RhD-positive baby. If you are RhD-negative and the baby's RhD status is also negative (confirmed by cffDNA testing) administration of these protective medications will not be necessary as the baby's blood will be compatible with yours however, or if the baby's RhD status is unknown or Rh positive on testing, preventive treatment is suggested following these procedures.

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**Infection Prevention:** Before specific diagnostic procedures like transabdominal CVS, amniocentesis, or FBS, the skin on the tummy is cleaned with an antiseptic solution, such as iodine or chlorhexidine, following local protocols. Sterile drapes are commonly used, and the ultrasound probe is covered with a sterile bag. Aseptic practices are emphasized, especially during therapeutic interventions, like fetoscopic surgeries. While antibiotic preventive measures are generally not advised for diagnostic procedures, they may be considered for fetal invasive therapy and given before, during or following the procedure.

## **What are the complications of these procedures?**

When it comes to tests like amniocentesis, chorionic villus sampling (CVS), and fetal blood sampling (FBS), it's important to understand that these are standard procedures performed during pregnancy. Our specialized experts are trained to minimize any potential risks. The focus is on the benefits of these tests, considering the very low chances of any problems. Your healthcare provider is here to guide you, explain the details, answer your questions, and support you in making decisions that are best for your health and your baby's well-being. It's essential to note that while the risks are minimal, they may include bleeding, early rupture of membranes, infection, and preterm delivery. Your healthcare team will closely monitor and manage any potential issues to ensure the safest possible experience for you and your baby.

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