



Sonography or Ultrasound

©2008 All rights reserved.

Sonography, also called ultrasound, can be performed during pregnancy for evaluation of fetal structure. An ultrasound scan is a technique which uses high-frequency sound waves to create an image of the fetus (baby). A screening ultrasound is sometimes done during the course of a pregnancy to check normal fetal growth and verify the due date. Ultrasounds may be performed at various times throughout pregnancy for different reasons.

Although the specific details vary slightly, generally, ultrasounds follow this process. Two types of ultrasounds can be performed during pregnancy:

- **transabdominal ultrasound**

In an abdominal ultrasound, gel is applied to the abdomen and the ultrasound transducer glides over the gel on the abdomen to create the image.

- **transvaginal ultrasound**

In a transvaginal ultrasound, a smaller ultrasound transducer is inserted into the vagina and rests against the back of the vagina to create an image. A transvaginal ultrasound produces a sharper image and is often used in early pregnancy.

A standard ultrasound (called basic or level I) exam is usually performed in the first trimester. This ultrasound checks for the number and location of the gestational sacs that contain the embryo, the embryo's heart activity, the size and age of the embryo, and the condition of the uterus, fallopian tubes, and ovaries. In the second trimester, a standard ultrasound checks for the size and age of the fetus, the number of fetuses, location of the placenta, fetal heartbeat, amount of amniotic fluid, and the basic fetal anatomy (brain, spine, kidneys, etc).

A targeted or comprehensive ultrasound (called level II) can be performed between 18 and 20 weeks of pregnancy. A level II ultrasound may be recommended if a provider suspects any birth defects after a standard ultrasound.

An ultrasound can rule out some major structural birth defects (i.e. congenital heart malformations, renal anomalies, cranial defects). However, some birth defects are not visible on ultrasound. A normal ultrasound does not guarantee a normal baby.