

ULTRASOUND

WHAT IS ULTRASOUND?

Ultrasound is a technique that uses sound waves to create an image of a developing baby (fetus) in the womb. Ultrasound has become an increasingly important part of prenatal care because it can provide information on the growth and development of a fetus in order to help guide an obstetrician's care plan.

HOW DOES ULTRASOUND WORK?

Ultrasound works by bouncing sound waves off of the developing fetus. Echoes from the waves are converted into an image, called a sonogram, on a computer monitor.

HOW IS ULTRASOUND PERFORMED?

For pregnancy scanning, sound waves are usually sent by a hand-held device called a transducer that is rubbed across the pregnant woman's abdomen. To better see the fetus, a gel is used on the woman's abdomen and a woman may be asked to have a full bladder while the test is performed. There are categories of ultrasound: routine and high resolution. A routine ultrasound exam takes about 15 to 20 minutes. This exam checks pregnancy dates, fetal growth and size, number of fetuses, placental location, and looks for major birth defects. A high resolution ultrasound is a more detailed exam that may be requested if birth defects are suspected or when a more detailed view of the fetus's anatomy is warranted.

IS ULTRASOUND SAFE?

Yes, ultrasound is considered safe for mother and baby. It has been used for more than 30 years and no risks have been identified.

ARE THERE ANY DRAWBACKS TO A ROUTINE ULTRASOUND?

Ultrasound is good at ruling out problems, but not all birth defects can be detected by ultrasound. For example, babies that have certain signs on ultrasound such as heart defect or a blockage in the intestines may be at an increased risk to have Down syndrome. However, not all babies that show these signs on ultrasound actually have Down syndrome. Diagnostic testing such as amniocentesis is offered to rule out or confirm if the baby has Down syndrome. A normal ultrasound alone cannot rule out the presence of Down syndrome. In fact, many babies with Down syndrome will not show any signs or problems on ultrasound. Ultrasound is most accurate when done by an experienced examiner at a major medical center. Besides missing some birth defects, ultrasound may occasionally suggest that a birth defect is present when none actually exist. Such false alarms may cause worry for parents.

WHEN IS ULTRASOUND USED?

- Rule out or confirm ectopic pregnancy and identify possible miscarriages
- Confirm more than one fetus such as twins, triplets, etc.
- Verify due dates by measuring the size of the fetus
- Evaluate fetal growth
- Determine cause of second or third trimester bleeding
- Help to perform other prenatal diagnostic tests such as amniocentesis or chorionic villus sampling (CVS)
- Screen for certain birth defects such as spina bifida, heart defects, missing limbs, and problems with internal organs, such as digestive or urinary tract
- Check fetal wellbeing late in pregnancy by observing fetal movement, muscle tone, and amniotic fluid level
- Help to determine the best delivery method

CAN PROBLEMS DETECTED BY ULTRASOUND BE TREATED?

The majority of birth defects cannot be treated until after delivery. However, information obtained by ultrasound can be used to alter prenatal care to improve a woman's chances of delivering a healthy baby. For example, the presence of certain birth defects or abnormalities of the placenta may determine that a cesarean is a safer mode of delivery for the baby.

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