Fetal Pictures of Ultrasounds Gallery

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Editorial

Ultrasound imaging (sonography) uses high-frequency sound waves to look at inside the body. Because ultrasound images are captured in real-time, they will also show movement of the body's internal organs also as blood flowing through the blood vessels. Unlike X-ray imaging, there's no radiation exposure related to ultrasound imaging.

In an ultrasound exam, a transducer (probe) is placed directly on the skin or inside a body opening. a skinny layer of gel is applied to the skin in order that the ultrasound waves are transmitted from the transducer through the gel into the body

The ultrasound image is produced supported the reflection of the waves off of the body structures. The strength (amplitude) of the sound signal and therefore the time it takes for the wave to travel through the body provide the knowledge necessary to supply a picture.

Ultrasound imaging may be a medical tool which will help a physician evaluate, diagnose and treat medical conditions. Common ultrasound imaging procedures include:

- Abdominal ultrasound (to visualize abdominal tissues and organs)
- Bone sonometry (to assess bone fragility)
- Breast ultrasound (to visualize breast tissue)
- Doppler fetal pulse monitors (to hear the fetal heart beat)

• Doppler ultrasound (to visualize blood flow through a vessel, organs, or other structures)

- Echocardiogram (to view the heart)
- Fetal ultrasound (to view the fetus in pregnancy)

Ultrasound imaging has been used for over 20 years and has a superb safety record. it's supported non-ionizing radiation, so it doesn't have an equivalent risks as X-rays or other sorts of imaging systems that use radiation

For all medical imaging procedures, the FDA recommends that patients ask their health care provider to know the rationale for the examination, the medical information which will be obtained, the potential risks, and the way the results are going to be wont to manage the medical condition or pregnancy. Because ultrasound isn't supported radiation, it's particularly useful for ladies of child-bearing age when CT or other imaging methods would otherwise end in exposure to radiation.1 **Expectant Mothers**

Ultrasound is that the most generally used medical imaging method for viewing the fetus during pregnancy. Routine examinations are performed to assess and monitor the health status of the fetus and mother. Ultrasound examinations provide parents with a valuable opportunity to look at and listen to the heartbeat of the fetus, bond with the unborn baby, and capture images to share with family and friends.

In fetal ultrasound, three-dimensional (3D) ultrasound allows the visualization of some countenance and possibly other parts like fingers and toes of the fetus. Four-dimensional (4D) ultrasound is 3D ultrasound in motion. While ultrasound is usually considered to be safe with very low risks, the risks may increase with unnecessary prolonged exposure to ultrasound energy, or when untrained users operate the device.

Expectant mothers should even be conscious of concerns with purchasing over-the-counter fetal heartbeat monitoring systems (also called doptones). These devices should only be employed by trained health care providers when medically necessary. Use of those devices by untrained persons could expose the fetus to prolonged and unsafe energy levels, or could provide information that's interpreted incorrectly by the user.

Ultrasound practices should consider site and staff participation in voluntary accreditation and certification programs that address both safety and effectiveness of the device following the principles of As Low As Reasonably Achievable (ALARA), like those offered by the American Institute of Ultrasound in MedicineExternal Link Disclaimer disclaimer icon and therefore the American Registry of Diagnostic Medical SonographersExternal Link Disclaimer disclaimer icon.

Ultrasound at diagnostic levels has the potential to cause cavitation or small pockets of gas within the tissues. It also produces slight heating of tissue. Even with the various benefits, the potential hazards of prolonged fetal exposure to ultrasound energy by using 3D/4D scanning for non-medical and unnecessary 'entertainment' purposes is inappropriate. Parents should discuss the difficulty with their health-care providers before undergoing this purely elective procedure at the present.

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