Prenatal ultrasound is a medical imaging technique that uses high-frequency sound waves to create images of a developing fetus in the uterus. Ultrasound is non-invasive and is considered safe for both the mother and the fetus.

Prenatal ultrasound is typically performed during the first trimester (around 11-14 weeks), the second trimester (around 18-22 weeks), and sometimes in the third trimester (around 32-36 weeks) of pregnancy. The procedure may be performed transabdominally (using a handheld probe on the mother's abdomen) or transvaginally (using a specialized probe inserted into the vagina).

The main purpose of prenatal ultrasound is to monitor the health and development of the fetus. Ultrasound can detect a range of abnormalities, such as neural tube defects, heart defects, and abdominal wall defects, as well as assess fetal growth and position. Ultrasound can also provide information about the placenta and the amount of amniotic fluid surrounding the fetus.

In addition to medical indications, prenatal ultrasound can also provide expectant parents with an opportunity to see their developing baby and bond with him or her before birth. Some ultrasound clinics offer 3D or 4D ultrasound, which provides more detailed and lifelike images of the fetus.

While prenatal ultrasound is generally considered safe, it is important to note that it is a medical procedure and should be used judiciously. Unnecessary or excessive ultrasound exposure should be avoided, as some studies have suggested that there may be potential risks associated with prolonged or frequent ultrasound exposure. As with any medical test, the benefits and risks of prenatal ultrasound should be discussed with a healthcare provider.