

Ultrasound Scans in Pregnancy

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Ultrasound scan is considered to be a safe, non-invasive, accurate and cost-effective investigation in the baby. It has progressively become an indispensable obstetric tool and plays an important role in the care of every pregnant woman.

The main uses of obstetrics ultrasound are:

1. Early pregnancy scans (Dating scan/Viability Scan):

To confirm the pregnancy (location of pregnancy, number of foetus, viability/heart beat).

The gestational sac is visualized as early as four and a half weeks of gestation. The embryo can be observed and measured by about five and a half weeks. Ultrasound at this stage can also confirm the location of pregnancy. By ultrasound can diagnosed the pregnancy is within the cavity of the uterus (normal) or out of uterine cavity (ectopic pregnancy).

- To accurately date the pregnancy. This is particularly important for women who do not know the date of their last menstrual period, have an irregular cycle or have conceived whilst breastfeeding or soon after stopping the pill.
- To diagnose multiple pregnancy. Approximately 2% of natural conceptions and 10% of assisted conceptions result in a multiple pregnancy
- To diagnose early pregnancy failure. Sadly, approximately 3% of women who attend for an early pregnancy scan will find that the foetus has died or has not developed. In this care we can arrange for other procedures that may be necessary

2. First trimester scan:

The first trimester scan you should be offered is a nuchal translucency scan (NT Scan) between 11 and 13 weeks 6 days.

The main reason for the NT scan is to assess of likelihood of a chromosomal abnormality, such as Down syndrome, however the NT scan can also reveal other conditions.

If this is your first scan, then dating the pregnancy, diagnose multiple pregnancy are another purpose of First trimester scan.

3. Anomaly scan:

All women in England are offered a mid pregnancy ultrasound scan as part of the Foetal Anomaly Screening Programme. This scan is sometimes called the 18+0 to 20+6 weeks foetal anomaly scan as this is when you will be screened in your pregnancy.

The main purpose of this scan is to look for abnormalities in your baby; these are known as foetal anomalies. Anomaly scan is a very detail scan which Sonographer will check your baby's anatomy.

4. Growth scan:

Usually, a scan in the third trimester is done to check how well the baby is growing. Sometimes, the doctor or midwife may suggest a scan if she thinks baby measurements are smaller than expected for the stage of pregnancy.

Other reasons for growth/ wellbeing scan are:

- Monitoring foetal growth
- Presentation of the baby
- Doppler
- Monitoring multiple pregnancies
- Position of placenta

5. Gender scan:

- Confirm the gestation
- Confirm sex

Gender determination could be done within 97% accuracy by ultrasound. It should be noted ultrasound cannot provide 100% confirmation, since some foetus's can be ambiguous.

This scan is usually performed after 16 weeks of pregnancy.

6. Cervical length

A short cervix diagnosed by vaginal ultrasound has a good predictive value for preterm delivery, even in a low-risk population.

By using vaginal ultrasound, a short cervix could be diagnosed.