HEALTH BASICS

Deciding about early fetal ultrasound

Early fetal ultrasound uses sound waves before about 14 weeks to assess pregnancy dating, location, number, and selected development.

WHAT IT IS
An ultrasound examination during the first part of pregnancy

WHERE IT COMES UP
Prenatal care, bleeding, pain, uncertain dates, or screening

WHY IT MATTERS
Guides dating, follow-up, screening, and urgent care

WHAT IT IS NOT
Not a disease or diagnosis

WHO TO ASK
Midwife, obstetric clinician, or early pregnancy service

HOW IT IS CHECKED
Abdominal or transvaginal diagnostic ultrasound

Overview

An early fetal ultrasound is an imaging examination during the first part of pregnancy, usually before 14 weeks. At the earliest stages, clinicians may use the term "embryo" rather than "fetus."

Ultrasound sends sound waves into the body and uses their echoes to create images. It does not use X-rays or other ionizing radiation.

An early scan may be offered as part of routine prenatal care. It may also be recommended because of bleeding, pain, previous pregnancy complications, fertility treatment, uncertain menstrual dates, or concern about the pregnancy's location.

The decision is not always a simple choice between having a scan and having no scan. Different early scans answer different questions. One may check the pregnancy's location and development. Another may date the pregnancy or contribute to screening for certain chromosome or structural conditions.

You can accept an ultrasound while declining optional chromosome screening. However, any scan may reveal an unexpected finding. Before the examination, you can ask what will be assessed and what kinds of results may be discussed.

How it works

The examination may be performed through the abdomen or vagina.

For an abdominal ultrasound, a clinician places gel on your skin and moves a handheld device over your lower abdomen. You may be asked to attend with a full bladder because this can improve some early images.

For a transvaginal ultrasound, a narrow covered probe is gently inserted into the vagina. Because the probe is closer to the uterus, this method often gives clearer images very early in pregnancy. The probe does not enter the uterus or touch the pregnancy. You should be asked for consent, and you can ask about a chaperone or stop the examination.

Depending on the timing and reason for the scan, it may assess:

Nuchal translucency is a screening measurement taken during a specific stage of pregnancy. It may be combined with a blood test and age-related information to estimate the chance of certain chromosome conditions. It does not diagnose them.

Pregnancy dating usually uses the crown-rump length, a measurement from the top of the developing head to the bottom of the torso. If this differs from dating based on your last menstrual period, your estimated due date may be adjusted according to local practice.

Standard diagnostic ultrasound has no confirmed harmful fetal effects when used appropriately by trained professionals. Even so, professional organizations advise using it only for a medical purpose and for as long as needed. Non-medical "keepsake" scanning may not follow the same clinical standards or provide appropriate follow-up.

- whether the pregnancy appears to be inside the uterus
- how many embryos or fetuses are present
- pregnancy dating based on measurement
- cardiac activity when it should be visible
- whether twins share a placenta or pregnancy sac
- selected early anatomy
- nuchal translucency, the fluid-filled space at the back of the fetal neck

Why it matters for your health

An early scan can clarify information that affects prenatal care. Accurate dating helps with the timing and interpretation of later screening, growth assessment, and decisions around birth.

Confirming that a pregnancy is inside the uterus is especially important when there is pain, bleeding, or a higher chance of ectopic pregnancy. An ectopic pregnancy develops outside the uterus, most often in a fallopian tube, and cannot continue normally.

Identifying twins or a higher-order multiple pregnancy early can also change follow-up. In particular, checking whether fetuses share a placenta helps clinicians plan the type and frequency of later monitoring.

Some people value early information and reassurance. Others may find the possibility of uncertain or unexpected results stressful. A scan may lead to repeat imaging, blood tests, specialist review, or a decision about diagnostic testing.

Early ultrasound has limits. It cannot detect every structural or chromosome condition, and a reassuring early scan does not replace later prenatal care. A detailed anatomy scan is usually performed later because many structures cannot be assessed fully in early pregnancy.

What can go wrong

Sometimes a scan is performed too early to give a clear answer. Dates based on the last menstrual period may be inaccurate because ovulation and implantation do not always occur at the expected time.

An inconclusive scan may lead to terms such as pregnancy of unknown location or pregnancy of uncertain viability . The first means that a pregnancy test is positive but the pregnancy has not yet been located on ultrasound. The second means that a pregnancy is visible but it is too early to determine whether it is developing as expected.

These findings are not automatically diagnoses of ectopic pregnancy or pregnancy loss. Follow-up may involve another ultrasound after an appropriate interval and, in some situations, repeated blood tests for the pregnancy hormone human chorionic gonadotropin, or hCG.

Conditions or situations that an early scan may help identify include:

No single early measurement should be interpreted without considering gestational age, scan quality, symptoms, and previous results. When findings are uncertain, waiting for a repeat scan can reduce the risk of drawing a conclusion too soon.

A transvaginal scan may cause pressure or mild discomfort. Tell the clinician if it is painful. The examination can be paused or stopped.

Heavy bleeding, severe or worsening abdominal pain, strong one-sided pain, shoulder-tip pain, fainting, marked dizziness, or collapse need emergency assessment. These can occur with internal bleeding from an ectopic pregnancy or another urgent condition. Contact emergency

services or attend an emergency department rather than waiting for a routine scan appointment.

Light bleeding, mild pain, or questions about an unclear result still deserve prompt advice from your prenatal or early pregnancy service, but they are not always emergencies. Follow the specific safety instructions given by your care team.

- ectopic pregnancy
- early pregnancy loss
- multiple pregnancy
- differences involving the pregnancy sac, placenta, or early development
- increased nuchal translucency or another screening finding

What you can do

Before deciding, ask what question the scan is intended to answer. A dating scan, a scan for pain or bleeding, and a nuchal translucency scan have different purposes.

Useful questions include:

Bring any useful records, including the first day of your last menstrual period, usual cycle length, fertility treatment dates, previous ultrasound reports, and relevant pregnancy history. Tell the service about current bleeding or pain before the examination.

If you are considering declining or delaying a recommended scan, ask what information may be lost and whether another test can answer the same question. For example, blood tests can support assessment of an early pregnancy, but they usually cannot show its location or provide the same anatomical information.

After an unclear scan, keep the follow-up appointment unless you have been told it is no longer needed. Seek earlier help if symptoms develop or worsen.

- Is this scan routine, medically recommended, or optional screening?
- What can it assess at this stage, and what can it not assess?
- Would the examination be abdominal, transvaginal, or both?
- Could it reveal information beyond the reason for the scan?
- What follow-up would be offered if the result is uncertain?
- Can I have the scan without chromosome screening?

- When and how will I receive the result?

Common questions

Can an early ultrasound cause miscarriage?

Standard diagnostic ultrasound has not been shown to cause miscarriage. A transvaginal probe stays within the vagina and does not enter the uterus. Bleeding may sometimes already be present because of the pregnancy condition that led to the scan.

Does cardiac activity mean everything is healthy?

Cardiac activity is a reassuring finding for that point in time, but it cannot rule out every later pregnancy complication, chromosome condition, or structural difference.

What if no cardiac activity is seen?

The meaning depends on the measurements, dates, scan method, and whether an embryo is visible. It may simply be too early. Clinicians use established measurement criteria and may arrange a repeat scan before diagnosing pregnancy loss.

Do I have to have a transvaginal scan?

No examination should happen without your consent. You can ask about an abdominal scan instead, but it may not provide a clear answer early in pregnancy. The clinician should explain the likely benefits and limits of each option.

Is an early scan the same as chromosome testing?

No. Ultrasound may contribute to screening, particularly through nuchal translucency measurement, but it does not examine chromosomes directly. Screening estimates chance. Diagnostic tests such as chorionic villus sampling or amniocentesis can provide more definite chromosome information but are separate procedures.

Can I have a scan only for reassurance?

Availability differs between health systems and services. Ask whether the scan would be a clinical examination, what it can realistically establish, and who will explain or follow up unexpected findings.

Sources

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