Early Pregnancy Scan

This is a scan done early in pregnancy before 12 weeks of gestation. It is otherwise known as dating/ viability scan. It is only natural to be curious and concerned about pregnancy and early pregnancy scans can give you peace of mind.

What are the advantages of having an early pregnancy scan?

- It confirms a pregnancy
- It ensures that the pregnancy is developing in the correct place within the uterus
- It excludes an ectopic pregnancy
- Establishes the diagnosis and the type of a twin pregnancy
- By measuring the baby, it establishes the exact duration of the pregnancy in number of weeks and therefore establishes a more accurate estimated date of delivery.
- It confirms the presence of fetal heartbeat normally at 6 weeks from the last menstrual period
- It checks for the presence of uterine fibroids and ovarian cysts

What are the reasons for having an early pregnancy scan?

- Uncertain dates (irregular menstrual cycle or unsure of last period)
- History of previous ectopic pregnancy
- History of previous miscarriage
- Bleeding and / or pain in early pregnancy
- Excessive vomiting/ nausea (to rule out twins/ molar pregnancy)
- At risk for twins/ higher order pregnancy (if you are undergoing fertility treatment)

How is the early pregnancy scanning done?

Normally it includes a scan across your lower abdomen with a full bladder (trans abdominal scan) and an internal scan (transvaginal scan). The internal scan does not harm the embryo in anyway and is a standard practice to obtain adequate details of early pregnancy. By about 8 weeks the embryo can be readily seen by transabdominal scan.

What is best time to have the scan done?

It really depends on the reason for having the scan. If the scan is for reassurance, it is best performed at 7-8 weeks, as the information obtained is more reliable and easily interpretable at a slightly later stage.
However if you develop any symptoms you will need an urgent scan irrespective of number of weeks of pregnancy.

**What can be seen on the scan at various stages of early pregnancy?**

A pregnancy sac is visible usually at 5 weeks of gestation (calculated from the last menstrual period). A yolk sac becomes visible inside the pregnancy sac as the pregnancy grows and the mean sac diameter reaches 8-10mm. After this a small embryo becomes apparent at about 6 weeks. When the embryo becomes 4mm (6 weeks and 2 days), the fetal heart should be visible. By 8 weeks the embryo is readily seen on abdominal scan. Fetal limb buds are seen at 9-10 weeks with body movements.

![Ultrasound images](image1.png)

**How accurate is the early pregnancy scan dating?**

The dating is most accurate when the scan is performed between 7-11 weeks. The Estimated Date of Delivery (EDD) is accurate to within 3 days and is calculated from measuring the length of the embryo (Crown Rump Length).

**What are the limitations of early pregnancy ultrasound?**

Each ultrasound is a snapshot in time of your pregnancy and the findings can sometime be nonspecific. It may require correlation with an additional follow up scan and or estimation of BHCG level. There are certain criteria to be met before a pregnancy viability/failure is diagnosed. Prolonged waiting to reach a definite diagnosis can be frustrating to some.

When you are anxious you may be tempted to come for the scan as early as possible. Remember that you will be able to see a lot more at a slightly later gestation and the information obtained is more reliable.