

Umbilical artery Doppler

Patient Information Series – What you should know, what you should ask.

Why is umbilical artery used for Doppler?

Umbilical artery Doppler velocimetry should be used in the management of the intrauterine growth restricted fetuses, as it helps in differentiating fetus with pathological growth restriction at risk for perinatal complications from small and healthy fetuses.

Should a Doppler study of the umbilical artery be performed routinely?

No, the Doppler study of the umbilical artery should be performed only if there is a precise indication. It does not have much information value in low-risk pregnancies.

When is umbilical artery Doppler done?

Umbilical artery Doppler assessment is used in surveillance of fetal well-being in the third trimester of pregnancy. Abnormal umbilical artery Doppler is a marker of placental insufficiency and consequent intrauterine growth restriction (IUGR).

What causes low blood flow to a baby during pregnancy ?

When the placenta gets damaged, the damage may reduce the amount of blood circulating between you and the placenta. This low blood flow means fewer nutrients for your baby. This could delay your baby's growth in the womb.

When should a Doppler study of the umbilical artery be performed?

The most common indications are:

- Suspected fetal growth restriction (low estimated fetal weight, abdominal circumference or fetal growth).
- Pre-eclampsia/ gestational hypertension in current pregnancy.
- Monochorionic twins that share a single placenta.

How long does an umbilical artery Doppler ultrasound scan take?

You can have a Doppler scan at the same time as an ultrasound scan. The Doppler scan will take just a few minutes during your regular ultrasound scan.

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How is the umbilical artery exploration performed?

Umbilical artery Doppler is usually done transabdominally with the same transducer used for your ultrasound scan.

Are umbilical artery Doppler scans safe?

The umbilical artery Doppler flow study is a noninvasive test. The test doesn't harm the baby nor you.

How do I get ready for an umbilical Doppler flow study?

You don't need to do any special preparation before the test.

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