

Uterine Arteries Doppler Ultrasound

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

What are the uterine arteries?

The right and left uterine arteries are the branches of the internal iliac arteries that supply blood to the uterus.

What does the Doppler of the arteries show?

In a normal pregnancy, the spiral arteries, terminal branches of the uterine arteries, undergo a transformation to stimulate an adequate blood flow at the placental site. These changes cause a decrease in the resistance of the uterine arteries that can be assessed by a Doppler ultrasound study.

In pregnancies complicated by preeclampsia and/or fetal growth restriction, frequently a decrease in resistance does not happen, leading to significantly increased resistance indices in the uterine arteries.

What is the Doppler study of the uterine arteries used for?

Uterine artery Doppler evaluation might be an appropriate tool for identifying pregnancies that may be at an increased risk for the development of pre-eclampsia and small fetus for gestational age.

Why is important to screen for preeclampsia?

Pre-eclampsia is a disorder of pregnancy characterized by the onset of high blood pressure after 20 weeks of pregnancy.

In severe cases of the disease, there may be hematologic disorders, impaired liver function, kidney dysfunction, or visual disturbances. Pre-eclampsia increases the risk of undesirable outcomes for both the mother and the fetus that very frequently develops severe growth restriction

When should I screen for preeclampsia?

Pre-eclampsia screening can be performed in the first trimester of pregnancy, between 11th and 14th weeks. A second screening test is usually done at 20 – 24 weeks.

Uterine Arteries Doppler Ultrasound

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

How is preeclampsia screening done?

It includes an investigation of your personal and medical history, a measure of your blood pressure, uterine artery Doppler evaluation on ultrasound exam, and a blood test.

What happens if I have a high risk for preeclampsia?

Women at risk of preeclampsia can benefit from taking low-dose aspirin to reduce their risk of developing the condition.

What is the usefulness of Doppler of uterine arteries in fetal growth restriction?

If your baby is underweight or growing abnormally, the uterine artery Doppler can confirm that it is due to an abnormal function of the placenta.

How long does a uterine artery Doppler ultrasound scan take?

You can have a Doppler scan at the same time as a normal ultrasound scan, frequently during the 11 – 14 weeks and the 20 – 22 weeks scan. It uses the same equipment. The Doppler scan will take just a few minutes during your regular ultrasound scan. Uterine arteries can be evaluated both by transvaginal and transabdominal routes.

Are uterine arteries Doppler scans safe?

The Doppler flow study is a noninvasive test and does not harm the baby or yourself.

Last updated October 2022