

ARTERIAL DUPLEX ASSESSMENT BY SR ANNETTE ANDERSON (M.CUR)

An arterial duplex assessment is done by your vascular surgeon as a non-invasive assessment of your arteries using an ultrasound. This is a painless, safe test and doesn't hurt at all. The only preparation needed for this test, is wearing loose clothes which can easily be moved out the way for the test.

The arterial duplex assessment includes both an arterial doppler, which assesses the blood flow velocity and doppler effect, and B-mode imaging which focuses on the structure of the blood vessels.

B-mode imaging looks at the size, shape and structure of the arteries which can indicate if the arterial walls are smooth (normal); narrowed with plaque (arteriosclerosis) or calcium buildup or blocked.

Doppler ultrasonography uses the doppler effect, like the sound of a passing train, to measures the speed and direction of the blood flow in real time and helps to determine if intervention, such as an angioplasty or stent can correct the problem, or if a larger arterial bypass surgery will need to be done.

An arterial duplex assessment is also used for diagnosing aneurysms and carotid arterial stenosis.

An arterial duplex assessment is crucial for early detection and management of peripheral and central arterial diseases and is best done by the treating surgeon as its results help to dictate and plan the best surgical management.

