



SOUTHERN INDIANA  
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## VASCULAR ULTRASOUND: Exam Overviews

Ultrasound is a method of vascular imaging that uses only sound waves to create diagnostic pictures. It does not require the use of radiation, needle injections, dyes or contrasts, and is typically pain free. The palm-sized ultrasound transducer makes contact with the skin through a layer of sound transmitting gel. Doppler is a type of ultrasound that also may be used that displays sound waves in addition to pictures in order to study blood flow. The area being examined by ultrasound will need to be uncovered; if clothing is in the way you may be asked to remove it.

EXAM	TIME	SUMMARY
<b>Arterial Doppler</b>	15-30 min	An <b>Arterial Doppler</b> is a study of the blood flow through the arms or legs. Ultrasound Doppler is used to listen to the blood flow through the major arteries in several different areas of the limb. You will be required to lie flat for this exam.  We will apply blood pressure cuffs to each arm, thigh, calf and ankle to record blood pressures in these areas.
<b>Arterial Duplex</b>	45-60 min	An <b>Arterial Duplex</b> studies the arteries of the arms or legs. Ultrasound is used to look at and monitor the health of major arteries, bypass grafts and stents that distribute blood flow into and throughout the limb. You will be lying down for this exam.  Depending on the order, we may examine your leg from high in the groin to ankle level, or the arm from the shoulder to the wrist.
<b>Carotid Duplex</b>	30-45 min	The <b>Carotid Duplex</b> is a study of the main arteries in your neck. Ultrasound is used to look at and monitor the health of the arteries that supply blood flow to your brain. You will be lying down for this exam.  We'll scan your neck from collar bone to ear on each side. In some cases, we may also need scan just above or below your collar bone.
<b>Abdominal Duplex (Ao)</b>	30-40 min Fasting, NPO	The <b>Aorta Duplex</b> is a study of the body's main artery that begins at the heart and courses down through the abdomen. Ultrasound is used to look at and monitor the health and size of your Aorta, including any grafts or stents. You must not eat or drink anything (no gum, candy, coffee...) for 8 hours prior to this exam. You will be lying down.  We'll scan your abdomen from lower chest level to below the navel, and, if necessary, on each side of your abdomen for the best images possible.
<b>Renal Artery Duplex</b>	60-75 min Fasting, NPO	The <b>Renal Artery Duplex</b> studies the arteries that supply your kidneys with blood and sometimes the arteries within the kidneys. Ultrasound is used to look at and monitor blood flow to the kidneys. You must not eat or drink anything (no gum, candy, coffee...) for 8 hours prior to this exam. You will be lying down and rolling onto each side during this exam.  We'll scan from the middle of your abdomen moving along your sides (flanks) between your ribs and hip bones.
<b>Mesenteric Duplex</b>	30-40 min Fasting, NPO	The <b>Mesenteric Duplex</b> studies the arteries that supply your intestines with the blood. Ultrasound is used to look at and monitor the arteries and flow going to the intestines, including any bypass grafts or stents. You must not eat or drink anything (no gum, candy, coffee...) for 8 hours prior to this exam.  We'll scan your abdomen area; from below the ribs down to the navel.
<b>Venous Duplex</b>	30-75 min	A <b>Venous Duplex</b> study may be ordered for multiple reasons and each requires a different approach to the exam. In each case, ultrasound is used to examine the major veins of the arms or legs, with attention to flow, size and geography. You will be lying down for this exam.  The <b>Mapping Study</b> is done to assess the possibility of using superficial veins to create a bypass graft. The <b>Reflux Study</b> looks at venous blood flow to identify flow reversal that may cause chronic swelling, discoloration, pain, varicose veins, or ulcers. The <b>DVT Study</b> examines the deep veins in search of thrombus (blood clots) that could become a serious health condition if left untreated.  We'll scan your leg from high in the groin to the calf, or the arm from shoulder to forearm.
<b>Hemodialysis Access Duplex</b> or <b>Hemodialysis Vessel Mapping</b>	▶ 30 min  ▶ 45-75 min	The <b>Hemodialysis Access Duplex</b> looks at the surgically created dialysis access vessel. Ultrasound is used to check the diameter and depth of the vessel as well as the blood flow thru the limb.  The <b>Hemodialysis Vessel Mapping</b> looks at select arteries and veins in the arm to assess for future creation of a dialysis access. Ultrasound is used to locate, measure, and map the vessels which will help the surgeon plan the best surgical outcome for a dialysis access vessel or graft.  We'll typically scan your arm(s) from shoulder to wrist taking many ultrasound measurements along the way.
<b>Radial Artery Mapping</b>	30-45 min	The <b>Radial Artery Mapping</b> examines the radial artery of the forearm(s) to assess its usefulness as a coronary bypass graft. Ultrasound is used to document size and layout of the radial artery and the blood flow within it.  We'll scan your arm from the lower bicep area to the hand, including the palm of the hand in most cases.