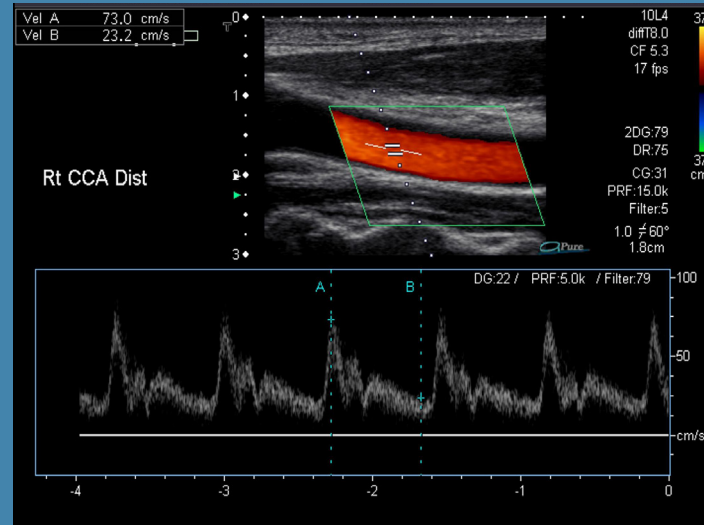


# Carotid Ultrasound

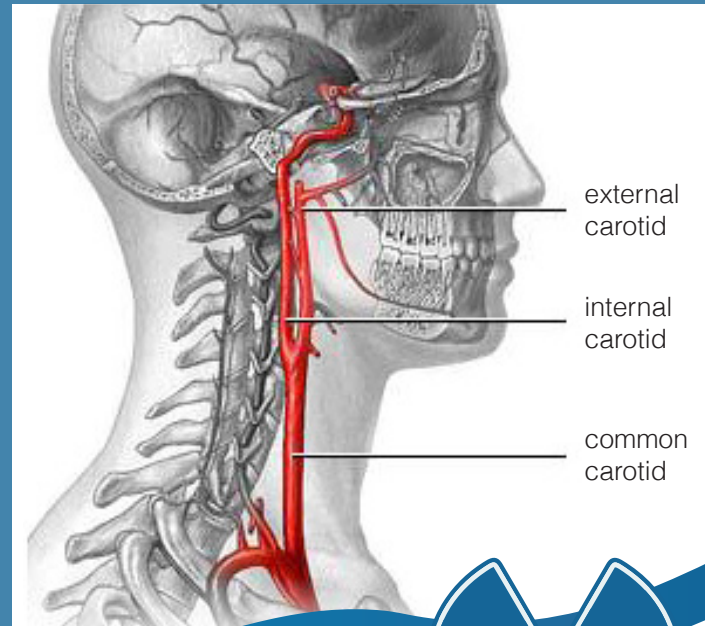
## How long will the procedure take?

A carotid ultrasound will usually take between 30 and 40 minutes to complete.

## Image of a Carotid Ultrasound



A common carotid artery with a spectral trace being obtained from the centre of the vessel.



If you have any related previous images from another provider please bring them on the day.

### Disclaimer:

The information contained in this brochure is intended as a guide only. If patients require more specific information please contact your referring Doctor.

### For more information contact:

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## Radiology



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*my hospital*

## What is a Carotid Ultrasound?

A Carotid Doppler Ultrasound is an examination of the body's two Carotid Arteries, which are located on each side of the neck. The Carotid Arteries carry blood from the heart to the brain. The main purpose of Carotid Doppler Ultrasound is to examine the arteries for plaque. Plaque causes a blockage or narrowing of the arteries which results in an increase risk of stroke.

Indications for a Carotid Ultrasound are advanced age, smoking, diabetes, elevated blood cholesterol or a family history of stroke or heart disease.

A Carotid Ultrasound is also performed to detect dissection of the Carotid Arteries (a split between layers of the artery wall that may lead to obstruction of blood flow or a weakening of the wall of the artery), check the blood flow of the Carotid Arteries after surgery, or verify the position of a metal stent placed to maintain carotid blood flow.

## Preparation

You should wear comfortable, loose-fitting clothing for your ultrasound exam. You may need to remove some clothing and jewellery in the area to be examined.

A loose-fitting, open necked shirt or blouse is ideal.

## Procedure

During the procedure you will be asked to lie on a bed with your head in a relatively flat position. Water-based gel is applied to the neck and an ultrasound probe (called a transducer) is placed on your neck and gently moved back and forth to examine your Carotid Arteries.

The transducer gives off ultrasound waves and detects echoes after they bounce off the artery walls and blood cells. A computer uses the echoes to create and record pictures of the arteries in black and white and the blood flow in colour.

Doppler Ultrasound, a special application of ultrasound, measures the direction and velocity of blood as it move through vessels. It represents the movement using varying colours and on a spectral trace. This application produces a audible sound representative of the blood velocity that you will hear. It is important to lie still, so that the readings are clear.

## Risks of Procedure

For standard diagnostic ultrasound there are no known harmful effects.

Some of the benefits are:

- Most ultrasound scanning is non-invasive (no needles or injections) and is usually painless.
- Ultrasound imaging does not use any ionising radiation.
- Ultrasound scanning gives a clear picture of soft tissues that do not show up well on x-ray images.