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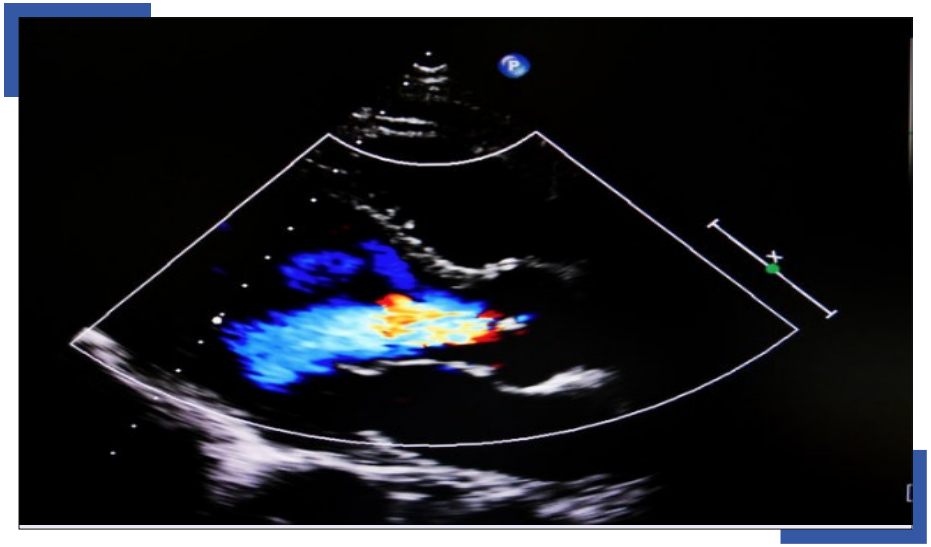
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# Understanding
## Colour Doppler (Arterial and Venous) Lower Limb?



## What is Colour Doppler (Arterial and Venous) Lower Limb?

Colour Doppler of the Arterial and Venous Lower Limb is a non-invasive ultrasound used to examine one leg. It combines regular ultrasound with Doppler technology to examine blood flow direction in arteries and veins, along with the structure of blood vessels. The exam can be used to assess blood flow and identify abnormalities such as narrowing, blockage, or altered flow in the specified lower limb.

## Why is it Performed?

It is done if someone has symptoms and/or clinical concerns that relate to the blood flow in a certain lower limb. It assists in the examination of diminished arterial blood flow, blood vessel narrowing, blood vessel blockage, venous insufficiency, pain, clot, or other blood vessel abnormal conditions, skin temperature and color changes, or swelling.

## Preparation

- Usually, no special fasting is required.
- Wear loose and comfortable clothing.
- Inform the medical team about current medicines and medical conditions.
- Bring previous Doppler, ultrasound, CT angiography, or other vascular reports.
- Inform the sonologist about any previous vascular surgery or procedure.

## Procedure

The patient lies on a scanning table, with ultrasound gel applied to the chosen lower limb. The ultrasound transducer is gently moved over various parts of the leg to assess the arteries and veins. Colour Doppler &Spectral Doppler are used to analyze blood flow, blood velocity, blood direction, and other vascular characteristics of blood flow. Depending on clinical need, the examination may involve the assessment of the thigh, knee, calf, and ankle areas. Generally, this procedure does not involve the use of ionising radiation and is not painful.

## Important Instructions

- Follow all instructions provided by the sonologist or medical team.
- Wear comfortable clothing that allows easy access to the affected limb.
- Remain relaxed and follow positioning instructions during the examination.
- Inform the sonologist if you experience significant pain or discomfort.
- Bring previous vascular imaging reports when available.
- Inform the medical team about previous vascular surgery, procedures, or treatment.

## Safety Precautions

Colour Doppler uses sound waves and a transducer placed on the skin, unlike radiation-based technologies. In general, it is considered to be safe as long as it is being applied by an experienced professional or trained technologist and on an appropriate ultrasound protocol. The exam is non-invasive and generally will not require a special injection or contrast dye. Positioning and imaging techniques are used to get as much vascular information as needed, while keeping the patient comfortable.

## When to Seek Medical Attention?

Seek urgent medical evaluation if chest pain or sudden difficulty breathing is accompanied by leg swelling. Molecular Diagnostics and Therapy uses suitable vascular ultrasound protocols and trained medical supervision to carry out Colour Doppler of the Arterial and Venous Lower Limb (Single Limb) to assess blood flow using appropriate vascular ultrasound protocols, with attention to patient safety and comfort.