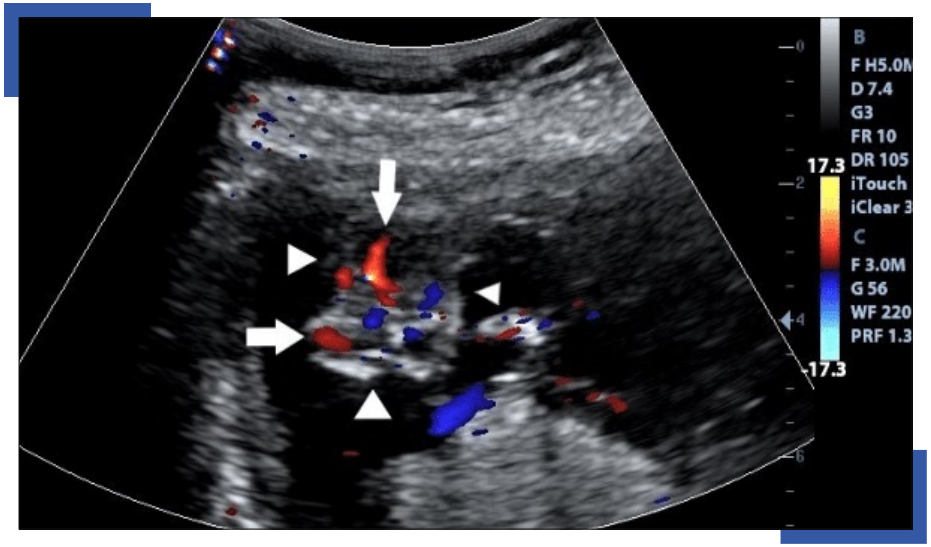
MOLECULAR
DIAGNOSTICS AND THERAPY
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Understanding
Colour Doppler - Head



What is Colour Doppler - Head?

Colour Doppler of the Head is a Doppler ultrasound scan that does not use X-rays or a gamma camera to examine blood flow in the blood vessels of the brain. The clinical need and type of vessels examined would determine the implementation of the Colour Doppler and spectral Doppler techniques used to evaluate the direction, velocity, and pattern of cerebral blood flow.

Why is it Performed?

This test can be carried out if the symptoms or clinical concerns relate to the blood flow in the vessels of the head and brain. It can aid in assessing abnormal blood-flow patterns, velocity changes in the blood flow, narrowing of blood vessels, and other vascular abnormalities. It may also be recommended for assessment and follow-up of some cerebrovascular conditions if clinically indicated.

Preparation

- Usually, no special fasting is required.
- Wear comfortable clothing and avoid unnecessary accessories around the head when possible.
- Inform the medical team about current medicines and conditions.
- Inform the sonologist about any previous vascular procedure or treatment.

Procedure

The patient is seated in a comfortable position for the exam. Depending on the vessels that are being evaluated, ultrasound gel can be applied to the area of the head or in the temporal area. An appropriate Doppler ultrasound probe is applied to get blood flow information from the relevant cerebral vessels by a sonologist. The direction, velocity, and the pattern of blood flow can be measured using colour Doppler or spectral Doppler techniques. Other acoustic windows are utilized whenever necessary to obtain acoustically acceptable Doppler signals from intracranial vessels.

Important Instructions

- Follow all instructions provided by the sonologist or medical team.
- Remain relaxed and avoid unnecessary movement during the examination.
- Follow positioning instructions during the scan.
- Inform the sonologist if you experience significant discomfort.
- Bring previous neurological or vascular imaging reports when available.

Safety Precautions

Colour Doppler is a measure of sound and not ionising radiation. When used appropriately and by trained professionals using Doppler ultrasound methods, it is generally safe. The examination is done without any actual injection, with no ink or contrast, and it's not intrusive. Patients are kept comfortable during the use of positioning and imaging techniques to acquire information from cerebral blood flow.

When to Seek Medical Attention?

If there is a sudden weakness or numbness that is most noticeable on one side of the body, trouble speaking or understanding speech, vision loss or disturbance, sudden, severe dizziness or loss of balance, a seizure or other sudden neurological symptom, contact medical help immediately. This condition can be a medical emergency. In Molecular Diagnostics and Therapy, Colour Doppler of the Head is performed with appropriate Doppler ultrasound protocols, training, and medical supervision, considering assessment of cerebral blood flow, patient safety, and comfort.