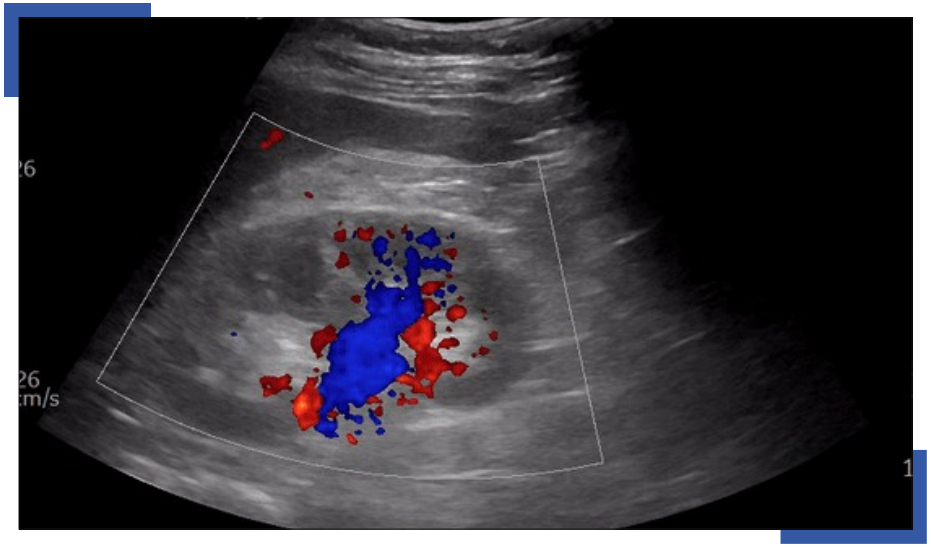
MOLECULAR
DIAGNOSTICS AND THERAPY
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Understanding
Colour Doppler - Renal



What is Colour Doppler - Renal?

Colour Doppler of the Renal vessels is a non-invasive ultrasound test that allows the assessment of the kidneys and blood flow through renal vessels. It combines the usual ultrasound imaging with Colour Doppler and spectral Doppler methodologies to evaluate renal vascular anatomy, direction, speed, and characteristics of blood flow.

Why is it Performed?

This test is usually done if the patient has symptoms or clinical issues of kidney or renal blood circulation. It can be used to assess constriction of the renal arteries, alterations in the renal blood flow, renal vascular abnormalities, and other renal blood flow disorders. It may also be indicated in the evaluation or treatment of some cases with intractable hypertension, or proven renal vascular disease to monitor for hypertension and signs or symptoms of renal failure.

Preparation

- Fasting for approximately 6–8 hours may be advised before the examination.
- Avoid heavy meals before the scan as instructed by the medical team.
- Wear comfortable clothing that allows easy access to the abdomen.
- Bring previous ultrasound, Doppler, CT, MRI, or other relevant renal reports.

Procedure

The patient lies on a comfortable examination table and ultrasound gel is applied to the sides and abdomen. The ultrasound probe is gently moved by the sonologist over the areas related to the kidneys and renal vessels. Conventional ultrasound is a technique utilized to assess the kidneys and other nearby tissues or organs, whilst Colour Doppler and spectral Doppler techniques are utilized to evaluate blood flow through the renal arteries and veins. The patient may have to change position during the examination or hold their breath for a short period to get better images. The procedure is usually painless and is not administered using ionising radiation.

Important Instructions

- Follow the fasting instructions provided before the examination.
- Take medicines only according to medical advice.
- Follow breathing or breath-holding instructions when requested.
- Inform the sonologist about any known kidney disease, hypertension, or previous renal vascular procedure.

Safety Precautions

Colour Doppler is based on sound waves and doesn't employ ionising radiation. Generally speaking, this is regarded as safe when applied by properly trained experts following the proper protocols of ultrasound and Doppler. This test is non-invasive and generally is not associated with needles or dye injections. Clear information on renal structure and blood flow is easily acquired, and the patient is kept comfortable by use of appropriate scanning techniques.

When to Seek Medical Attention?

Get immediate medical care if the pain is severe or sudden, or if there is blood in the urine, little or no urine output, serious swelling, or other symptoms get worse quickly. If very high blood pressure is present with extreme symptoms, including headache, chest discomfort, trouble breathing, neurological symptoms, or other serious symptoms, it should be evaluated immediately. Molecular Diagnostics and Therapy uses the appropriate ultrasound and vascular Doppler protocols and conducts Colour Doppler of the Renal vessels under trained medical supervision, with attention to the patient's safety, comfort, and assessment of renal blood flow.