# What is the Laser Doppler Imager?

#### WHAT IS THE TEST?



Fig. 1 - Laser Doppler Imager machine

This machine is a laser doppler imager and it takes a picture of your burn showing the amount of blood flow in the skin.

Please take your time reading this information leaflet; it will tell you about the machine and why it will be used to take a picture of your burn wound.

The laser doppler imager has been designed so that the camera can reach over the bed and rotate in different directions, allowing your burn wound to be scanned in a comfortable position.

For good quality pictures it is important that you remain as still as possible.

#### WHY DO I NEED THIS TEST?

It is important for the doctor to decide how much of your skin is burned and how deep the burn is, so that they can decide the best treatment for your burn.

It is fairly easy for the doctor to estimate the proportion of the body surface that has been burned by making simple calculation. Trying to estimate the depth of the burn by just looking at it is more difficult.

#### WHAT DOES THIS TEST DO?

In this test the laser doppler imager gives us a picture of the amount of the blood flowing through the blood vessels in your burn. This will help us to predict the length of time it will take for your burn wound to heal. Your doctor can then use the result of this test to help make a decision about your treatment.

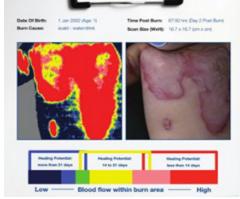


Fig. 2 - Type of picture produced by Laser Doppler Imager

#### WHEN WILL I HAVE THIS TEST?

The scan is normally performed a few days after the burn has occurred, usually during a routine change of bandages and burn dressings.

#### WHERE WILL I HAVE THE TEST?

The laser doppler imager is specially designed for use on patients who are in hospital and can be brought to your bedside.

A member of your burns team will advise you where and when the test will be carried out.

## WHAT PREPARATION WILL I NEED FOR THE LASER DOPPLER IMAGER?

Your bandages and burn dressing will be removed along with any loose skin on the surface of the burn. This is normally done at a routine change of dressings.

We may ask you to wear protective eyewear.

#### WHAT WILL HAPPEN WHEN I HAVE THIS TEST?

The laser doppler imager will use a low power beam of laser light to take a picture of the blood flow in your burn. It will also take a colour photograph of your burn.

You will see a beam of red light on your skin; you will not feel it and it will not harm you. The laser doppler imager makes very little noise.

The reflection of the light from the skin looks bright during measurement and we advise you not to stare at it. We may ask you to use protective eyewear. You will need to keep still whilst the picture is taken.

#### HOW LONG DOES THE LASER DOPPLER IMAGER PICTURE TAKE?

The time to take the laser doppler imager picture will depend upon the size of your burn. Normally the burn scan takes between 1 and 2 minutes. The operator doing the test can tell you how long it will take before they begin.

If you have a large burn area or more than one burn on your body, then you may need more than one picture to be taken.

#### WHAT HAPPENS AFTER THE TEST?

The doctor will look at the pictures from the laser doppler imager and use them to help decide on the best treatment for your burn.

#### WHERE CAN I GET MORE INFORMATION ON THE LASER DOPPLER IMAGER?

If you have any questions you can ask your doctor or nurse for more information.

### Further Information and Support

St Andrews Burns Service Broomfield Hospital (Chelmsford) Adults 01245 516186 Children 01245 516973 Outpatients 01245 516008

Chelsea & Westminster Hospital (London) Adults 0203 3153785 Children 02033 153706 / 0203 3153707

#### Queen Victoria Hospital (East Grinstead) Adults 01342 414440

Children 01342 414469

**Stoke Mandeville Hospital (Aylesbury)** Adults and Children 01296 315040

#### YOUR NOTES AND QUESTIONS

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### Burn assessment with the Laser Doppler Imager

**Information** Leaflet

This leaflet answers some of the most commonly asked questions about Laser Doppler Imaging.

If you have any questions or would like to talk about anything related to your treatment, please speak to a member of the burns team.