



# Pulsed Dye Laser

Treatment of Vascular Lesions



Changi  
General Hospital  

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## How does pulsed dye laser remove vascular lesions?

The laser produces an intensive but gentle burst of laser light at a certain frequency (585 to 595nm) that is absorbed by the blood vessels and not by the skin.

In this way, the laser does not damage the skin and only destroys the excess vessels underneath the skin, thus, reducing the risk of scarring.

## What kinds of conditions are treated with vascular laser?

- Port wine stains
- Hemangiomas
- Spider angiomas/ telangiectasias. These are overgrown blood which contains a certain large blood vessel with tiny vessels radiating from it. They look unsightly but are otherwise harmless.

## What does the treatment consist of?

- The treatment consists of placing a small handpiece against the skin and activating the laser.
- The laser emits a shot followed by a one second delay while it recharges to produce another burst of light.
- During treatment, goggles will be worn to protect your eyes from the light emitted from the laser.

## Does the treatment hurt?

- The sensation of the laser is similar to a rubber band snapping on the skin or a small pinprick and has a warm sensation during treatment.
- Topical anaesthetic (EMLA cream) or general anaesthesia may be given.
- Placing an ice bag on the skin during treatment may help to reduce the hot sensation.
- The pain is short-lived and disappears a few minutes after the treatment.

## What do I do after the treatment?

- Immediately after the treatment, the area will turn dark-grey or red depending on the energy used. This discolouration is called purpura and may last approximately 10 days, until the dead blood cells are absorbed by the skin. Occasionally, a blister or a thin scab will form. Do not scratch it. You will be given an ointment to apply until the discolouration fades.
- Makeup should be avoided until the grey discolouration fades. Try to also minimise sun exposure.
- Swimming is allowed only after the discolouration has faded. Sunscreen is recommended beforehand.





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