



Laser treatment for birthmarks

This information sheet provides information about laser treatment for birthmarks and what to expect when your child comes to Great Ormond Street Hospital (GOSH) for treatment.

Laser treatment, with a pulsed dye laser, is currently the treatment of choice for improving the colour of a capillary malformation (port wine stain). It may also help reduce the risk of a 'cobblestone' effect that can sometimes develop in adulthood. When laser treatment is carried out at a specialist centre, with experience in dealing with vascular birthmarks in children, the results can be excellent and the side effects minimal.

Appointments for laser treatment are in great demand so please let us know as soon as possible if your child cannot attend. We will reschedule their appointment as quickly as possible but there may be a wait of several months for a new appointment.

What is laser treatment and how does it work?

The laser produces a narrow beam of light that is absorbed by the red colour in the blood vessels in the birthmark. Each treatment consists of multiple pulses, a few millimetres across. We call these pulses 'dots'. Most children have lots of 'dots' in one laser treatment session.

Your child's skin may look bruised and sore after laser treatment and will need to be looked after carefully for three weeks.

Please make sure that you bring in some unperfumed moisturiser to apply after laser treatment. Unfortunately, we can no longer supply moisturiser after laser treatment.

Suitable types of moisturiser include:

- Diprobase® ointment
- Dermamist® spray for larger areas of treated skin
- Aloe vera gel – this may sting a little when applied

All are readily available in most chemists and supermarkets. You could also get this on a prescription from your GP.

Your child will also need to wear a high factor sunblock for the whole course of the treatment and for a year afterwards, as sunlight can darken birthmarks making them harder to treat.



We will have to cancel your child's appointment if they have a sun tan.

If your child has a cold sore, please tell us as soon as possible as we may have to postpone their appointment until it has healed.

Full instructions are provided in our leaflet *After your child has had skin laser treatment*, which will be given to you after each treatment session.

How long does laser treatment take?

In our experience, the best results occur when a series of treatments, usually between four and six, take place over two or three years. The length of each treatment session varies according to whether your child has treatment under general anaesthetic or local anaesthetic and the characteristics of their birthmark.

Test patch

The first stage in the treatment process is usually a 'test patch', which shows how well your child's birthmark responds to the laser. Most of our children have a test patch, but if the port wine stain is very small, the test patch might not be necessary.

The test patch involves having just a few laser 'dots' on the birthmark. The 'dots' at higher laser energies can be uncomfortable (children have told us that it feels like being

flicked with a rubber band) so the area of skin being tested is usually numbed first using local anaesthetic cream. The treated area will be covered with a cold dressing afterwards to make it more comfortable.

After 12 to 16 weeks, you will need to discuss the results of the test patch with the doctors or nurses.

Laser treatment

If the test patch has shown that laser treatment will help, full treatment sessions will be arranged. These involve many more 'dots' than the test patch, so some children have laser treatment under a general anaesthetic. Children can also have local anaesthetic treatment if the number of 'dots' planned and the area to be treated makes this practical.

What happens afterwards?

If your child had laser treatment using local anaesthetic, they will be able to go home very soon afterwards. If your child had a general anaesthetic, they will need to stay on the ward for an hour or two afterwards until they have woken up completely and eaten some food.

If you have any questions, please call the clinical nurse specialists in the Birthmark Unit on 020 7405 9200 extension 1113.

Compiled by the Birthmark Unit in collaboration with the Child and Family Information Group

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