



Laser treatment for birthmarks: information for families

Laser treatment, with a pulsed dye laser, is currently the treatment of choice for improving the colour of a capillary malformation (port wine stain). When laser treatment is carried out at a specialist centre, the results can be excellent and the side effects minimal. Laser treatment can also be used for other vascular conditions. This information sheet from Great Ormond Street Hospital (GOSH) describes laser treatment for birthmarks and what to expect when your child has treatment. An Easy Read information sheet is included for your child.

The laser produces a narrow beam of light that is absorbed by the red colour within 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.

Before the appointment

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 but there may be a wait of several months for a new appointment.

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

Important

The person bringing your child for laser treatment should have 'Parental Responsibility' for them. Parental Responsibility refers to the individual who has legal rights, responsibilities, duties, power and authority to make decisions for a child. If the person bringing your child does not have Parental Responsibility, we may have to cancel the treatment session.

Please make sure that you bring in some unperfumed moisturiser to apply after laser treatment. Unfortunately, we can no longer supply the moisturiser. Suitable types of moisturiser include:

- Diprobase® ointment or similar such as QV® ointment or Cetraben® ointment
- Dermamist® spray or Emollin® for larger areas of treated skin mostly on the arms and legs
- Aloe vera gel – this may sting a little when applied

All are readily available in most chemists and supermarkets. You may also get this on a prescription from your family doctor (GP).

Your child will 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. It can also cause side effects to the skin immediately after laser treatment. We will have to cancel your child's appointment if they have a sun tan or acquired sun complications.

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 children have a test patch, but if the port wine stain is very small, it may be possible to treat the entire area but often with lower laser energy levels initially.

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 is likely to be covered with a cold dressing afterwards to make it more comfortable.

After 12 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 most younger children have laser treatment under a general anaesthetic. Children can also have local anaesthetic treatment depending on the size and location of the area to be treated.

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 after treatment until they have woken up completely and eaten some food.

Looking after your child's skin

The area treated with the pulsed dye laser will probably seem bruised and may feel like mild sunburn for 5 to 10 days. The skin will be very fragile and needs gentle handling. Some lasers do not cause much surface bruising, but your child's skin still needs full care afterwards.

- Apply the unperfumed moisturiser to the treated area three to four times a day for 7 to 10 days or more frequently if the skin is itchy or dry.
- Your child will be able to have a bath or a shower, but do not use bubble bath or rub the treated area with soap for one week.
- The treated skin will be dry and may crack and form a crust or blister. If this happens, you should contact your laser nurse or family doctor (GP) who will arrange for an antibiotic ointment such as Bactroban® to be applied two to three times a day for five to seven days.
- Your child should avoid PE, games or swimming for three weeks after treatment to prevent damage to the lasered skin.
- Your child should not use camouflage cream or make up for at least five days after treatment.
- You can relieve any discomfort soon after treatment by putting an ice pack wrapped in a

towel or gauze on the treated area.

Paracetamol is also helpful.

- lunchtime
- mid-afternoon
- early evening

Using sun blocks

You should not expose your child's birthmark to strong sunlight while they are having laser treatment and for at least a year afterwards.

- Your child should use a total sun block (factor 30 or higher) on the treated area at all times in the UK from March to October.
- If you are visiting a sunny country at any time of year, your child should wear sun block at all times when exposed to the sun.

Your child should put sun block on at least four times a day:

- first thing in the morning

If your child is at school, they should apply sun block before each break time, at lunchtime and before going home.

- Your child should re-apply the sun block after swimming, even if the bottle is labelled as waterproof.
- Your child should stay out of direct sun between 11am and 3pm, when the sun is at its strongest.
- Your child should wear a hat with a peak or wide brim when outdoors if possible. Babies should always have an umbrella to shade their pram or buggy.

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

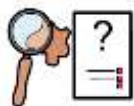
Having laser treatment



Laser treatment is the best way to treat a birthmark called a port wine stain. It uses a narrow beam of light to make the port wine stain less red.



Each time the laser beam touches the skin, it treats a very small area. We call this a laser 'dot'. Children have lots of 'dots' in one session.



First we do a 'test patch'. This is a few dots on your birthmark and a few on normal skin.



We put some cream on your skin first. This makes it numb.



After the dots, we put a cold dressing on the area to make it comfortable.



After a few months, you will need to come back to hospital for a check-up. If the doctors think the laser treatment has worked, they will book another laser appointment for you.



After laser treatment, you need to look after your skin carefully. You can have a shower or bath but do not use soap.



You will also need to put strong sun cream on the treated area all year round.



You will not be able to go swimming for three weeks after treatment. You should also avoid sport or PE for three weeks.



You will have more dots at the next treatment.



For local anaesthetic treatment, you will have numbing cream like you did for the test patch



Some children have laser treatment under a general anaesthetic (said an-ess-thet-ic). This means that you will be asleep during the laser treatment. You will not be able to feel anything or know what is happening.



Please ask us if you have any questions.