

# Intralesional photocoagulation of subcutaneous congenital vascular disorders

Understanding NICE guidance –  
information for people considering the  
procedure, and for the public

September 2004



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**Intralesional photocoagulation of subcutaneous congenital vascular disorders**

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## About this information

This information describes the guidance that the National Institute for Clinical Excellence (NICE) has issued to the NHS on a procedure called intralesional photocoagulation for subcutaneous congenital vascular disorders. It is not a complete description of what is involved in the procedure – the patient's healthcare team should describe it in detail.

NICE has looked at whether intralesional photocoagulation is safe enough and works well enough for it to be used routinely for the treatment of abnormalities of the skin's blood vessels – doctors call these 'subcutaneous congenital vascular disorders' (see below).

To produce this guidance, NICE has:

- looked at the results of studies on the safety of intralesional photocoagulation and how well it works
- asked experts for their opinions
- asked the views of the organisations that speak for the healthcare professionals and the patients and carers who will be affected by this guidance.

This guidance is part of NICE's work on 'interventional procedures' (see 'Further information' on page 10).

## About intralesional photocoagulation of subcutaneous congenital vascular disorders

Subcutaneous congenital vascular disorders is the medical name given to abnormalities of the skin's blood vessels. These disorders are present from birth and include haemangiomas, 'port wine stains' and clusters of abnormal blood vessels called 'arteriovenous malformations' that can cause the skin to look darker.

Often, these fade without treatment or don't cause any physical problems. If the problem area is near the eyes, mouth, nose or ears, or if it bleeds, becomes ulcerated or infected, then laser treatment is often recommended. But, this may not work very well because the laser beam can't penetrate far beneath the skin.

In intralesional photocoagulation, a laser fibre is inserted into the problem area so that the laser energy can reach deep within it. This may be done more than once.

## How well it works

### What the studies said

The studies that NICE looked at were small. The largest study was of 100 children: in this study, the mark was reduced by more than 90% in 46 children after the treatment, and in the rest of the children, the mark was reduced to at least half its original size. In the same study, 76 of the children went on to have surgery after having the intralesional photocoagulation procedure.

A second study of 23 patients who had a particular type of birthmark near the eye called a 'periorbital haemangioma' was looked at. The mark was reduced to at least half its original size within 8 months in 19 patients (83%) who had the procedure.

### What the experts said

The experts noted that this procedure had not been used very often in the UK.

## Risks and possible problems

### What the studies said

The following problems were seen in the studies that NICE looked at:

- between 17% (4 out of 23 patients) and 25% (3 out of 12 patients) developed ulceration of the mark
- in 8% (1 out of 12 patients), the treated area continued to bleed and needed surgery
- in 8% (1 out of 12 patients), scarring and shrinkage caused problems and surgery was needed
- 4% (1 out of 23 patients) developed an infection
- 2% (2 out of 100 patients) had some damage to the facial nerve, causing numbness
- 2% (2 out of 100 patients) needed a blood transfusion during the treatment
- 2% (2 out of 100 patients) had small burns to the area that was treated.

## What the experts said

The experts thought that the main problems that could happen were ulceration, damage to nerves, healthy tissue dying (called necrosis), scarring, shrinking of the skin and formation of what doctors call a 'fistula', which is an abnormal link that has developed between an artery and a vein.

## What has NICE decided?

NICE has decided that, if a doctor wants to carry out intralesional photocoagulation of subcutaneous congenital vascular disorders, he or she should make sure that the patient understands what is involved and that there are still uncertainties over the safety of the procedure and how well it works. There should be special arrangements in place so that the patient only agrees (consents) to the procedure after this discussion has taken place.



## Other comments from NICE

NICE also noted that, while the procedure seems to work in terms of 'shrinking' the problem area, there was little information on how the procedure improved function or how it fits with surgical treatment.

One of the potential problems with this procedure – damage to the facial nerve – can be serious, and there was also not much information in the studies about how severe ulceration and scarring could be and what this means for the patient.

## What the decision means for you

Your doctor may have offered you or your child intralesional photocoagulation. NICE has considered this procedure because it is relatively new. NICE has decided that there are uncertainties about the benefits and risks of intralesional photocoagulation that you need to understand before you agree to it. Your doctor should discuss the benefits and risks with you. Some of these may be described above.

## Further information

You have the right to be fully informed and to share in decision-making about the treatment you receive. You may want to discuss this guidance with the doctors and nurses looking after you.

You can visit the NICE website ([www.nice.org.uk](http://www.nice.org.uk)) for further information about the National Institute for Clinical Excellence and the Interventional Procedures Programme. A copy of the full guidance on intralesional photocoagulation of subcutaneous congenital vascular disorders is on the NICE website ([www.nice.org.uk/IPG090guidance](http://www.nice.org.uk/IPG090guidance)), or you can order a copy from the website or by telephoning the NHS Response Line on 0870 1555 455 and quoting reference number N0699. The evidence that NICE considered in developing this guidance is also available from the NICE website.

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