

Laser treatment of infantile hemangiomas

Last update on April 2024

Infantile hemangiomas (often referred to as "strawberry angiomas") are benign vascular proliferative lesions appearing in the neonatal period in around 5% of infants. They appear on any area of the body as a red spot that rapidly increases in thickness until 6 to 8 months of age, taking on the appearance of a bright red, well-limited swelling, sometimes associated with a deeper component. After this proliferative phase, the lesion stabilizes, then spontaneously regresses in the majority of cases before the age of 7-8 years, often leaving a sequelae of atrophic, slack skin, with red and blue vessels and, in the case of a deep component, a curved appearance.

Small, superficial, uncomplicated infantile hemangiomas usually do not require treatment, but only simple clinical monitoring until regression. In the early stages, vascular laser treatment, particularly pulsed dye laser, can be suggested to limit progression and accelerate regression. Some also recommend the application of local beta-blockers.

After regression, lesions with residual red or blue vessels can be effectively treated with pulsed dye laser and Nd:YAG 1064 nm laser. A few sessions are usually all that's needed to erase them.

Atrophic sequelae, textural changes and sagging can be improved by fractional laser treatment in several sessions.

Large infantile hemangiomas or hemangiomas of periorificial location (eyes, mouth, nose) which may lead to serious functional complications must be rapidly managed by a multidisciplinary medical team with a view to administering beta-blockers per os, which have revolutionized the treatment of these infantile hemangiomas since 2008, by halting their evolution in the growth phase and accelerating their regression.

Ulcerations of infantile hemangiomas, which occur in 10-20% of cases, particularly in areas where diapers rub, are very painful, may bleed and become superinfected, leaving a scar-like appearance. They are the cause of crying and behavioral problems in children, with altered sleep and eating patterns linked to the pain. Healing can be slow, lasting from several weeks to several months, despite well-managed medical nursing care. Pulsed dye laser treatment has been shown to be effective in these ulcerations, accelerating healing and reducing pain in 1 to 4 sessions at 15-day intervals, usually in conjunction with beta-blocker treatment.

After regression of these complicated infantile hemangiomas, sequelae will be managed by laser treatment in the same way as for small infantile hemangiomas, and deep cutaneous-greasy residues and structural deformities may require additional surgery.

This information sheet recommended by the French Laser Society can be given to you by your dermatologist. Even if it is not sufficient to have an estimate, it helps to give the patient a clear information.

The information consultation provides clear explanations on expected outcomes, side effects and possible complications. There are not any reimbursement from social security or medical leave for these aesthetic treatments. Prices are mainly based on the area to be treated. The total cost is to be evaluated with the patient and is the subject of a signed quote.

A post-operative order and an advice sheet are given to the patient with the doctor's contact information.