SOCIÉTÉ FRANÇAISE DES LASERS EN DERMATOLOGIE & Dispositifs à Base d'Energie

Chronic radiodermatitis and vascular lasers or IPL

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Breast cancers are becoming increasingly common, and many are treated with radiotherapy. Radiotherapy is highly effective and has dramatically improved breast cancer prognosis and survival. However, several years after radiotherapy, up to 30% of patients develop a progressive chronic skin disease called "chronic radiodermatitis" on the irradiated areas.
This radiodermatitis is characterized by the progressive appearance of numerous red telangiectasias (dilated blood vessels), often associated with areas of hyper- and hypo-pigmentation, very thin and fragile skin on the surface (cutaneous atrophy) and sometimes deep induration of the skin (fibrosis). Patients with this side effect experience an undeniable reduction in quality of life.
Fortunately, vascular treatments by laser or IPL have been recognized for years as safe and effective treatments for these areas of chronic radiodermatitis, and can thus improve patients' quality of life. A study carried out in France on over 170 women demonstrated the efficacy of pulsed dye laser sessions, with no long-term side effects (1). A recent meeting of experts has led to a worldwide consensus on the benefits and tolerability of vascular lasers for this condition (2).

Session practice: Vascular lasers (in this indication, the pulsed dye laser, the KTP laser, or even certain IPL) can be used to selectively treat pathological vessels in areas of radiodermatitis. The session is short and requires neither general nor local anesthesia. Each laser impact induces a sensation usually compared to a "rubber band", followed by a slight sensation of heat in the treated area.

Side-effects: These are transient and benign, consisting of sensations of sunburn-like heat, purpura of purplish then blue appearance (reflecting coagulation of the vessels), and very rarely transient hyperpigmentation. Sun protection before and after treatment is strongly recommended.

Complications: not reported in the literature to date, since 1997, in this indication (the skin being fragile, the exceptional but classic complications of vascular lasers should nevertheless be reported as a matter of principle: ulcerations and scars, hyper- or hypo-pigmentation).

Expected results:
A clear reduction in dilated red vessels is progressively observed from the first session onwards; their more complete disappearance may require between 1 and 5 sessions, depending on the severity of the radiodermatitis and the device used. Sessions are generally spaced two months apart.

Your laser specialist will also be able to inform you of other possible therapeutic options for improving the texture and color of the skin in these areas of radiodermatitis, using lasers, particularly fractionated lasers, or other energy-based devices.

(1) Mazer JM. Presse Med., 2002;31(5):223–231. French.

(2) Consensus on the Clinical Management of Chronic Radiation Dermatitis and Radiation Fibrosis: A Delphi Survey
British Journal of Dermatology Septembre 2022

This information sheet, recommended by the Société Française des Lasers en Dermatologie, can be given to you by your dermatologist. Although it is not sufficient for drawing up a quotation, it does help to provide patients with sufficiently clear information.
The information consultation provides clear explanations of the expected results, side effects and possible complications. There is no social security reimbursement or time off work for these aesthetic treatments. Prices depend essentially on the surface area to be treated. The overall cost must be assessed with the patient, and is the subject of a signed estimate.
A post-operative advice and care sheet or prescription is given to the patient, together with the doctor's contact details.

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