LASER TREATMENT FOR XANTHELASMA PALPEBRARUM

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Background and Aims

When lipid phagocytosis occurs in the dermis with a build-up of lipid-laden histiocytes, the resulting lesion is known as a xanthoma. Xanthelasma palpebrarum is the most common type of xanthoma. On average, only half the patients with xanthelasma palpebrarum are hyperlipidemic. In hyperlipidemic patients with xanthelasma, the risk for atherosclerosis may be inferred from the associated lipoprotein and apolipoprotein abnormalities. The possible risk for atherosclerosis in normolipidemic patients with xanthelasma is more obscure because of the relative paucity of epidemiologic data and the conflicting results in some of the lipid studies. Several studies, however, showed decreased high-density lipoprotein cholesterol levels and other lipoprotein and apolipoprotein abnormalities that are associated with atherosclerosis.

Subjects and Methods

The subject was a xxx-year old male/female. The lesion had first appeared 12 years previously, and had gradually increased in size. There had been no previous treatment. (**Figs. 1, 2**) The focused CO₂ laser (2 W, 0.1 s, continuous wave [CW]) was used to make an incision around the margin of the lesion.

The central portion was then grasped with a pair of skin forceps and lifted upwards, while the defocused CO₂ laser (2 W, 0.1 s, CW) was aimed at the

base of the lesion so as to achieve smooth extirpation. It is possible in this way to remove all remnants of the xanthelasma palpebrarum by virtue of the dry field associated with the CO₂ laser wavelength. The wound was dressed with Terramicin (Terramicin®) ointment and a gauze pad to gather the exudates, and covered with sterile cling film in the occlusive dressing technique. The patient returned 48 hours later, the dressing was removed; the wound was gently patted dry with gauze and redressed.

Results

After 1 year, the present case demonstrates an excellent result of laser treatment for xanthelasma palpebrarum. (**Figs. 3, 4**) There is good skin texture and healing, with no sign of recurrence. The patient had no problem with bilateral ptosis.

Conclusions

The focused and defocused CO₂ laser was indicated for treatment of the lesion using laser excision, vaporization and hemocoagulation. The GaAlAs diode laser was also indicated in low level laser therapy (LLLT), used during the treatment of the xanthelasma palpebrarum lesion for pain control particularly as an anti-inflammatory agent, and for prophylaxis against and control of post inflammatory hyperpigmentation.

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Fig. 1

Fig. 2

Fig. 3

Fig. 4