

MEETING ABSTRACT

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Hemangiomas and laser therapy: clinical experience

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From de Senectute: Age and Health Forum
Catanzaro, Italy. 5-7 December 2009

Background

Hemangiomas are common benign vascular tumors characterized by a proliferative growth phase followed by very slow and inevitable regression. They are classified as capillary, cavernous, and mixed lesions, 60% are localized on the head and neck but they can be found in all regions of the body. Most of the lesions are focal and solitary, while 15%–20% are multiple with involvement of extracutaneous sites. Although hemangioma is usually benign, its growth is very unpredictable, due to uncontrollable endothelial cell proliferation, and complications are frequent because hemangiomas can evolve in ulceration. We present our clinical experience on the role of lasers to treat port wine stains, superficial hemangiomas, and café au lait macules.

Material and methods

Literature 1 reports many treatment modalities including close observation, drug therapy, sclerotherapy (steroids, bleomycin), cryotherapy, radiotherapy, laser therapy, and surgical therapy. There still exist many controversies over the optimal treatment options for individual patient. Between 2005 and 2009 we used different types of laser therapy, indicated in proliferative hemangiomas, to treat 103 patients. The flash lamp pulsed dye laser (585 nm) has been used successfully in ulcerated lesions. The Nd:YAG laser (1060 nm) 2, which penetrates deeper in the tissues, produce considerable scarring. Scarring appears to be less with a tunable dye laser (577 nm).

Results

After 6 months of follow-up from the first session of laser treatment, total resolution was obtained in 72 patients. A second or third session followed in 29

patients in which, the initial results were good, moderate, or poor. Two patients refused the second session. Complications were seen in nine patients. One patient had postoperative bleeding which stopped spontaneously, while atrophic scars occurred in six patients, and hypertrophic scars in two patients.

Conclusions

Nd:YAG laser irradiation produces good cosmetic results for the treatment of cutaneous hemangiomas. Best results are obtained if patient epidermis are ice protected. That decreases the number of sessions for treatment of these lesions.

Published: 19 May 2010

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doi:10.1186/1471-2318-10-S1-A62

Cite this article as: Ciriaco et al.: Hemangiomas and laser therapy: clinical experience. *BMC Geriatrics* 2010 **10**(Suppl 1):A62.

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