



Low Level Laser Therapy & Herpes clinical research

Laser Therapy of Human Herpes Simplex Lesions

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ABSTRACT: Herpes Simplex is rather a widespread illness caused by human herpes virus generally combining primary lesions with periods of latency. The authors evaluate results of treatment with a low power laser and with classical antivirals. Obtained results are demonstrated in attached tables. By way of illustration the editor also attached a series of images showing typical history of a herpes lesion treated with a laser.

INTRODUCTION: Herpes Simplex is an illness caused by the human herpes virus types 1 and 2 that generally present a primary lesion, with periods of latency and a tendency to relapse. It is also known as *Button of fever* or *Bladder of fever*. According to the World Health Organisation (WHO) an international prevalence of about 60 % is observed (1, 2). An experimental study was carried out, where 232 patients affected by the Herpes Simplex type 1 virus were treated. All patients attended the clinic „Leonardo Fernández“ in Cienfuegos during the period of January 2001 to January 2003, with the objective of determining the time of recurrence of labial herpes in the groups, studied before and after treatment, and to evaluate the effectiveness of low power laser in the treatment of the infection of the virus.

MATERIALS AND METHODS: Two groups were selected (study and control) with 116 patients in each group, distributed and classified according to the clinical stage in which they went to consultation. In the study group the patients were offered treatment with a GaAlAs diode laser (670 nm / 30 mW - 40 sec) in the prodromal stage and the stage of vesicles; or (670 nm /20 mW - 2 min) in the crust stage and in infections infected secondarily. To all these patients radiation among vertebrae C2 - C3, where the resident ganglion of the virus is located during the latent periods (670 nm / 30 mW - 30 sec), was also applied. Control group was offered indicated treatment with antivirals (Aciclovir in cream and in pills) and other paliative therapies.

CONCLUSIONS: Periods of annual recurrence in the study group were prolonged considerably after having received treatment, whilst in the control group such evident changes were not shown. In the prodromal period the patients treated with laser all healed up in the first 48 hours, whilst those treated conventionally needed from 3 to 4 days to cure. In the vesicular period and the period of crust, those of the study group cured in majority in the first 48 hours, whilst those of the control group needed more than 5 days. In infected lesions those treated with laser cured mainly in 3 to 4 days, whilst those treated with medication needed more than 7 days to cure.

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Low-intensity laser therapy is an effective treatment for recurrent herpes simplex infection. Results from a randomized double-blind placebo controlled study.

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50 patients with recurrent perioral herpes simplex infections (at least once a month for more than 6 months) were treated with 690 nm, 80 mW laser, 48 J/cm², in a double blind study. Patients received daily irradiations for two weeks, 10 treatments. The treatment was given in a recurrence-free period and the irradiation was given at the site of the original herpes simplex infection. If both lips were involved, both upper and lower lips were treated. Patients were monitored for 52 weeks. The mean recurrence-free interval in the laser group was 37.5 weeks (range; 2-52 weeks) and in the placebo group 3 weeks (range 1-20 weeks). No side effects were noted.

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