Formação de Especialização em Eletrofisiologia com Aplicações Terapêuticas

Parte 8
FBM

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Um bom exemplo!

TABLE 1 PARAMETERS FOR CLUSTER LOW-LEVEL LASER THERAPY

Number of laser diodes	5
Wavelength	810 nm (infrared)
Frequency	Continuous output
Optical output	200 mW each diode (total of 1000 mW)
Spot size	0.0364 cm^2 each spot
Power density	5.495 W/cm^2 (for each laser spot)
Energy density	164.85 J/cm^2 (for each laser spot)
Energy	30 J on each point (6 J from each spot)
Treatment time	30 s on each point (60 s of total treatment time)
Number of irradiation points per muscle	2
Total energy delivered per muscle	60 J
Application mode	Cluster probe held stationary in skin contact with a 90° angle and slight pressure

Segurança

video

FOTOBIOMODULAÇÃO NO TRATAMENTO DAS DTMS

Medicina Fluminensis : Medicina Fluminensis, Vol.53 No.1 Ožujak 2017.

Izvorni znanstveni članak
DOI: 10.21860/medflum2017_173373

The effects of low level laser therapy on the management of chronic idiopathic orofacial pain: trigeminal neuralgia, temporomandibular disorders and burning mouth syndrome

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Aim: To investigate the efficacy of different wavelengths of low level laser therapy (LLLT) in the management of orofacial pain by measuring the pain reduction using visual analogue scale (VAS). Materials and methods: Study involved 20 patients with trigeminal neuralgia (TN), 20 with temporomandibular disorders (TMD) and 40 with burning mouth syndrome (BMS). 50 % of the patients in each syndrome group were treated with 660 nm laser, and other 50 % with 810 nm laser. Orofacial pain was quantified by the VAS. Results: VAS was significantly lower after the application of LLLT, in all subjects and for both applied wavelengths ($P < 0.05$). Efficacy of 810 nm laser compared to 660 nm laser was significantly higher for all patients and in both the TN and TMD groups ($P < 0.001$; $P = 0.005$; $P = 0.024$). Conclusions: LLLT has proven to be an effective intervention in reducing pain in TN, TMD and BMS patients. Better results can be achieved with higher wavelengths.

Efeitos analgésicos do laser

A Meta-analysis of Clinical Effects of Low-level Laser Therapy on Temporomandibular Joint Pain

Wen-Dien Chang e col. J Phys Ther Sci. 2014 Aug; 26(8): 1297–1300.

Published online 2014 Aug 30.

- “wavelengths of 780 and 830 nm can cause moderate and large pain relief effects.”

The use of phototherapy in the management of TMJ pain: clinical evidence of benefits and limitations

A.L.B. Pinheiro[a], A.P. Soares*[a], A.M.C. Marques[a], F.B. de Carvalho[a], L.G.P. Soares[a], S.C.P.S. de Oliveira[a], M.C.T. Cangussú[b].

Mechanisms of Photobiomodulation Therapy XII, edited by Michael R. Hamblin, James D. Carroll, Praveen Arany, Proc. of SPIE Vol. 10048, 100480N · © 2017 SPIE · CCC code: 1605-7422/17/$18 · doi: 10.1117/12.2251179

Tratamento: 3 vezes por semana por 4 semanas.

Dose: 3 joules por ponto na ATM.

COMPARAÇÃO VERMELHO E INFRAVERMELHO:
INFRAVERMELHO AINDA MELHOR QUE VERMELHO.

Lasers Med Sci (2018) 33:181–214
DOI 10.1007/s10103-017-2368-6

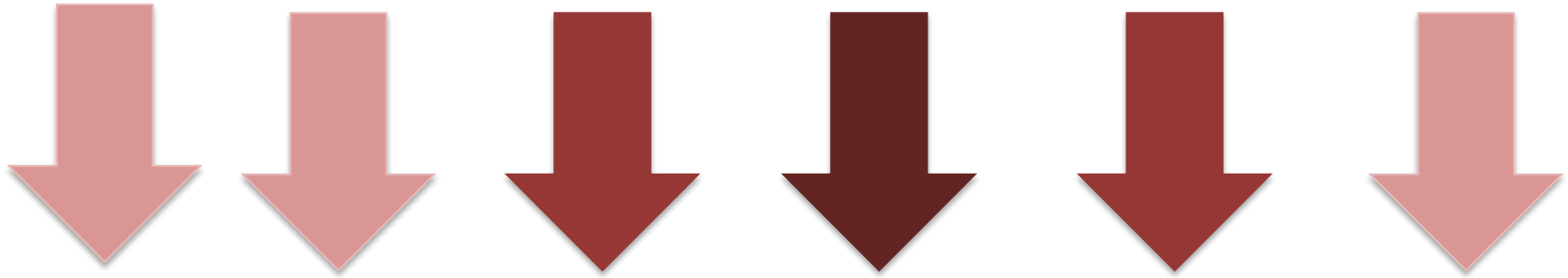
REVIEW ARTICLE

Photobiomodulation therapy for the improvement of muscular performance and reduction of muscular fatigue associated with exercise in healthy people: a systematic review and meta-analysis

Adriane Aver Vanin[1,2] · Evert Verhagen[3,4] · Saulo Delfino Barboza[4] · Leonardo Oliveira Pena Costa[5] · Ernesto Cesar Pinto Leal-Junior[1,2]

Características

- 39 RTCs publicados;
- 28 selecionados;
- Pessoas submetidas a protocolos de força;
- Estudos com grupo placebo;
- Total de 861 indivíduos!!!

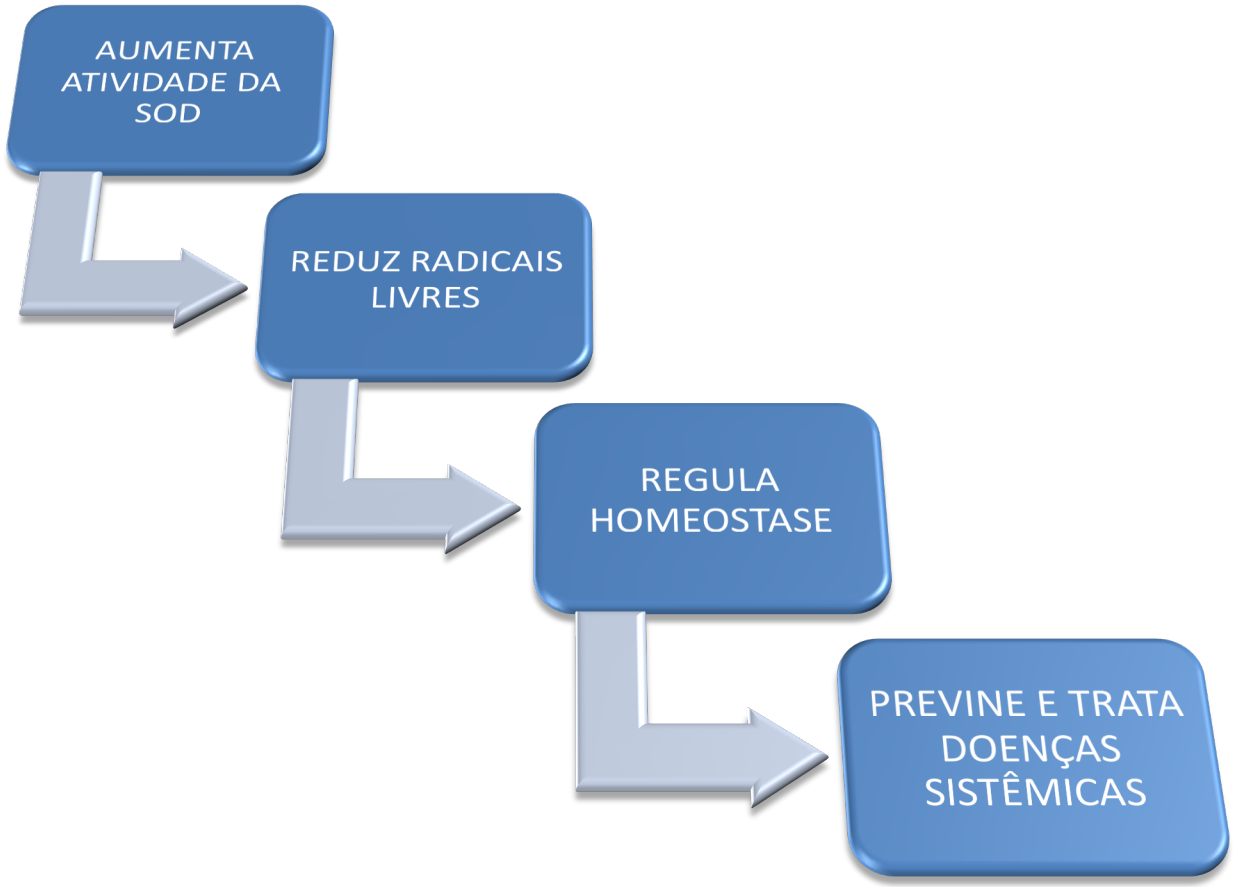


positive results were found using both low-level laser therapy and light-emitting diode therapy or combination of both in a wavelength range from 655 to 950 nm. Most of positive results were observed with an energy dose range from 20 to 60 J for small muscular groups and 60 to 300 J for large muscular groups and maximal power output of 200 mW per diode.

ILIB

INTRAVASCULAR LASER IRRADIATION OF BLOOD

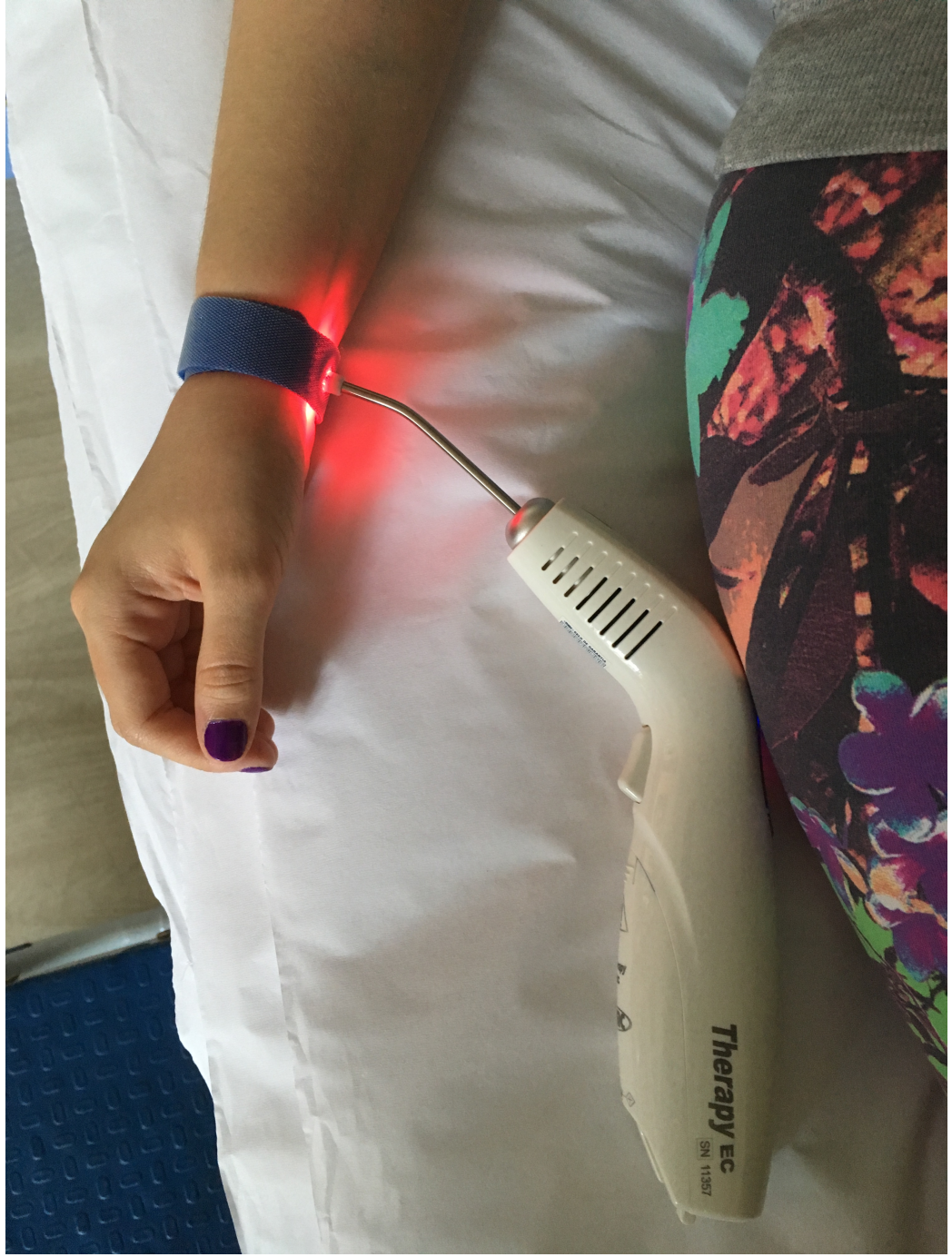
- ✓ Utilizado pelos russos nos nos 70;
- ✓ Atua nas células sanguíneas;
- ✓ Tempos de até 30 minutos por aplicação.


AUMENTA ATIVIDADE DA SOD
REDUZ RADICAIS LIVRES
REGULA HOMEOSTASE
PREVINE E TRATA DOENÇAS SISTÊMICAS

TERAPIA ILIB

- TRATAMENTO DO SISTÊMICO ATRAVÉS DO SANGUE e MERIDIANOS.
  - Técnica modificada pelo INCOR;
  - Laser 660nm na artéria radial;
  - Programa:
    - 10 sessões de 30 minutos durante 10 dias;
    - 20 dias de intervalo;
    - Repete tratamento
    - 20 dias de intervalo.
    - Manutenção a cada 4 meses: 10 dias.

ILIB MODIFICADO



Obrigado

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