

## عنوان مقاله:

Non-thermal CO2 laser Therapy (NTCLT): A new pain relieving approach for chemotherapy- induced oral mucositis: the preliminary results

## محل انتشار:

یازدهمین کنگره بین المللی سرطان پستان (سال: 1394)

تعداد صفحات اصل مقاله: 2

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## خلاصه مقاله:

Background: Non-Thermal CO2 Laser Therapy (NTCLT) is a novel laser phototherapeutic procedure in which CO2 laser can be used as a nonthermal, low intensity (low level, photobiomodulative) laser to reduce pain in some oral mucosal lesions immediately and dramatically without any visible thermal side effects such as ulceration or aggravation of the lesions or even erythema. The purpose of this before- after clinical trial was to evaluate the pain relieving effects of application of single session of NTCLT in Chemotherapy- induced Oral Mucositis (COM). Study Design: The patients with COM were included in the trial according to inclusion and exclusion criteria. Before CO2 laser irradiation, a layer of non-anesthetic, transparent gel with high water (87.5%) content was placed on the lesions. Then the lesions were irradiated with CO2 laser (power: 1 W, continuous mode, scanning rapidly over the lesions with circular motion of hand piece) through the gel layer. The patients reported their pain on VAS before and immediately after NTCLT and up to 4 days post operatively. Results: The pain severity declined immediately and significantly after NTCLT ( $p < 0.001$ ). This analgesic effect was consistent during the follow-up periods. The procedure itself was painless and no kind of anesthesia was required. There were no visible complications following NTCLT. Conclusion: Up to now, the results of this clinical trial suggest that single session of NTCLT could reduce pain in COM immediately and significantly without any visible complications.

## کلمات کلیدی:

cancer, chemotherapy, oral mucositis, NTCLT, laser phototherapy, pain

## لینک ثابت مقاله در پایگاه سیویلیکا:

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