

Effectiveness of Hemoglobin Spray and 830nm Light Emitting Diode Low Level Light Therapy in Chronic Wound

Budsara Sitthikhet ; ET,RN , Wasana Kijpotjanee ;ET,RN, Punnika Tangchitthavorngul; BU* Director

Veeravorn Ariyakhagorn ; Vascular surgery Doctor, Pruesttipong Kaviros ; Vascular surgery Doctor

Bumrungrad International Hospital, Thailand

*Business Unit

Background

830nm Light Emitting Diode Low Level Light Therapy is a new technology that help to promote wound healing by the very high efficacy of phototherapy with low incident levels of 830nm wavelength with appropriate intensities and doses. The combination of 830nm LED- LLLT with hemoglobin spray are rapidly healing wound with the patient sastisfaction.

Method

This is the report of the effectiveness the new technology 830nm LED-LLLT combined with hemoglobin spray to promote wound healing. Wound dressing daily with hemoglobin spray and used of 830nmLED-LLLT 2times per week and the tissue granulation was investigate daily.

Result

Total 3cases of chronic wound were treated with 830nm LED-LLLT and hemoglobin spray, effective wound healing was achieved. All patients were sastisfied with the treatment.

Conclusion

The used of 830nm LED-LLLT combined with hemoglobin spray are the enhanced safety of the treatment, harmless and beneficial. Both of them are varies of purposes and achieving excellent results faster and better.

Reference

Min, P. K., & Goo, B. L. (2013). 830 nm light-emitting diode low level light therapy (LED-LLLT) enhances wound healing: a preliminary study. Laser therapy, 22(1), 43–49. <u>https://doi.org/10.5978/islsm.13-or-06</u>

R Glen Calderhead PhD, DrMedSci, FRSM.(2011).Healite II with photosequencing technology: A novel phototherapeutic approach involiing photosequencing with 590nm and830nm LED energy:Preconditioning 590nm MICRO-Low level light therapy(μ-LLLT) in combination with 830nmLED photatherapy. VP, Cliical affairs, Lutronic Corporation, Goyang, Korea.