

Literature

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Abstract

BACKGROUND AND RATIONALE

DEEP OSCILLATION® has proven effects in different indications. The purpose of this animal study was to investigate wound healing effects of DEEP OSCILLATION®.

MATERIAL AND METHODS

40 male whistar rats were randomly assigned either to excisional (full thickness) or scarification (split thickness) wound model. Then again by randomization we compared DEEP OSCILLATION® to usual care.

RESULTS

The following results were obtained in the split thickness wound model: significant improvement of planimetry results, significant inhibition of myeloperoxidase activity in the new epidermis, significant inhibition of the glutathione peroxidase activity in the granulation tissue and significantly decreased swelling in the wounded area (ratio of dry to wet tissue weight).

The following results were obtained in the split thickness wound model: significant improvement of planimetry results, significant inhibition of myeloperoxidase activity, significant inhibition of lipid peroxidation and significantly decreased swelling in the wounded area (ratio of dry to wet tissue weight).

CONCLUSION

The authors conclude that DEEP OSCILLATION® has the following general effects concerning wound healing: improvement in wound healing (dynamic wound healing), anti-inflammatory effect, acts as an anti-oxidant, anti-inflammatory effect, decreases swelling, antiedematous effect. DEEP OSCILLATION® positively affects wound healing in terms of systematic parameters and in the visible result.