PREPARATION OF RECIPIENT WOUND BED FOR SKIN FLAPS BY ELECTRICAL STIMULATION AND ULTRASOUND THERAPY

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The study was carried out on 12 clinical cases of dogs that were brought to Madras Veterinary College Teaching Hospital, Chennai with large chronic wound requiring skin flaps. Group I animals with wound's were treated with electrical stimulation. Wounds on Group II animals were treated with Low intensity pulsed ultrasound (LIPUS). The flaps performed in the present study were single pedicle and bipedicle advancement flaps, flank and elbow rotational flap, transposition flap and caudal superficial epigastric flap. Subjective evaluation of wound healing based on the physical observations such as colour, odour and presence of exudates for recipient wound bed and skin flap
respectively were performed. Clinical Photography, Wound Planimetry studies were evaluated. Additionally, hematological, bacteriological, biochemical, and histopathological evaluation were done for the recipient wound bed and skin flap. A subjective analysis of vascularity of the donor site was performed through Colour flow Doppler ultrasonography. After reconstructive surgery, skin flap vascularity and uptake were analysed by the same procedure on 3rd, 7th and 14th day respectively. The results of the study will be discussed.