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### WOUND PAIN – ASSESSMENT AND MANAGEMENT A 24 HOUR APPROACH

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**Aim:** The aim of the project was to differentiate between the different types of wound pain, their potential precursors, descriptors and pain management regimes.

**Methods:** The authors were aware of a theory practice gap in the management of neuropathic and nociceptive wound pain. Therefore a review was undertaken of current assessment tools and pain management regimes which were then reconciled with patient descriptors and the reality of wound pain during the 24 hour period. A wound pain algorithm that addressed both neuropathic and nociceptive pain was developed that provided specific advice for the clinician. In addition a pain pyramid was utilised to assist in understanding the significant impact wound pain has on the individual.

In order to ensure widespread dissemination of the material the authors worked with the Wound Care Society, UK, to produce an educational resource to assist clinicians in assessing and managing wound pain.

**Discussion:** This document has developed the work from previous groups i.e. European Wound Management Association (2002), World Union of Wound Healing Societies (2004). It provides pragmatic advice that is patient focussed and places pharmaceutical interventions alongside every day wound pain inducing experiences.

#### References

European Wound Management Association (2002) Position document: Pain at wound dressing changes. London. MEP Ltd.  
World Union of Wound Healing Societies (2004) Principles of best practice: Minimising pain at wound dressing-related procedures: A consensus document. London. MEP Ltd.

## P 2

### THE EFFECT OF RECOMBINANT HUMAN GROWTH FACTOR (RH-EGF) AGAINST RADIATION INDUCED DERMATITIS OF MOUSE

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**Background:** This study evaluated the efficacy of recombinant human epidermal growth factor (rh-EGF) radiated wounds of mouse skin.

**Method:** Total of 30 nude mouse were exposed to 15Gy daily of total 45Gy on their femoral region. Six mouse were randomly assigned to one of the five groups; 1) control, 2) vehicle-treated and 3,4,5) rhEGF treated groups (ointment of 10ug/g, 50ug/g, 100ug/g rh-EGF each). During the 6 month evaluation, healing was defined as complete epithelialization and recurrence was defined as breakdown of the skin on the region of radiation. All wounds were evaluated by digital photography and histology at 6 months.

**Results:** Initial wound was observed in all groups and demonstrated no difference in achieving 100% healing time. However, the recurrence of the wound was significant in group 1 and 2 whereas the rh-EGF treated groups did not demonstrate any recurrence except the 100ug/g treated group. Histology revealed near normal appearance in the group 4, irregular epidermal thickness in group 3, and poor definition of dermis and epidermis in groups 1, 2, and 5. The collagen distribution were observed as followed; group 1 26.58%, groups 2 23.79%, groups 3 33.26%, groups 4 41.36%, and groups 5 22.37%.

**Conclusion:** The hypothesis that healing in normal manner can prevent further recurrence of wound caused by radiation is supported by the results suggesting that 50ug/g rh-EGF prevents further recurrence of wound despite radiation exposure. This is also supported by histologic findings that mimic the normal skin structure.