An Investigation into the Prevention of Blistering in Post-Operative Wounds: Results of a Delphi Survey

Original Citation


This version is available at http://eprints.hud.ac.uk/13788/

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

- The authors, title and full bibliographic details is credited in any copy;
- A hyperlink and/or URL is included for the original metadata page; and
- The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: E.mailbox@hud.ac.uk.
AN INVESTIGATION INTO THE PREVENTION OF BLISTERING IN POST-OPERATIVE WOUNDS: RESULTS OF A DELPHI SURVEY

AUTHORS: Dr Karen Ousey, Dr Warren Gillibrand, Dr John Stephenson - School of Human and Health Sciences, University of Huddersfield, UK

INTRODUCTION

- Surgical patients are at risk of developing post-operative wound complications, including blistering and infection, especially following orthopaedic surgery.
- Incidences of wound blistering have been reported in the literature of between 6% - 24%.
- Wound blisters can increase wound pain, delay wound healing and increase the susceptibility to wound infection.
- Consequently, the length of an ‘in patient’ hospital stay can be prolonged, increasing costs and adversely affecting the morbidity/mortality rates.
- Currently, the literature is equivocal as to whether the choice of wound dressing has an effect on wound complication rates.

METHODS

- A survey questionnaire was developed using item pool analysis from national policy, prior published research and research group agreement/consensus.
- Seventeen international, prospective participants were invited onto the Delphi panel.
- Two rounds of the Delphi process were completed; the 1st and refined 2nd questionnaires were delivered via email.
- Descriptive statistics relating to respondents’ opinions of treatment of wound blistering and wound dressing characteristics were derived for each data set independently; the results from the 2nd round analysis were additionally cross-checked against the results from the 1st round.
- Inferential statistics were not derived for either round of the survey due to the small sample size.

RESULTS

- Thirteen experts agreed to be involved in the survey; all completed the 1st round but only 9 completed the 2nd questionnaire.
- The mean proportion of wound blistering across all institutions was 15.5% (range 1% - 55%).
- The key findings are presented below.

Problems associated with wound blisters

MANAGEMENT OF WOUND BLISTERING

Nursing staff should be the 1st to assess a wound post-operatively

The primary wound dressing should be left in situ for as long as possible, providing there is no excessive oozing or signs of infection.

WOUND BLISTERING

- Increased pain
- Macerated skin
- Extended hospital stay
- Reduced patient mobility

DISCUSSION

At present, the literature contains a limited number of studies that have examined the effect of different dressings on post-operative wound healing, with no conclusive recommendations as to the most appropriate and effective dressing choice.

This study endeavored to achieve consensus between experts and practitioners as to the most clinical and cost-effective dressings and post-operative wound management to prevent blistering and other complications.

Although this Delphi panel was relatively small, it does provide valuable data to help identify the consequences of wound blistering and the important factors that should be considered when choosing a wound dressing to help prevent blister formation.

CONCLUSIONS

- The choice of post-operative wound dressing was the most important factor in the prevention of wound blister formation.
- Nursing staff should be the 1st to assess a wound post-operatively and to choose the appropriate wound dressing.
- The wound dressing should be left intact for as long as possible.
- An ideal wound dressing to prevent wound blister formation should: conform to the wound, be easy to apply, allow for swelling, be easy to remove and minimise pain on removal.

REFERENCES: