

# Review of the relationship between stress and wound healing: part 1

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## Why was the study undertaken?

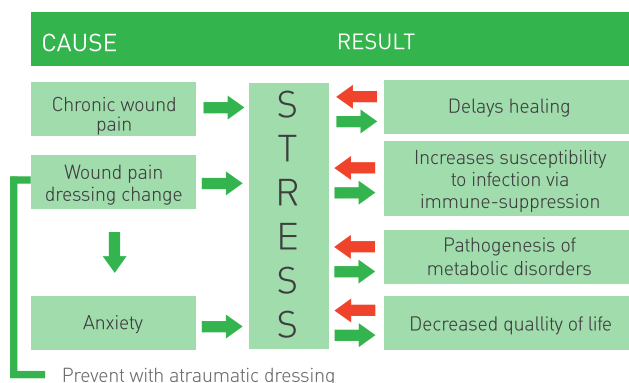
To review the evidence for the relationship between stress, pain and wound healing, focusing on research involving acute and chronic wounds in both experimental and naturalistic (observation of naturally occurring wounds) settings.

## Who are the authors of the study?

- Kazia Solowiej (Research Assistant), Victoria Mason (Senior Lecturer) and Dominic Upton (Professor of Health Psychology), all based in the Department of Psychological Sciences, Institute of Health and Society, University of Worcester, Worcester, United Kingdom.
- The authors have a keen interest in the psychology of pain and have written a number of articles relating to the psychological aspects of wound-related pain.

## What were the key findings?

- Pain can contribute to stress, anxiety, fear and depression.
- Stress is a multidimensional concept as it comprises physiological, psychological and social factors.
- Studies of biopsy wounds, surgical wounds and chronic wounds provide evidence to show that stress and anxiety are detrimental to the wound healing process.
- Chronic pain and the anticipation of pain (e.g. prior to dressing change) can generate distress; this may have detrimental effects on the healing of acute and chronic wounds.
- Using appropriate dressings to minimise pain could potentially minimise stress.
- Practitioners should pay particular attention to both physiological and psychological aspects of stress when delivering wound care.



## What commercial involvement was there in the study?

- This is the first in a series of two review articles commissioned by Mölnlycke Health Care, as part of a research programme to examine the relationship between stress, dressing-related pain and wound healing.
- A summary of the findings of this review was presented at the Mölnlycke Health Care Satellite Symposium held at the European Wound Management Association Conference, Helsinki, Finland, 2009; May 21.
- The second article will examine physiological and psychological measures of pain and stress that can be implemented in clinical practice.

## Are there any useful quotations in the article?

“As wound pain can contribute to psychological stress, measurement and successful management of wound pain could help minimise stress in patients, and thus promote faster healing of acute and chronic wounds.”

## How meaningful are the results of the study?

- The authors are all highly skilled in undertaking literature searches and utilising appropriate databases, searching techniques, and inclusion/exclusion criteria for the purposes of this review.
- Evidence of the relationship between stress, pain and chronic wound healing is limited; most of the evidence for a causal link between stress and wound healing is from studies of acute wound healing.