

## Wound Patient Factors

Epidemiological studies have suggested that there are several types of patient factors that have an impact on their risk for developing wounds as well as their expected rate of wound healing. Such factors may be characteristics of the patient's physical constitution such as their age and ethnicity, their body type or composition, the position of their body (eg, do they have contractures), their mental status (which may affect their mobility) and whether they have an existing amputation of a lower extremity. Patient factors that affect wound healing may also be characteristics of their lifestyle or habits such as the use of alcohol, smoking, and the presence or absence of family or a social support system (which may affect compliance), as well as the medications patients are taking.

## Physical Aspects of the Wound

There are key characteristics of the wound itself that have an impact on healing rates for the patient concerned. These characteristics include the overall shape and dimensions of the wound, the location of the wound on the body, whether there is one or multiple wounds on the patient, the quality of the tissues in the wound bed (eg, are the tissues healthy or dying), the temperature of the exposed tissues, the amount and quality of the wound exudate, and the presence of maceration.

Additional characteristics of the wound may be indicative of an infective process, such as the presence of cellulitis, odor from the wound, pain in the wound, condition of the wound margins, continence status (if the wound is in the perineal area), and the presence of edema or lymphedema. Also, the duration of time that the wound has been present, or if it has reoccurred, seem to correlate with healing rates.

## The MACROscopic Biochemical Environments of the Wound

There are also key macroscopic aspects of the overall biochemistry of the body, which can impact the biochemistry or cells involved in the healing process. These aspects include the patient's metabolic control, their nutritional status, their immune status and presence of inflammation, their circulatory status (perfusion), the presence of infection, and the moisture balance in the exposed tissues of the wound.

## The MICROscopic Biochemical Environments of the Wound

Microscopic aspects of the wound which affect cells or biochemistry include the levels of tissue proteases, the levels of key intercellular communication chemicals such as cytokines and growth factors, the presence and duration of tissue hypoxia, the proliferative capacity of the cells, especially the fibroblast, and the levels of bacteria and bacterial by-products in the wound.



# Core Healing Principles

## A Systematic Approach to Wound Care



# Core Healing Principles

## Categories of Factors Affecting Wound Healing

- Patient factors
- Physical aspects
- MACROscopic environment
- MICROscopic biochemical environment

