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## Nursing Information 1

Why is alternating pressure  
not always the correct treatment  
for pressure ulcers?

**IGAP**

Institute for Innovations in Healthcare  
and Applied Nursing Science

Dear reader,

In daily practice it is often hard to find a suitable pressure care system for the patient that agrees exactly with his needs.

**The reason: There is no working principle that is suited for every patient to lead to the best therapeutical success possible.**

In pressure care, alternating pressure systems are now established for years. Based on the latest findings and observations in nursing and medicine however, their concerted use should be thoroughly scrutinised.

Encouraged by the process of professionalising in German care, nursing concepts like e.g. Aktivitas Care, kinaesthesia or consisting and scientifically proved concepts that were modified for nursing, like e.g. basal stimulation, were developed. The improved nursing expertise resulting from this allows a holistic and patient-oriented care.

The way of handling the subject pressure ulcer is in the process of fundamentally changing as well. Whereas years ago pressure sores have been regarded as a pure result of pressure and shearing forces, we know today that psycho-social factors can also strongly influence the events. Therefore, product development of pressure care systems focused only on reducing pressure and shearing forces.

According to the current state of knowledge, considering the former illness is critical for choosing the appropriate positioning system. For patients with perceptive disorder especially, like e.g. stroke patients and patients suffering from Alzheimer's disease, alternating pressure systems can cause serious side effects that can have a negative impact on the healing process.

### The use of alternating pressure systems leads to the following changes with patients:

- A negative habituation (degenerative habituation), due to regularly recurring monotonous stimuli
- Irritation of the body structure and the body-related perception
- Impaired co-ordination
- Environmental stimuli can be misinterpreted
- Spatial and sequential disorientation
- Communicational disorders
- Conspicuous behaviour
- Emotional disorders
- Increase in existing pain symptoms due to intense lifting motions and temporary peak pressure
- Impeding of sleeping quality due to noise, vibrations and unphysiological lying position
- Negative changes of skin and bed climate
- Limited mobility. Therefore promotion of contractures
- Possible occurrence of spastics
- Negative influence on the patient's well-being due to a lack of adaptability that meets the needs

### The nursing persons can have difficulties in handling alternating pressure systems as well:

- Positioning and promoting the patient's mobility is more complicated
- Problems with patient transfer
- High sensitivity of many systems and inability to repair interferences
- System failure leads to an immediate complete loss of function

**These statements make it very clear that only responsible nursing staff and physicians should carefully choose the appropriate pressure care system based on the individual needs of each patient.**

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