

## **KALTPLASMA: How long does treatment and therapy with plasma care® last?**

### **This is how the therapy proceeds.**

The duration of a plasma care® therapy depends on various factors. One important aspect is which pathogen is affecting the wound. But there are several other circumstances that can interfere with wound healing. These include

- Concomitant diseases such as diabetes mellitus, anaemia, arterial circulatory disorders, venous insufficiency, gout and autoimmune diseases
- Poor nutritional status, alcohol and nicotine addiction
- A weak immune system, for example due to cancer or chronic infectious disease
- Medications such as anticoagulants, cytostatics and cortisone preparations
- Psychosocial circumstances, such as neglect, dementia or fear of pain

In addition, the wound itself may present poor conditions, such as

- A very large or deep wound
- Bruising with avital tissue
- Wound edges that are under tension or fissured
- Large haematomas in the wound area
- Inadequate immobilisation of the wound
- Pressure load
- Tendency to excessive scarring
- Folding of the wound edges after suturing (wound dehiscence)

Experience shows that problematic wounds heal after six to twelve weeks if they are treated regularly with plasma care® - provided no complications occur.

### **Duration of a single wound treatment**

**plasma care® is usually applied for one to three minutes per wound area.**

However, one minute is usually sufficient. A longer application is recommended, for example, for particularly aggressive pathogens such as Pseudomonas bacteria. They attach themselves to the wound and protect themselves with a layer of mucus that cannot be easily removed. In this case, the cold plasma needs three minutes to take effect.

### **When does wound treatment with plasma care® end?**

Whether a wound responds to cold plasma therapy becomes noticeable after only three to four treatments. Regardless of whether the wound is chronic or acute, the practitioner should then notice a change.

**Signs that the wound is responding well to therapy include:**

- Wound secretions become less and change in consistency, colour and odour.
- Wound edges contract and are in contact with the wound surface, macerations decrease
- Wound area decreases
- Wound depth decreases
- Granulation begins
- Pain decreases, especially at dressing changes

As soon as the wound has healed and closed, the plasma-care® therapy can be terminated. However, many patients suffer from severe underlying diseases that slow down the healing process. In these cases, even a first granulation or less wound secretion can be considered a success. If a wound deteriorates again, the therapy can be resumed at any time.

The fact is: every improvement increases the patient's quality of life. This should always be kept in mind when considering whether treatment is worthwhile. In the following parts of this series, individual case reports show how well cold plasma is suited as a supplement to stage-appropriate wound care.