Problem wounds

What is important in wound care for general practioners?

kirov1969 - Fotolia

In addition to primary wounds, secondary healing wounds also may need to be treated in the general practice. Wounds resistant to treatment or chronic wounds are often associated with a high infection rate. Without treatment, healing may take up to 8 weeks. The manifestations of such problematic wounds are manifold, but can be well treated with newly developed wound dressings.

Multimorbid patients are often affected by complicated wounds (Fig. 1). All individual factors must therefore be taken into account for adequate therapy. In parallel, local therapy of the wound is carried out with specific treatment steps and wound care products.

Systemically relevant influencing factors include malnutrition, limited mobility, metabolic disorders, adverse drug reactions, biological age and cardiovascular disorders. Local factors influencing wound healing include pressure damage, effects of shear forces, infections, dehydration, wound dehiscence, necrosis or individual manipulation.

Disease patterns in wound care

The most common causes of complicated and chronic wounds are CVI (chronic venous insufficiency) and PAOD (peripheral arterial occlusive disease) due to venous or arterial circulatory disorders, DFS (diabetic foot syndrome) due to diabetes mellitus or decubiti (pressure ulcers, most frequently in the sacral region or on the heel) due to pressure and/or shear forces.

Adequate care of wounds

Without consistent treatment of causal therapy, subsequent local wound care has no chance of success and modern wound dressings would not be economically justifiable. The first step is debridement (the removal of avital tissue, coatings and/or foreign bodies), followed by cleansing or decontamination of the wound. Depending on the degree of contamination, different procedures are used. If an antiseptic wound irrigation solution is used, care must be taken to maintain the antiseptic substance identity when covering the wound later. Different antiseptic substances (e.g. octenidine

Contipro

Fig. 1: Complicated wound types in GP care
1 Posttraumatic wound healing disorder
2 Venous leg ulcer
3 Diabetic foot syndrome (DFS)

dihydrochloride, PVP-iodine, polyhexanide, silver) must not be combined or mixed directly with one-another. This is followed by a detailed wound assessment. Wound size, depth, base, margin, environment and quantity or quality of exudate are used for evaluation. Signs of inflammation and infection should be considered.

Using modern wound dressings economically

Especially in complicated, chronic wounds, a modern wound dressing should fulfil various criteria, depending on the healing phase. Economical and user-friendly wound care can be achieved very well with products that cover more than one wound phase. It is also advisable not to use more than one or two products per wound. Dressings are medical devices and not auxiliary or medicinal products and, if medically necessary, can be prescribed via the statutory health insurance (GKV). However, they are relevant to guideline sizes and are subject to the economic efficiency. Depending on the type of wound, wound care products currently used can significantly accelerate healing. A cost-conscious, medical prescription according to the specifications of § 9 of the pharmaceutical guideline (AM-RL) means: The treatment strategy chosen must be most economical when taking into account daily therapy costs and total treatment duration. In the case of therapeutically equivalent dosage forms or products, the least costly offer should be chosen in accordance with the regulatory requirements, provided there are no medical reasons to the contrary. When treating wounds at the expense of the SHI, the requirements of the wound situation and economic efficiency (§ 12 SGB V in conjunction with § 9 AM-RL) must always be taken into account. Therefore, in addition to the determination of a specific product, prescription quantities, pack sizes and change intervals of modern wound dressings are also decisive. The prescribing physician must therefore consider whether the unit price of a product is as low as possible or whether, for a given indication, it would not be significantly more effective and economical to use a modern, universal wound dressing from the outset. At present there is a wide range of products. In addition to convincing efficacy, a universally applicable wound dressing must fulfil as many other requirements as possible. These include the option of adapting the size to the wound or multifunctional properties such as high absorbency, antiseptic and activation of wound healing.

INFO

Criteria of modern wound dressings

- Easy handling and universal applicability (across wound phases)
- Can be cut to size and adapted to anatomical contours
- Sterile and hypoallergenic
- Guarantee of atraumatic, residue-free removal
- Direct contact with the wound bed
- Guarantee of gas exchange, i.e. avoidance of occlusion
- Absorption or transfer of excess exudate
- Maintenance of an optimal, physiological moisture environment
- Good absorption, retention and rehydration capacity
- Multifunctional, synergetic properties (e.g. cleansing, decontaminating, activating)
- Protective function: pressure, dehydration, trauma, foreign particles, secondary infection
- Support of autolytic wound cleansing
- Wound healing-promoting (active) substances or combinations of active substances
- Use of non-toxic materials - Thermal insulation (prevention of heat loss)
- Ensuring wound dormancy through long dressing change intervals
- Few dressing changes, efficient pack sizes
- Economic total therapy costs (third party comparison)

Source: Own representation according to Moderne Wundversorgung (2019); Hrsg. Arbeitsgruppe Arzneimittel Rheinland-Pfalz

INFO

Categories of modern wound dressings

- Silver-containing wound dressings
- Antiseptic wound dressings
- Cavity products
- Hydrogels and hydrogel dressings
- Hydrocolloid dressings
- Impregnated wound gauzes
- Interactive wound dressings
- Superabsorbent dressings, absorbent dressings
- Foam dressings
- Alginates
- Wound spacers (hydroactive, with silicone)
- Wound films
- Wound dressings containing active substances
- Activated charcoal dressings

Source: Own representation according to: W. Sellmer (2021); Preisinformationen zu Produkten der modernen Wundversorgung

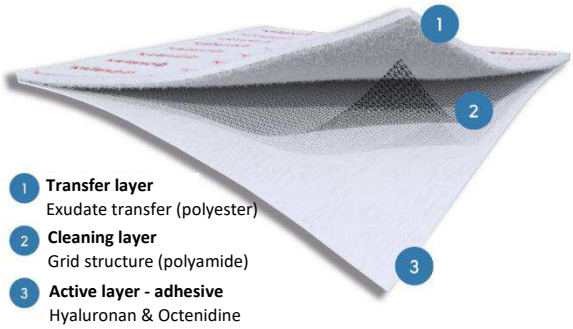

Fig. 2: Three-layer, multifunctional wound dressing, which is also well suited for use in the general practice.

Adhesive capabilities of a primary dressing facilitate handling and are very helpful when applying the secondary dressing. The reduced workload due to reduced dressing changes and the possibility of combination with inexpensive secondary dressings can also be important features of a modern wound dressing. Multifunctional products with synergistic, active agent combinations appear to be particularly advantageous as they can be used across wound phases. Uneconomical product changes adapted to the respective wound healing phase are thus obsolete.

Multifunctional wound dressings and -therapeutics appear to be beneficial.

The use of hyaluronic acid

In the adjoining paper we describe a three-layer, multifunctional wound dressing (Fig. 2). By combining sodium hyaluronate (hyaluronic acid, hyaluron) with the antiseptic agent octenidine dihydrochloride (octenidine), this wound dressing can be used very early in local therapy - when the wound is still bacterially loaded. Its active layer also has adhesive properties and adheres to the wound by itself.

ESSENTIALS

Important for the consultation:

- ✓ The most common causes of complicated and chronic wounds: CVI, PAOD, DFS and pressure ulcers
- ✓ Especially in multimorbid patients, causal therapy is indispensable
- ✓ One of the most important criteria for wound dressings: easy handling and universal applicability (across wound phases)
- ✓ Antiseptic wound dressings with hyaluronic acid can be used at an early stage.

It also has a cleansing layer for mechanical debridement or removal of coatings. The third, outer transfer layer drains excess exudate into a secondary dressing. The advantage of this wound dressing is that when an antiseptic or wound irrigation solution with octenidine is initially used, a consistent antimicrobial agent identity can be ensured.

The high concentration of hyaluronic acid also increases the healing rate and accelerates wound healing. Scar formation is also reduced. Hyaluronic acid activates various cellular processes and has an intense regenerative effect in epidermal proliferation and dermal renewal.

Hyaluronic acid triggers the macrophage response and induces angiogenesis of the injured tissue, stimulates fibroblast proliferation throughout healing and supports the build-up of extracellular matrix. Hyaluronic acid also regulates cell migration and is well tolerated.

No noticeable side effects have been reported so far. Combination products based on hyaluronic acid are similarly priced as products with physical properties or with silver-based active ingredients. However, due to the antiseptic component, they can be used across wound phases, even on infected wounds.

You can find the complete references at www.doctors.today

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