Wearable Handmade Wound Dressing: Letter to the Editor
Giyibleşir El Yapımı Yara Pansumani

Ozan BALIK, MD, Koray URGU, MD, Adnan MENDERES, MD

ABSTRACT Until the mid 1900s it was firmly believed that wounds healed more quickly if they were kept dry and left uncovered. After much careful research, we now understand that wounds heal faster and better when a moist environment is maintained. We suggested a new idea for dressing wide wounds. Underpads made from 100% cotton were treated with mupirocin and D-pantethanol pomade in a steel container and then they were sterilized. In the last step, patients put on second underpads over the handmade dressing. This is time saving, easy to use make dressing easily and very cost effective. Furthermore, it is more comfortable for the patient and mobilization of the patient is easier than traditional dressing. Application areas may be multiple such as gloves, socks, undershirt, even braces for burn wounds, chronic ulcer wounds, crush injury, and skin grafted areas.

Key Words: Surgical wound infection, bandages, occlusive dressings, wound healing


Anahtar Kelimeler: Çerrahi yaralar, yara pansumaları, pansuman, yara iyilemesi


Natural adhesive was used as early as 4000 years ago, as resins were applied to rags for “stickiness”. Early Sumerians (around 2100 B.C.) recorded the first use of bandages. They described procedures for the treatment of wounds such as washing, malung plasters, and bandaging.

Until the mid 1900s it was firmly believed that wounds healed more quickly if they were kept dry and left uncovered. After much careful research, we now understand that wounds heal faster and better when a moist environment is maintained. Keeping a moist environment for the wound is one of the major considerations in developing a dressing. The importance of the moist wound environment to wound healing was first outlined by Win-
ter and has been extensively reviewed in other publications.²

Wounds that are covered with skin grafts tend to be crack and scale. Especially split thickness grafts require lubrication until sebaceous and sweat secretion returns.³,⁴ Topical antibiotics have been used in wound care for many years. A number of reports suggested the effectiveness of topical antibiotics for prevention of infection in surgical and traumatic wounds.⁵-⁷ Occluded wounds were shown to heal with cosmetically superior results, which is likely related to a modification of the inflammatory process and the acceleration of collagen remodeling and wound contraction.⁸,⁹

In this article, we present a new wound dressing technique for a patient with hidradenitis suppurativa. The patient underwent excision and grafting; then a dressing was made with mupirocin and D-panthenol pomade absorbed gauze. This dressing provides lubrication and a moist environment that a skin graft requires. In addition, this combination prevents the most common bacterial skin infections and increases epithelial growth on grafted area.¹⁰-¹² We usually prepare wound materials handmade but this procedure may be difficult and time consuming as was in the presented case.

We suggested a new idea for dressing wide wounds. Underpants made from 100% cotton were treated with mupirocin and D-panthenol pomade in a steel container and then they were sterilized with ethylene oxide. The patient put on this handmade dressing after cleaning with 0.9% NaCl solutions. In the last step, the patient wore second underpants on the handmade dressing (Figure 1, 2).

This method is time saving, easy to use and very cost effective. Furthermore, it is more comfortable for the patient and mobilization of the patient is easier than with traditional dressings. Moreover, hospitalization period may be shorter since the patient can prepare wound dressing at home.

In conclusion, we suggest wearable handmade wound dressing materials such as we presented here. Application areas may be multiple such as gloves, stocks, undershirt, even brassiere for burn wounds, chronic ulcer wounds, crush injury, and skin grafted areas.

KAYNAKLAR


