

Treatment of chronic wounds: an issue for Africa

Chronic wounds represent a major, yet ill-recognized, public health problem in Africa. Compared to tropical wounds of infectious origin (Buruli ulcer, leprosy, sickle-cell anemia, leishmaniasis, phagedenic ulcer, etc.), the incidence of diabetic and vascular ulcers is on the rise. Pressure ulcers and burns of paraplegics or people confined to bed constitute another source of chronic wounds. The treatments offered rely chiefly on the concepts of disinfection and drying out, which consequently delay the healing process. For the patient, these procedures beget suffering and other major costs. The consequences linked to poor wound-dressing may sometimes lead to a breakdown in social life.

For three years, Médecins Sans Frontières (Doctors Without Borders), with the help of the Haute Ecole de Santé of Geneva and the Hôpitaux Universitaires of Geneva, has developed an innovative approach to wound treatment for the program dedicated to fighting against Buruli ulcer disease in Akonolinga, Cameroon. The main objective of this pilot project was to show that wound healing conducted in a humid milieu can be adapted to a tropical context.

Several training sessions have updated doctors and nurses on the international consensus on healing. A wound description card was tailored with our Cameroonian colleagues to consider the char-

acteristics of the Buruli ulcer and colored cards were constructed to facilitate decision making. For each situation, a treatment was offered that could be executed with the materials characteristically found in an African health center (compresses, polyvidone iodine, tulle gras, Vaseline, etc.). The use of a limited range of modern¹ dressings has also been proposed. The notion of wound infection was tackled with the aim to streamline the use of antiseptics and antibiotics. Additionally, attention has been placed on the fight against edema.

The results of this effort are already conclusive. The different stages of wound healing have been well integrated by the doctors, who are capable of defining the correct course of treatment to follow. The use of wound description cards and photos help maintain structure and organize the team effort. The modern dressings facilitate the work of the nurses and also improve the comfort of the patient. The diminution of dressing renewal allows for ambulatory treatment carried out by a mobile team that visits the village only twice a week. The efficiency of these procedures is evident in the detersion and granulation phases. However, the results obtained in the epidermization phase are more contentious and require more practice

¹ This list includes the following products: hydrogel, alginate, hydrocellular, hydrocolloid, charcoal, charcoal silver, and hyaluronan.



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The Buruli ulcer is an infection caused by *Mycobacterium ulcerans* which provokes large skin ulcers. Affecting rural populations with limited access to treatment, it is one of 14 neglected tropical diseases on which OMS (WHO) focuses its attention. Treatment of this disease includes wound treatment, the antibiotherapy Streptomycin-Rifampicin, surgery and physiotherapy.

For more information: www.who.int/buruli

Médecins Sans Frontière (Doctors Without Borders) is a medical humanitarian organization.

It supports the program in the fight against Buruli in Akonolinga in cooperation with the Ministry of Health of Cameroon. As of 2002, more than 750 patients have benefited from treatment.

For more information: www.msf.ch/buruli

to analyze the obstacles to wound healing and the appropriate countermeasures for each case.

This project shows that wound healing in a humid milieu can be adapted to tropical contexts and that the use of modern dressings facilitates the organization of and access to treatment. Therefore, it is essential that these practices expand in Africa. The refusal to recognize chronic wounds as a public health problem, the lack of knowledge on international consensus and the lack of adapted materials along with their exorbitant costs are the three main obstacles that are impeding the progress and spread of these practices.

However, there is still hope. Emerging nations, such as South Africa and Brazil, have developed

very interesting wound treatment networks comprised of doctor and nurse colleagues trained in Europe that are practicing their expertise despite limited means. Other connections to be drawn on include exchanges from nongovernmental organizations and twinning between hospitals and universities.

The global initiative created for wound and lymphedema treatment started by Handicap International, with the support of the OMS (World Health Organization), will publish a white paper at the end of 2009 with the objective to promote knowledge development on wound healing in developing countries.

“Modern” dressings, if they are not vital to the conducted healing process, strongly improve its



Fig. 1. Poorly administered use of polyvidone iodine.



Fig. 2. Fight against edema, a crucial element of wound treatment.



Fig. 3. Buruli ulcer.



Fig. 4. Poor wound treatment leads to serious side-effects.

practical application. The incidence of prices altered for Africa and the recourse to generics has allowed for the distribution of antiretroviral viruses against HIV, accommodating the interests of patients and pharmaceutical companies. This example must be adapted to modern dressings, which currently are exorbitantly priced and insufficiently distributed to the markets of developing countries. Delay in the established treatment of wounds and scars in developing countries is not inevitable. Quality care is not a utopia, but rather a goal to achieve. The knowledge that we have acquired must be adapted and Africa must not be deprived of modern dressings. In this challenge, EWMA as well as national wound and healing organizations can play a fundamental role with their networks and expertise. ■



Fig. 5. Buruli ulcer.



Fig. 6. Buruli ulcer.



Fig. 7. Use of hydrogel dressing.



Fig. 8. Use of hydrocellular dressing.



Fig. 9. Use of hydrocellular dressing.