Improving wound care in Africa

WE NEED YOU!

There is a need for effective wound care in Africa

Acute or chronic wounds are a common condition, although little recognized in Africa. Besides the pathologies similar to those existing in Europe (or metabolic vascular ulcers, surgical wounds or traumatic ...), there are more specific wounds. Tropical infectious ulcers (ulcers phagedenic, Buruli ulcer, leishmaniasis, leprosy ...) are characteristic but there are also the burns particularly related to domestic accidents in children. The epidemiological transition underway in many African countries, results in an increase in diabetic wounds and ulcers that affect the elderly, paraplegics or end of life HIV patient.

The WHO has recently published a guide to sum up the principles of modern wound care: The WHO Buruli Group includes in its recommendations the principles of wound bed preparation.

In Africa, we also see that it is possible to use the four pillars of wound healing with different approaches. Some rely on the use of conventional dressings that are cheap and available locally. Here we should especially mention the work of Professor Ryan for the treatment of filariasis1 and Dr. Grauwin for the treatment of leprosy2. Others aim to build on local medicine noting the use of honey or plants such as papaya. Also, MSF has developed a new approach to introduce a simplified range of modern dressings.

BURULI ULCER PROGRAM IN CAMEROON

Buruli ulcer is an infectious disease that occurs in tropical regions, around slow running rivers. The mode of transmission is still not studied enough, but it is suspected to be transmitted via micro-organisms living in slow running rivers, which enter the skin.

The symptoms start often with small nodules. The tissue below the visible part of the skin slowly dies, eventually leading to open wounds. These can spread over arms, legs and the back. Buruli ulcer is rarely lethal, but it leaves those who suffer from it with debilitating deformations of arms and legs. Sadly patients often come at a late stage, when the open wound is already developed and too large to be easily treated.

The treatment has four components:

- **Antibiotics**
  - A combination of antibiotics (rifampicin and streptomycin or clarithromycin) is necessary during end months to fight infection.
- **Wound Care**
  - Wound care is a key element for cicatrisation.
- **Physiotherapy**
  - Physiotherapy helps to prevent disabilities.
- **Surgery**
  - Surgical treatment is useful for large debridement, skin graft or osteomyelitis.

Wound care represents a real medical issue. Unfortunately the international consensus in favour of wound bed preparation is largely ignored in Africa. The practice to dry and disinfect the wound care prevails leading to inefficient, time-consuming and expensive sources of pain, sometimes resulting in permanent disabilities.

However, several initiatives exist that seek to promote a modern approach to wound care by using simple equipment suitable for resource-limited settings.

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1 www.oxfordinternationalwoundfoundation.org/develop/develop4.html
Akonolinga is a rural district with very limited resources. The district is divided into 12 ‘health sectors’, each with its own health centre. There is one district hospital in Akonolinga town. A study done in 2007 found high prevalence rates of Buruli ulcer throughout the district, indicating that the disease is a public health problem. It was found that 25 out of 10,000 inhabitants in the district were infected with skin ulcers.

The MSF programme opened in 2002 to support the Ministry of Health district hospital. All medical activities to treat Buruli ulcer are conducted by a joint team of National MSF-staff and international employees. MSF offers free treatment and provides the infrastructure, equipment, and medication necessary to run the Buruli ulcer treatment programme. MSF has established an independent pharmacy in the hospital, and also provides laboratory support, organisation of surgery and sterilisation, and nutritional support to patients. MSF staff participates in scientific meetings. MSF also trains local staff and brings foreign specialists for short periods to Akonolinga. Since 2002, the programme has treated over 900 patients.

For four years, MSF, with the help of the haute Ecole de Santé de Geneva and University Hospital of Geneva, has developed an innovative approach to its wound care programme. The aim of this project was to show that modern dressing protocols can be adapted to tropical settings.

MSF has trained doctors and nurses in Cameroon to update knowledge on the international consensus on healing. MSF has also worked with Cameroonian colleagues to adapt a sheet description of wounds that reflects the characteristics of Buruli ulcer. Colour sheets were designed to facilitate decision-making on treatment methods.

MSF has also introduced a limited range of modern dressings (alginate, hydrogel, hydrocellular, Vaseline tulle). The concepts of wound infection have been addressed to rationalize the use of antiseptics and antibiotics and attention was drawn to the struggle against oedema in order to improve cicatrisation. Modern dressings facilitate the work of nurses and improve patient comfort. They also require fewer dressing changes, and enable patient care by mobile teams that travel to villages twice a week, instead of forcing patients to come to the clinic on a daily basis.

Beyond our experience, we want to open the debate on the need in Africa to use these techniques and to remove obstacles to the development of modern dressings (cost and availability of products, training ...).