Disability Prevention in Buruli Ulcers, Results of ankle Rehabilitation in Akonolinga Hospital

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Introduction and Settings

Buruli Ulcer (BU) is an infectious disease due to Mycobacterium Ulcerans (MU) that prevails along still watersides in tropical and sub-tropical settings. The toxin (Mycolacton) released by MU will produce large ulcers. Near joints, these lesion can result in deformities and ankylosis and thus severe disability.

In Cameroun, Médecins sans Frontières runs a Buruli Clinic in Akonolinga, west of Yaoundé. Classical treatment of BU consists in antibiotics (Rifampicin and Streptomycin) for 6 weeks, surgery and graft. Rehabilitation, in order to reduce disability, is provided by a local physiotherapist backed by international consultants.

Observations and results

- In 2009, of the 104 patients included in the program, 34 (33 %) had lesions in regard of the ankle
- Women were more represented then men (fig 1)
- Their mean age was less then that of men
- Deficit was expressed in three categories (percent of mobility loss compared to the opposite ankle). Patients whose deficit was superior to 50% percent were more then 70 % (fig 2)
- Basic therapy involved: Stretching, Activo-passive mobilization, Posturing, Training on Mexican hat and Compressive Bandaging when necessary
- Global success (70%) or improvement rate (24%) after rehabilitation was high (fig. 3)
- For the majority of patients, treatment duration is included between 3 and 6 months (fig. 4)

Discussion

In Buruli Ulcer (BU), rehabilitation is needed and worthwhile. Less resource settings meet many challenges, among which:
- Physiotherapist availability and proper training
- Possibility and motivation for the patient to undertake a lengthy treatment
- Availability of basic instruments
- Continuous training and contact with other teams managing BU
- Community based rehabilitation must also be provided

Conclusion

Buruli Ulcer often affects the ankle. In order to reduce impairment, rehabilitation must be included as early as possible in the treatment plan.

As these lesions occur mainly in less resource settings, providing proper rehabilitation is a real challenge.

Final impairment in Buruli Ulcer would probably be highly reduced with early detection and treatment.