Buruli Ulcer: It’s Impact and Treatment Worldwide

**Background**

Buruli ulcer, a devastating disease first described in 1897 by Sir Albert Cook in Uganda, Africa, is caused by Mycobacterium ulcerans and is seen in more than 30 mostly under-resourced, countries world-wide.

1. More than 70% of the patients affected are children under age 16
2. With 90% of the ulcers being manifested on the limbs.
3. Unfortunately these ulcerative lesions can become very large before treatment is sought because of lack of access to care, lack of funds, superstition beliefs about the disease, and the stigma of the disease.
4. Current treatment entails administration of two antibiotics (Rifampin and Streptomycin) for 8 weeks followed by excision of the ulcerated area and skin grafting.
5. In an attempt to improve the healing of this devastating disease and to avoid some of the long standing complications, a clinical trial utilizing good basic wound care techniques and dressings was conducted.

**Treatment of Patients**

All patients were treated with Rifampin and Streptomycin for 8 weeks. Historical wound care had been to wash the wound with water and apply Betadine-soaked gauze dressings. Because of the need to provide moist wound healing and treatment of the edema, each patient in our evaluation was treated with vasoelastic gauze, Drawtex hydroconductive dressings, and short stretch compression therapy. The Drawtex dressing was utilized because of its superior wicking action to move wound fluid away from the wound surface and to facilitate autolytic debridement of the wound. Short-stretch compression bandages were utilized to reduce the marked edema seen in the extremities of patients with this disease. Dressings were changed 3 times per week by clinic personnel. Wounds were evaluated weekly for 8 weeks.

**Interim Results**

Average hospital stay for treatment of Buruli Ulcer—102 days

Annual income for farm laborer - $200

Average Daily income for farm laborer - $1

Average Direct cost to treat - $139.63 in 1996

Average Indirect cost to treat - $549.49 (all patients have to have a relative in attendance to help with care and to provide food)

Total cost for treatment - $658.74 in 1996

Direct costs = 30%

Indirect costs = 70%

**Economic Impact of Buruli Ulcer in Ghana**

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