

## 3463 - Successful treatment of burn wounds with Banana Leaves in northeastern rural India

 Sat, Mar 7  6:00 PM – 7:00 PM

**Case Diagnosis:** Second degree Burn wounds

### **Case Description:**

SM is a 14-year old girl admitted with 20% body surface area of 2<sup>nd</sup> degree burns in her pubic area, thighs and buttocks when she fell into the fire while cooking. Due to her parents' resistance to move her to a nearby Burn center, she was treated in a rural hospital setting with available resources. She was treated with analgesics, silver nitrate ointment and prophylactic antibiotics. Two days after admission, fresh Banana leaf dressings were applied and were changed daily. She did not have any inflammation or fever. Her wounds healed completely in one month. Banana leaves are a great source of antioxidants which help fight against the free radicals in the body. Due to their astringent properties, they reduce inflammation and fever. Many herbal treatments have shown to be helpful in the management of wounds. They are considered as an alternative source of treatment when the resources are limited.

### **Discussions:**

Banana belongs to the genus *Musa* of herbaceous plants. Fresh banana leaves are used in rural India to heal wounds. Dried banana leaves are rich in Allantoin (boosts immune system, accelerates healing process and act as an astringent) and polyphenol which helps improve immunity, reduce irritation and speed healing process. Skin stays hydrated which also is important for healing. Phytochemicals support wound healing at different stages of burn wounds by various mechanisms including antimicrobial, anti-inflammatory, antioxidant, collagen synthesis stimulation, cell proliferative and angiogenic effect. Sometimes the leaves are also crushed into a paste and applied to the burn before applying the dressing for better adherence. Banana leaves are big with their non-adherent cool waxy surfaces.

### **Conclusions:**

A 14-year old was treated with fresh Banana leaf dressings for second-degree burns with successful healing of the wounds.

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