Innovative treatment of Burn wounds with Banana Leaf Dressing: A Case report

Kanakadurga Poduri  
*HCA Healthcare*

Brian Tucker  
*HCA Healthcare*

Pritesh Patel  
*HCA Healthcare, pritesh.patel@hcahealthcare.com*

Follow this and additional works at: [https://scholarlycommons.hcahealthcare.com/pmr](https://scholarlycommons.hcahealthcare.com/pmr)

Part of the Anesthesia and Analgesia Commons, and the Therapeutics Commons

**Recommended Citation**
Poduri K, Tudker B, Patel P. Successful treatment of burn wounds with banana leaves in northeastern rural India. Poster presented at: ISPRM World Congress; March 4-9, 2020; Orlando, FL.

This Poster is brought to you for free and open access by the Research & Publications at Scholarly Commons. It has been accepted for inclusion in Physical Medicine & Rehabilitation by an authorized administrator of Scholarly Commons.
Innovative treatment of Burn wounds with Banana Leaf Dressing: A Case report

K. Rao Poduri, MD FAAPMR, Brian Tucker, MBBS, Pritesh Patel MD
Physical Medicine and Rehabilitation Residency Program at West Florida Hospital Pensacola, FL

Background
Banana Leaves have a variety of medicinal benefits which can be harvested. They have the following medicinal properties:
- Great source of antioxidants to help fight against free-radicals in the body.
- Reduce inflammation and fever.
- Dried banana leaves are rich in Allantoin. This compound has been long used for its soothing and healing properties. It is associated with boosting the immune system and accelerating the healing process. It is commonly found in anti-acne and sun care products because of its ability to help heal skin wounds. Allantoin helps to heal wounds and skin irritations and stimulates the growth of healthy tissue.
- Dried leaves are also a rich source of polyphenols – a group of compounds associated with improving immunity, reducing irritation and accelerating the healing process. Animal studies have shown that polyphenols when applied orally or topically assuage adverse skin reactions secondary to UV exposure.

Case Description
14 y/o girl in northeastern rural India sustains 20% partial thickness burns in her pubic area, thighs, and buttocks after falling into fire while cooking. She was treated at the local rural hospital with limited resources. Due to the parents resistance for transfer to a Burn center, the 14y/o patient was treated in a local rural hospital. She was treated at first with analgesics, silver nitrate, and antibiotics. Two days after admission, fresh banana leaf dressings were added which were changed daily. Her wounds healed completely. The wounds healed in a month after the aggressive banana leaf dressings. She needed no outpatient follow-up.

Discussion
• Crushed paste of the leaves are applied on the affected area and then covered with bandages, preventing leaves from falling off.
• Banana leaves are large allowing them to cover large surface areas. Their surface is non-adherent, waxy, and cool.
• Their abundance in tropical and less developed areas make them the cheapest dressing available in regions like northeast rural India.
• Phytochemicals support burn wound healing at different stages by various mechanisms including antimicrobial, anti-inflammatory, antioxidant, collagen synthesis and stimulation, cell proliferative, and angiogenic effects.
• Many herbal treatments have been shown to be helpful in the management of wounds especially burn wounds. Banana leaves can be considered an alternative source of treatment, particularly when resources are limited.

References

Conclusion
Burns treated with fresh Banana leaves dressings can successfully heal the wounds as shown in this case.