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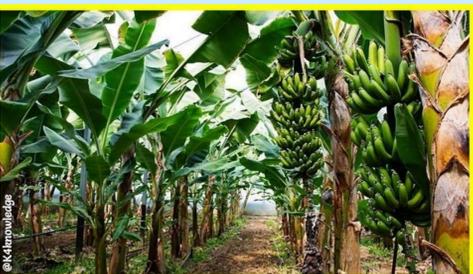
# Innovative treatment of Burn wounds with Banana Leaf Dressing: A Case report

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## 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.



### DID YOU KNOW?

**BANANA TREES ARE NOT ACTUALLY TREES. THERE'S NO WOOD IN THEM, THEY ARE GIANT HERBS AND BANANA IS ACTUALLY ITS BERRY .**



Banana Leaves

## 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.



Before Treatment



After Treatment

## 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

1. Gore MA and Akolekar D: Evaluation of banana leaf dressing for partial thickness burn wounds. *Burns: Volume 29, Issue 5, August 2003, Pages 487-492* [https://doi.org/10.1016/S0305-4179\(03\)00050-0](https://doi.org/10.1016/S0305-4179(03)00050-0)
2. Guenova E, Hoetzenecker, W et.al Banana Leaves as an Alternative Wound Dressing. *Dermatologic Surgery*. 10 December 2012 <https://doi.org/10.1111/dsu.12067>.
3. Ali, WG & Eazaym, HA. The Effectiveness of Using Banana Leaf Dressing in Management of Partial Thickness Burns' Wound, *International Journal of Nursing*, 5: 4 April 2015. DOI: <http://dx.doi.org/10.15520/ijnd.2015.vol5.iss04.70>.

## Conclusion

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