

Effectiveness of a New Ayurvedic Medication for Treating Wounds

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Abstract

In the realm of surgery, wound healing is a crucial problem since it necessitates painless recovery. The goal of management is to hasten healing and avoid infection. Wounds and their care have received increasing attention from Acharya Sushruta. Numerous antiseptics that prevent infection are often used, however they play no part in speeding up the healing process and are cytotoxic, which harms wound healing. In order to evaluate acute cutaneous toxicity and wound-healing efficacy, Pentabark Kashaya (PK), a novel polyherbomineral formulation, was created.

Keywords: Pentabark kashaya • Ayurveda • Dermal toxicity • Wound healing

Introduction

Worldwide, wounds are a major cause of morbidity and studies have shown that for every million patients, almost 10,000 will pass away from microbial infections. Disruption of typical anatomical structures and function is referred to as a "wound." According to studies, traumatic wounds impact 5 million people annually. Vrana (wound) is accorded the ultimate priority by Acharya Sushruta, who describes it as a wound that disrupts shareeradhatu (body tissues), leaves a scar after ropana (healing) and lasts till death. He has provided detailed descriptions of vrana categorization, sadya-asadyata (prognosis) and treatment, emphasising the need of wound care [1]. The primary goals of wound care are to prevent infection and hasten the healing process. Topical antimicrobial dressings like those containing povidone iodine, soframycin and silver are used to accomplish these goals.

Description

The natural process of healing a wound primarily depends on tissue regeneration. The goal of wound management is always to speed up the healing process while lowering risk factors like infection, which have a direct bearing on it. Studies in this area make use of a variety of medicinal plants with qualities that promote wound healing. In order to guarantee the safety of Pentabark Kashaya, a research of acute cutaneous toxicity was conducted before the product's ability to promote wound healing in test animals.

Healthful male three groups of six Wistar rats, weighing between 150 and 200 gm apiece, were formed by dividing the total population. Group 1 served as the control group, Group 2 as the test group that received PK treatment and Group 3 as the Standard group that received 5% Povidone iodine solution treatment [2].

Excision wound creation: Using the Morton and Malone excision wound model as a guide, the animals' excised wounds were made. The rats' dorsal

hair was clipped with an electric razor. A 2.5 cm imprint was created utilising a circular seal on the dorsal interscapular area while the patient was under mild ether anaesthesia. A circular region of 2.5 cm in diameter and 2 mm in depth of full thickness skin was removed along the imprint. The animals were kept in separate cages while the wound was traced on the polythene sheet.

Estimation of the amount of Kashaya needed for application: A piece of gauze weighing about 400 mg was collected and Kashaya was dropped onto it using a dropper. For the gauze to completely absorb, 6 drops were enough.

Chronic wounds have spread like an epidemic and are tough to treat everywhere. Chronic wounds have a bad prognosis and, if untreated promptly, can quickly result in amputation or even death. Despite the fact that this illness is old, there are still no reliable treatments for chronic wounds. Here, we suggest and present a brand-new combination therapy that combines biological debridement with stem cell treatment. The two methods combined will undoubtedly become a potential therapeutic approach with the qualities of extensive source, biological intelligence, safety and high efficacy, even though some details need to be worked out before formal application [3].

The main thing that prevents wounds from healing normally is wound infection. The presence of necrotic tissue and the rupture of the barrier preventing germs from entering the wound are what cause infection. Swab tests to determine the microbial load of the wound were done on days 1, 3 and 12 and indicated a steady decline in total bacterial load and total fungal count as compared to the control group (13, 24 and 27 cfu/ml, respectively). This could be as a result of the PK's antibacterial properties, which help to establish the wound's protective barrier [4].

PK demonstrated a gradual decrease in the microbial burden throughout the course of therapy, demonstrating the formulation's effectiveness in lowering the microbial load and hence limiting infection and promoting wound healing. Aqueous Panchavalka extract is reported to have antibacterial properties, which decreases wound drainage, malodor and slough [5]. PK has demonstrated antibacterial activity against a number of gram-positive and gram-negative bacteria, including *Staphylococcus aureus* at a concentration of 50 g/ml in the disc diffusion method and a MIC of 0.8 g/ml, *E. coli* at a concentration of 25 g/ml in the disc diffusion method and a MIC of 3.12 g/ml and *Pseudomonas aeruginosa* at a Copper sulphate, or "tuttha," exhibits antimicrobial efficacy against microorganisms that are resistant to several drugs.

Conclusion

When used topically, Pentabark Kashaya showed no symptoms of skin harm. In terms of assessment metrics such wound contraction rate, epithelialization time, wound infection, wound closure day and histo-

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pathological alterations, PK shown a considerable improvement. The research demonstrates the safety, efficacy and accessibility of Pentabark Kashaya as a substance for wound healing.

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Conflict of Interest

No conflict of interest.

References

1. Tang, Yunan, Michael J. Zhang, Jason Hellmann and Madhavi Kosuri, et al. "Proresolution therapy for the treatment of delayed healing of diabetic wounds." *Diabetes* 62 (2013): 618-627.
2. Qi, Xiaoliang, Yijing Huang, Shengye You and Yajing Xiang, et al. "Engineering Robust Ag decorated polydopamine nano-photothermal platforms to combat bacterial infection and prompt wound healing." *Adv Sci* 9 (2022): 2106015.
3. Mirza, Rita E., Milie M. Fang, William J. Ennis and Timothy J. Koh, et al. "Blocking interleukin-1 β induces a healing-associated wound macrophage phenotype and improves healing in type 2 diabetes." *Diabetes* 62 (2013): 2579-2587.
4. Wong, Siu Ling, Melanie Demers, Kimberly Martinod and Maureen Gallant, et al. "Diabetes primes neutrophils to undergo netosis, which impairs wound healing." *Nat Med* 21 (2015): 815-819.
5. Cheng, Siyao, Hao Wang, Xihao Pan, Cheng Zhang, Kexin Zhang, Zelin Chen, Wei Dong, Aming Xie and Xiaoliang Qi. "Dendritic hydrogels with robust inherent antibacterial properties for promoting bacteria-infected wound healing." *ACS Appl Mater Interfaces* 14 (2022): 11144-11155.

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