

عنوان مقاله:

Antimicrobial Activity and Wound Healing Properties of Aloe Arborescens Extract: An in Vivo Study

محل انتشار:

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خلاصه مقاله:

Background & Objective: Burn is one of the prominent causes of death around the world, however drug discovery attempts for burn healing has not been entirely successful. Aloe arborescens (*A. arborescens*), is effective in the burning wounds healing and growth inhibition of bacterial pathogens. Our objective was to assess the wound healing and antibacterial effects of *A. arborescens* in vivo. **Materials & Methods:** Thirty healthy Wistar rat animals were enrolled. The treatment process continued for ۲۱ days and sampling was conducted on days ۱۴ and ۲۱ and the tissue slides were sent to the pathology laboratory for testing. The bactericidal activity of *A. arborescens* extract was evaluated using the disc diffusion method. **Results:** *A. arborescens* demonstrated a significant effect on the healing of burn wounds. Furthermore, the antibacterial effects of the *A. arborescens* extract against Gram-negative (*Escherichia coli*, *Pseudomonas aeruginosa*) was significantly higher than that against Gram-positive (*Staphylococcus aureus*, *Bacillus cereus*) bacterial species. **Conclusion:** In conclusion, this study indicated that *A. arborescens* extract had an improving effect on the healing process of third degree burns without toxicity to the tissue.

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