Therapeutic Effect of an Indigenous Herbal Spray on Cutaneous Wound Healing in Swine

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Cutaneous mange is highly contagious, which leads to severe wounds later, thus, resulting economic losses to the farmers if not treated on time. In this study, the effectiveness of a herbal spray, which is prepared using a traditional herbal recipe for controlling mange infestation in pigs, was investigated. Herbal materials have wound-healing abilities, antibacterial, antifungal, antiseptic, and anthelmintic properties. The prepared herbal spray was applied daily on the affected area of mange-infested pigs and the prognosis was evaluated for 21 days at 07-day intervals. Efficacy was evaluated using a numerical scale based on the severity of clinical symptoms and behavioural signs at the initial treatment. A score of 0 was given to pigs with no symptoms, while a score of 100 was given to pigs showing severe clinical symptoms. Scores between 0-100 were given accordingly to pigs in between. The post-treatment evaluation was done using the same scale. The herbal spray was also tested against balb/c mice to observe the wound healing process as well. Animals with non-treated wounds served as the control. The data were statistically analyzed using Wilcoxon Signed Rank Test. The results showed that applying this herbal spray significantly ($P<0.05$) improved wound healing in pigs when compared with the control. In conclusion, this herbal spray is effective in healing cutaneous wounds resulting from mange in pigs, and the spray is highly effective for controlling general skin infections too. Therefore, this herbal spray has a potential for commercialization to control the mange and skin wounds in pigs. However, further studies have to be conducted to investigate the effectiveness of the herbal spray on other farm and pet animals.

Keywords: Cutaneous wound healing, Herbal spray, Pigs, Skin diseases

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