Clinical efficacy of herbal formulation "SCAVON" on wound healing

Skin affections including wounds are common presentation in large animal practice and effect the overall health of animals resulting in economic losses. Wound healing is a highly complex process involving the regulated series of biological events. These include a set of co-ordinated interactions between cells in the dermis and the epidermis. Important relationships have been found to exist between fibroblasts, keratinocytes and resident dermal cells, wherein these events involve several cellular phenomena such as migration, proliferation, adhesion, phenotypic differentiation etc. (Raghow, 1994). It is an orchestrated cascade of events which can roughly be divided into three overlapping phases which include inflammation, granulation tissue formation and remodeling of the extracellular matrix (Chithra et al., 1998). Healing of wounds is a fundamental response to injury which occurs by the process of connective tissue repair and any infection delays this tissue repair (Smith, 1967 and Bucknall, 1980). To prevent infections and promote holistic healing, the antimicrobial agents are applied topically to minor lesions, deeper traumatic and surgical wounds, cutaneous ulcers and burns. The topical antibiotics and chemotherapeutics can reduce wound infections in animals but they also carry certain limitations either by way of destruction of tissue by irritation, allergy or by development of resistant microbes. In this regard there has always been awareness for the need of herbals as a source of natural remedy. The present study deals with the herbal formulation Scavon to evaluate its healing properties in wounds of varied etiologies.

Materials and Methods

In the present study cumulative data from different sources over a maximum period of 14 days was taken. A total of 19 cases comprising fresh wounds, yoke gall wounds, infected wounds, maggot wounds and wounds following foot and mouth disease (FMD) were chosen for the evaluation of antibacterial, and healing properties of the herbal formulation Scavon.

Following sampling of wounds, the infected wounds were cleaned with Potassium permanganate solution (Venugopalan, 1995). The wounds were wiped dry with sterile cotton and Scavon cream was applied twice a day liberally over the surface of the wound. The severity of the wound, its location, the time taken for complete healing (scab formation) were recorded for each of the cases.

Results & Discussion

The results obtained are presented in the table. The results of the study revealed that in cases of fresh wounds and bruises complete healing was observed in 3-4 days irrespective of the species and age of the animal. However the incised wounds took a longer duration and the scab formation was seen on the 7th day. The healing pattern depended on the severity of the wound, which varied from mild to moderate. The infected and the FMD wounds of moderate intensity took 12-13 days for complete healing. It took 6-7 days for complete healing of FMD wound with infection of mild nature. Foot lesions with maggot infestation of moderate intensity took 9-11 days for complete healing.

The efficacy of herbal preparations in the treatment of wounds (Sharma et al., 1981) is well documented. The herbal ingredients in Scavon namely Ocimum tenuiflorum, Acorus calamus and Eucalyptus globulus are antibacterial and antimycotic (Grover and Rao, 1977) and are also known to possess insecticidal, antiseptic and wound healing properties (Satyavati et al., 1976).

In the present study Scavon proved to be a good topical antimicrobial preparation to reduce wound microorganisms and permit normal repair. The cream was non-irritant and non-staining and had good fragrance. The cream acted as an insect repellent and was easily dispersible on application to the moist surfaces.

Summary

The clinical evaluation of the herbal formulation, Scavon on wounds of different nature was done on 19 cases. The results of the study indicated that Scavon was safe, effective and efficacious in the management of the wounds of varied etiologies.
References


