**Therapeutic efficacy of a herbal formulation "Scavon" on the wound healing in cattle**

Bhagwat, V., Veterinary Surgeon and Consultant, Pet Animals Clinic, Ramamurthy Nagar, Bangalore, India, and
Mitra, S.K., Suryanarayana, T. and Ashish Sachan
R&D Centre, The Himalaya Drug Co., Bangalore, India.

Skin affections including wounds are common in large animal practice and affect the overall health of animals resulting in economic losses. Healing of wounds is a fundamental response to injury, which occurs by the process of connective tissue repair (Chithra et al., 1998) and any infection delays this tissue repair (Smith and Enquist 1967 and Bucknall, 1980). To prevent infections and promote holistic healing, 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 limitation either by they also carry certain limitations either by way of destruction of tissue by irritation, allergy or by the 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 in cattle.

[Scavon, a herbal formulation developed by The Himalaya Drug Company, Makali, Bangalore. Each 50 gm cream contains: Tulasi (Ocimum tenuiflorum) 0.6 gm, Vacha (Acorus calamus) 0.4 gm, Tailaparna (Eucalyptus globulus) 1.5 gm, Kumari (Aloe barbadensis) 6.5 gm and Yashada bhasma 0.9 gm in base q.s.].

**Materials and Methods**

In the present study cumulative data from different sources over a period of 9 days was taken. A total of 24 cases comprising fresh traumatic wounds, yoke gall wounds, infected wounds, maggot wounds and wounds following foot and mouth diseases (FMD) were chosen for the evaluation of antibacterial and healing properties of the herbal formulation Scavon. Prior to application of the cream, swabs were taken on the first and the third day to identify the nature of the isolate (Baron et al., 1994) and their susceptibility to the wound cream under different clinical conditions in the same season.

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) and nature of the isolates were recorded for each of the cases.

**Results & Discussion**

**Fresh wounds (4 cases):** The results of the above study revealed that in cases of fresh wounds complete healing was observed in 3-4 days in the absence of pathogenic isolates.

**Yoke gall wounds (2 cases):** The animals recovered within 6 days with 80-100% of healing seen on the 3rd day.

**Mild and severely infected wounds (4 cases):** The healing of mild infected wounds ranged from 3-9 days depending on the nature of the isolate. The response for the *E. coli* was faster than that for the Non-haemolytic *Streptococci*. However, the wound infected with *Klebsiella* showed a poor response to the treatment. No response was seen over a period of 9 days in the case of wound infected with the coagulase positive *Staphylococci*.

**Infected wounds with maggot infestation (5 cases):** In mild cases of infected wounds the maggot infestation complete healing was seen on the 6th day whereas in maggot wounds without infection complete healing was seen on the 9th day. The longer duration of healing of the non-infective maggot wound suggests individual variation in response to the treatment.

**FMD lesions with infection (9 cases):** In the FMD lesion with infection 75-100% of response was seen on the 9th day depending on the nature of the isolate. The response against *E. coli* was comparatively better than the wounds infected with *Klebsiella*.

The efficacy of herbal preparation in the treatment of wounds (Sharma et al., 1981) is well documented. The herbal ingredients in Scavon namely *Ocimum tenuiflorum*, *Acorus calamus*, *Eucalyptus globulus* and *Aloe barbadensis* are known to be 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 evaluation, Scavon has proved to be a good topical antimicrobial preparation necessary to reduce wound microorganisms and permit normal repair. Scavon also possessed antibacterial activity against the following species of bacteria namely *E. coli*, *Staphylococci* (coagulase positive), *Streptococci* (non-haemolytic), *Klebsiella* and *Proteus* species indicating a wide spectrum of activity. However, response of the cream varied depending upon the nature of the wounds. The cream was non-irritant and non-staining and had a good fragrance. The cream acted as an insect repellent and was easily dispersible on application to the moist surfaces.

**References**