Equine Leg Wounds: Should You Bandage?

by: Stacey Oke, DVM, MSc

Managing wounds on the lower limbs of horses is expensive, frustrating, time-consuming, and wrought with complications. Various approaches to expedite wound repair and minimize the development of serious complications have been assessed, including extracorporeal shock wave therapy and platelet-rich plasma. Now, even the merits of bandaging on wound healing is questionable, says a group of Australian researchers.

"Wounds on the distal (lower) limb are often left to heal without suturing; however, this often predisposes wounds to form excessive granulation (scar) tissue," said Andrew Dart, MACVSc, Dipl. VetClinSt, ACVS, director of the University of Sydney’s Veterinary Centre Camden and Biomedical Research and Clinical Training Unit in Australia.

The formation of excessive granulation tissue is undesirable as it prolongs healing.

"Wound healing in the horse, particularly wounds of the lower limb, differs from healing in ponies and other species," he added.

To evaluate the effect of bandaging on wound healing, Dart and colleagues created full-thickness skin wounds in the mid-cannon bone region of 33 horses. Seventeen of the horses were treated with a standard three-layer, non-occlusive bandage, while the remaining horses were left unbandaged. The wounds were evaluated weekly for nine weeks.

"The bandaged wounds had greater wound retraction (spreading), a decreased rate of wound contraction (scarring down), and more granulation tissue than unbandaged wounds," relayed Dart. "There was no overall difference in the rate of healing between the two groups; however, the granulation tissue that formed in the bandaged horses required regular trimming".

While these results suggest that bandaging appeared to alter the pattern of healing and promote the production of excessive granulation tissue, the study authors indicated that these results should not be over interpreted until controlled clinical trials are performed.

"There are indications for bandaging lower leg wounds, but it is important to recognize that bandaging can have positive and negative implications on the healing process," said Dart.

The study, "Effect of bandaging on second intention healing of wounds of the distal limb in horses" was published in the June 2009 edition of the Australian Veterinary Journal.

Readers are cautioned to seek the advice of a qualified veterinarian before proceeding with any diagnosis, treatment, or therapy.

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