Effect of Manuka Honey Gel on Second-Intention Healing of Distal Limb Wounds in Horses

Andrew Dart, BVSc, PhD, Diplomate ACVS, ECVS*; Ashley Kelly, BAnVetBioSc; Christina Dart, DrmedVet, MVSc, DVSc, Diplomate ACVA; Nigel Perkins, BVSc, PhD, FACVSc, Diplomate ACT; Leo Jeffcott, MA, BVetMed, PhD, DVSc, FRCVS, VetMedDr; and Andrea S. Bischofberger, DrmedVet

Treatment of equine distal limb wounds with manuka honey gel enhances wound healing. Authors’ address: 410 Werombi Road, Camden, NSW, Australia 2570; e-mail: andrew.dart@sydney.edu.au. *Corresponding author. © 2011 AAEP.

1. Introduction
Manuka honey modulates healing of equine distal limb wounds. The consistency of honey requires application under a bandage. Manuka honey gel (66% manuka honey and 34% water-based gel) can be applied without a bandage. The study hypotheses were that (1) The gel would be as effective as manuka honey in minimizing wound retraction, (2) treatment with the gel throughout healing would improve overall healing time, and (3) manuka honey would enhance healing of contaminated wounds.

2. Materials and Methods
Five full-thickness skin wounds (2×2 cm) were created on both metacarpi. Wounds on one forelimb were covered with horse feces for 24 hours, whereas wounds on the contralateral limb were left uncontaminated. Wounds were randomly assigned different treatments: manuka honey for 12 days, manuka honey gel for 12 days, manuka honey gel applied throughout healing, gel control for 12 days, and untreated control. The wound area was measured on days 1, 7, 14, 21, 28, 35, and 42, and overall healing time was recorded.

3. Results
Wounds treated with manuka honey and manuka honey gel were smaller than gel control and untreated control wounds until day 35. Wounds treated with manuka honey gel throughout healing healed faster than all other wounds. There was no effect of manuka honey gel on healing of contaminated wounds.

4. Discussion
As a gel, manuka honey can be used safely to promote healing of equine wounds without the need for a bandage, thereby reducing complications and costs associated with long-term bandaging.

Research Abstract

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