Does use of subcutaneous medical grade honey improve healing of repaired traumatic equine lacerations?

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Introduction
Traumatic injuries are common in horses and often result in failure of primary closure. Medical grade honey (MGH) has proven efficiency in treating wounds of many species, including horses. Local antibiotics have been proven to reduce rates of dehiscence in humans. This study evaluates the benefits of prophylactic treatment with subcutaneous application of MGH in primary repair of equine lacerations.

Materials and Methods
This is a prospective, randomized case control study. One hundred and four horses were assigned to control (50) and treatment (54) groups using block randomization. Naturally occurring traumatic lacerations in horses were sutured routinely by field practitioners with the exception of applying l-mesitran soft gel prior to complete wound closure in the treatment group.

Data about the cases and the results of the repair were collected and analyzed using the following tests: Chi square, Linear by Linear Association, Fisher's Exact, Mann-Whitney and Kruskal Wallis as appropriate (SPSS).

Results
Beneficial results were observed in the treatment group. The strongest correlation (P=0.02) was between treatment group and clinical signs of infection, with 83.3% (45) of horses in the treatment group being without clinical signs of infection, compared to 62% (31) in the control group. Treatment improved clinician satisfaction following repair (P<0.05). Complete wound healing was more common in the treatment group (P=0.05).

Conclusions
Subcutaneous application of MGH improved healing following primary closure of traumatic equine lacerations and further evaluation of MGH is warranted.