

Effects of a Supplement Containing Turmeric and Devil's Claw on Stomach Health

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Introduction

Turmeric and Devil's Claw are added to supplements to decrease inflammation and pain due to osteoarthritis. However, there is some concern that supplements containing these products cause or worsen stomach ulcers in horses. Because there is a lack of evidence to support these claims, the purpose of this study was to determine if a supplement containing Turmeric and Devil's Claw causes or worsens stomach ulcers in stall confined horses.

Materials and Methods

Healthy adult Thoroughbred horses (N=12) with no clinical abnormalities on physical examination or blood work were included in the study. Horses were housed in stalls for 28 days. Before treatment was initiated, endoscopic examination (scoping) of the stomach was performed and horses were allocated to two treatment groups of 6 horses each, TxA (supplement pellets containing Turmeric and Devil's Claw) or TxB (control) stratified by ulcer score. Horses were then treated for 28 days. Scoping was repeated on days 14 and 28 of treatment. Horses were monitored daily for clinical signs or adverse events. At each scoping a veterinarian (FMA), who was masked to the treatments, assigned gastric ulcer scores based on size (EGUS), severity (NGS) and number (NGN). In addition, gastric fluid pH (stomach acid) was measured using a pH meter. Blood samples were also obtained before treatment and on Day 28, before the last scoping.

Results

Stomach ulcers were significantly smaller (**Fig. 1**, EGUS score) and less severe (**Fig. 2**, NGS score) in both supplemented and non-supplemented groups on Days 14 and 28 compared to Day 0. Stomach pH (gastric pH) remained low and physiologic in both groups during the study period (**Fig. 3**). Mild changes were seen in the blood including, hematocrit and hemoglobin, potassium, lactate, BUN, creatinine and total protein in both groups, but no value was outside of the reference range.

Conclusion

- The supplement containing Turmeric and Devil's Claw was readily consumed by the horses and was safe.
- The supplement containing Turmeric and Devil's Claw did not cause or worsen stomach ulcers and stomach acid was not affected after 28 days of treatment.
- Turmeric and Devil's Claw supplemented in horses does not compromise stomach health.

References

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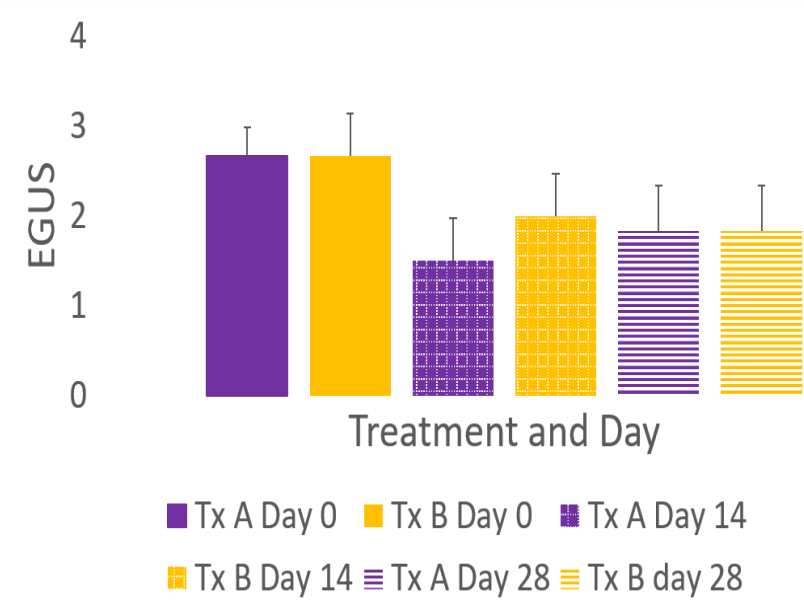


Fig. 1: Gastric ulcer scores in stalled horses fed a supplement containing Turmeric and Devil's Claw (TxA) and placebo (TxB). Gastric ulcer size was significantly lower in both groups at 14 and 28 days.
*Denotes significantly lower scores from Day 0.

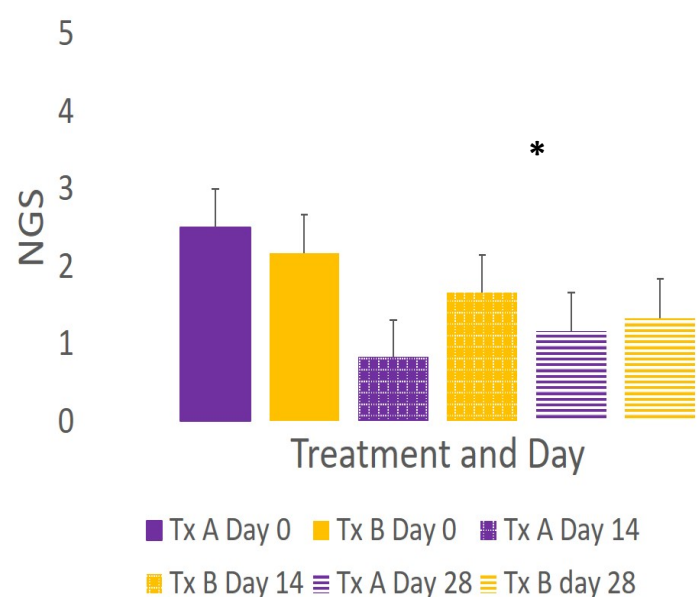


Fig. 2: Gastric ulcer severity in stalled horses fed a supplement containing Turmeric and Devil's Claw (TxA) and supplement alone (TxB). Gastric ulcers were less severe in both groups at 14 and 28 days.
*Denotes significantly lower scores from Day 0

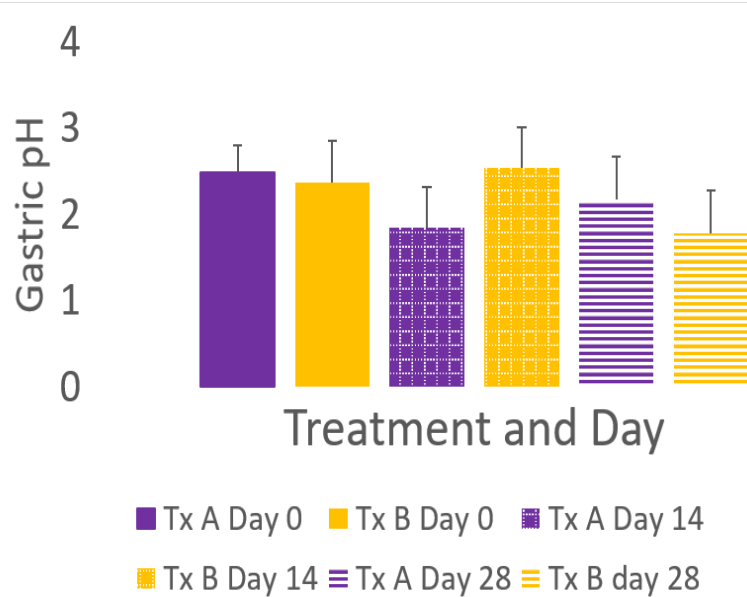


Fig. 3: Stomach acid was not altered by Turmeric and Devil's Claw (TxA) or supplement alone (TxB) over the treatment period.