

Duration of Analgesia Resulting from Extracorporeal Shockwave Therapy in Unilateral Lameness in Horses

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In addition to the potential therapeutic value of ESWT in horses is the consideration of the analgesic affect. The risks to both horse and rider when working without full comprehension of pain is significant. The objective of the study reported here was to determine the short term effect of ESWT on lameness by force plate evaluations.

In the study, 9 horses that had chronic unilateral lameness localized to the forelimb were used. All horses had lameness localized by perineural and/or intraarticular anaesthesia and confirmation of the specific lameness aetiology by radiographic evidence. Force plate data was obtained daily for each horse for 3 days (day -3 to -1) prior to ESWT. In addition, following the force plate analysis on the first day (day -3), local anaesthesia was used to alleviate the lameness and a force plate analysis was completed. On day 0 ESWT was done in the morning and the first post treatment force plate analysis was completed 7 to 8 hours later.

Force plate analysis was repeated daily though day 7. A matched pairs t test was used to compare between baseline, the post-block measurement and post-treatment measurements day 0 through 7.

There was a significant difference between baseline PVF and PVF on day 0 (0.003) and 2 (0.0156). The PVF after local anaesthesia was not significantly different (0.14) than the day 2 post-treatment PVF.

There was a significant analgesia following ESWT from 8 hours through 48 hours after treatment. These data can be utilized in the formation of regulations concerning ESWT.