

Qualitative Evaluation of ESWT for Treatment of Cauda Equina Syndrome in Dogs and Cats

Young Joo Kim, DVM, MS, Linda Jenkins-Muschetto, DVM, and Edward B. Leeds, DVM, DACVS

From the Surgical Group for Animals, Torrance, California

Address reprint requests to Young Joo Kim, DVM, MS, Surgical Group for Animals, 2325 Torrance Blvd., Torrance, CA 90501. E-mail: dvmkim@gmail.com

ABSTRACT

Objective – To evaluate the clinical outcome after extracorporeal shock wave therapy (ESWT) in dogs affected by cauda equine syndrome (CES).

Study Design-Retrospective Study

Sample Population- 38 dogs and 2 cats diagnosed with CES.

Methods- All patients were sedated for ESWT. 1,000 shock waves were delivered over the lumbosacral spine, using an energy flux density of $0.14\text{mJ}/\text{mm}^2$ with a focal pressure depth of 20mm at a rate of 240 pulses per minute. The patient's response was evaluated by the authors. The owners were required to complete pre-treatment and post-treatment questionnaires at the respective visits and through a follow-up phone survey.

Results- Thirty five (87.5%) out of 40 animals responded to ESWT according to the authors' subjective evaluation. The average owner's satisfaction score regarding ESWT was 5.75 ± 1.86 (82.1%) out of 7. Most patients showed initial significant improvement from immediately after to three weeks after ESWT. The median duration of ESWT effect was 13.6 months (0-23 months). Five dogs and one cat out of 40 patients (15.6%) received ESWT twice. One dog (2.5%) received three treatments. Thirty five out of 40 clients (87.5%) would use ESWT again if needed. No adverse treatment-related effects were observed in any patient.

Conclusion- ESWT provides an effective method of relieving pain associated with CES in dogs and cats. ESWT may replace or enhance chemical analgesics and delay or eliminate the need for surgical intervention.

Clinical Relevance- ESWT can be used to provide non-surgical treatment for CES in dogs and cats.