



VET NOTES

AUGUST 2005

Previous VET NOTES

- July 2005 - Vaccination recommendations
- June 2005 - The advantages of high fat/low carbohydrate diets for horses
- May 2005 - The Hoof: Form and function
- March 2005 - Liquid gold
- February 2005 - Breeding the problem mare
- January 2005 - Condylar fractures
- December 2004 - Early diagnosis and treatment of high-risk pregnancy in the mare
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- March 2004 - Colic in the post-foaling broodmare
- February 2004 - Equine Dentistry

Extracorporeal shock wave therapy (ESWT)

Shock waves have been used for many years in human medicine for the treatment of kidney stones. The technology was later used in the treatment of selected orthopedic conditions, and in 1996 was adapted for use in horses.

Extracorporeal shock waves are acoustic waves, generated electrohydraulically from outside the body, which apply peak pressures at a pre-defined frequency, energy level and depth.

Focused shock waves converge on a small target point without regional or systemic effects. It is, therefore, necessary to have an established diagnosis with a clear target area, defined either by ultrasonography or radiology.

Shock wave therapy has been shown to increase regional blood flow, have a direct effect on tissues at the cellular level, and activate new bone growth. The effects of shock waves are dose dependent; there appears to be no effect at low energy and low frequency, a therapeutic effect at midrange levels and a damaging effect at high energy and high frequency.

Some of the more commonly treated conditions in the horse include bucked shins, tibial stress fractures, proximal sesamoid bone and splint bone fractures, high suspensory desmitis, bone spavin, navicular disease, superficial digital flexor tendonitis and back pain.

The treatment typically requires sedation, as energy is being applied to an already sensitive area. The procedure is well-tolerated and may provide relief of pain for up to three days following treatment.

One to three treatments are administered at one to three week intervals with the patient being restricted to stall rest and controlled exercise between each treatment. Guidelines for return to work after therapy are dictated by the nature of the original injury and repeated re-examinations.

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Until very recently, experimental data has been lacking but is now becoming available. One controlled study, measuring the healing effect of shock wave therapy on suspensory desmitis, showed that treated limbs not only healed faster, but also had better fiber alignment, meaning that they also healed stronger.

Shock wave therapy is safe with few potential adverse effects. It is known to be effective in shortening recovery time in some injuries, and stimulating repair in some others which have not responded to conventional treatments. As more data becomes available and numerous other orthopedic applications are tried clinically, extracorporeal shock wave therapy will continue to evolve, define and establish its role in the treatment of equine lamenesses.

- January 2004 - Lameness and poor performance
- December 2003 - Internal parasites - the hidden battle
- November 2003 - Equine tapeworms - The forgotten parasite
- October 2003 - Blister beetle poisoning
- September 2003 - The horse owners' role in wound care
- August 2003 - West Nile update: Broodmare vaccinations
- July 2003 - Stifle radiographs
- June 2003 - A newly emerging cause of diarrhea in weanling foals
- May 2003 - Vaccination recommendation
- April 2003 - Flexural deformity of the distal interphalangeal joint or "clubfoot" and the distal check desmotomy

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2005 PETERSON & SMITH HORSEMAN'S SEMINAR

The second Peterson & Smith horseman's seminar will be held on November 19 & 20, 2005. Watch out for more information in the coming months.

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