

RSWT or splitting for the treatment of overuse tendon and ligament injuries in sport horses: Early results

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Device and producing company:

Storz Medical D-Actor 100

Introduction:

The aim of this study was to compare the results of Radial Shockwave Therapy (RSWT) and splitting for the treatment of suspensory desmitis and digital flexor tendonitis in sport horses.

Methods:

We performed a prospective study between October 2006 and March 2007. Twenty sport horses with clinical and ultrasonographic evidence of tendon or ligament injuries were treated with either RSWT or splitting. Both treatments were undertaken under sedation with the horse in standing position. RSWT was applied in a single session with a total of 3500 pulses at 1.5 to 3.5 bar using the Storz Medical D-Actor-100 device. If the lameness and the lesion grading were consistent with a severe condition, we injected Autologous Growth Factors within the injury area and/or performed a second RSWT session. Splitting was achieved with a syringe using the usual technique.

Results:

Fourteen horses had suspensory desmitis and 6 had digital flexor tendonitis. The mean degree of lameness was 2.6 out of 5. Both groups showed a lameness decrease of 2 points at first month after treatment and a complete clinical recovery in 90% of horses at the third month of follow-up. Ultrasonographic exams showed a gradual decrease in lesion grading until the attainment of scars with good fiber alignment.

Discussion:

RSWT and splitting are equally effective treatments for tendon and ligament injuries. Nevertheless, RSWT is preferred because it is a noninvasive option that avoids the risk of infection and does not depend on surgeon's skills.

Conclusion:

RSWT is as effective as splitting for tendon and ligament injuries treatment in sport horses.