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Year: (2002).

Title: “*The Nd:YAG pulsed wave laser as support therapy in the treatment of tenodesmopathies of athlete horses: a clinical and an experimental trial.*”

Magazine: Proceedings of *SPIE*, Oct. 2002 - Vol. 4903:105-118.

Place:

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Purpose: to assess the efficacy of HILT Therapy in the treatment of tenodesmopathies of athlete horses.

Discussion: the clinical investigation was performed on 79 sport horses though randomized double-blind. All animals (control and treated with HILT therapy) received , on the subskin above the tendon lesion, the same local infiltration of immunostimulant.

Method: The protocol included a clinical examination and surgical preparation for intratendineous inoculation of immunostimulant (T/0). After six days of systemic antibiotic coverage, 1064 pulsed Nd:YAG laser treatments began (T/7); three different levels of energy was applied: 110 mJ, 130 mJ, 150 mJ.

Results: at T/2, T/3 and T/4, at one-week intervals between one another, clinical examination and ultrasonography were performed. The experimental survey showed that the Nd:YAG laser treatment was well-tolerated and safe. At T/4, in the treated subjects the best clinical improvement appeared to be gradual and continuous; ultrasonography revealed a greater ecogenicity of the treated tendon.

Conclusion: the association between an immuno-stimulating agent and power laser considerably reduced the amount of the time necessary to obtain ultrasound resolution of the tendon and ligament lesion, as well as to antagonize the possible fibrotic evolution. In conclusion Nd:YAG laser treatment is able to reduce the “reparative phase”, but it is not able to reduce the time of the “rehabilitative phase”.