Diffusion Tensor Imaging To Assess Triceps Surae After Achilles Tenotomy In Rats.

Yusuke Hara¹, Kazuya Ikoma, MD, PhD¹, Tsuyoshi Sukenari¹, Yuji Arai¹, Yasuo Mikami¹, Hiroyoshi Fujiwara¹, Takashi Yoshida¹, Yoshinobu Oka¹, Mitsuhiro Kawata¹, Toshikazu Kubo¹.

¹Department of Orthopaedics, Graduate School of Medical Science, Kyoto Prefectural University of Medicine, Kyoto, Japan, ²Department of Anatomy and Neurobiology, Graduate School of Medical Science, Kyoto Prefectural University of Medicine, Kyoto, Japan.

Acknowledgments: none

References: (1) Kearney RS, Costa ML. Current concepts in the rehabilitation of an acute rupture of the tendon Achilles. J Bone
The results of DTI parameters. There was a significant increase in λ1 (1a), while no significant differences were observed in λ2 or λ3 at two and four weeks after tenotomy (1b and 1c). The FA values were significantly higher in the two-week group and the four-week group than in the control group (1d) (* significant difference, p < 0.05).
The results of micro-measurement. The tendoty side was significantly lower than the control about the muscle belly length: major axis length ratios (2a). There was no significant differences about the cross-sectional area (2b) (* significant difference, p<0.05).

ORS 2014 Annual Meeting
Poster No: 1941