

Novel technology for Facial Muscle Stimulation Combined with Synchronized Radiofrequency Induces structural changes in Muscles tissue: Porcine Histology Study

Brian Kinney, MD¹; Jan Bernardy, DVM²; Rea Jarosova MSc²

Division of Plastic Surgery, The University of Southern California Keck School of Medicine, Beverly Hills, CA, USA
Veterinary Research Institute, Brno, Czech Republic

Presented at 41st Annual Conference of the American Society for Laser Medicine and Surgery. 2022; San Diego, CA

+19.2%

Increase in Muscle Density

+21.2%

Increased nr. of Myonuclei

+19.8%

Increased nr. of Muscle Fibers

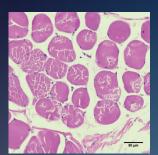
Methodology

- 8 Large white pigs (60-80 kg) divided into 2 groups
- Active group (6 sows): Four 20-minute treatments of forehead
- Control group (2 sows): No treatment
- Punch biopsies of muscle tissue collected at baseline, 1 and 2 months after last treatment

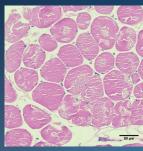
Results

- All results in active group were significant
- Control group showed insignificant changes
- Muscle temperature during treatment up to 39.5°C

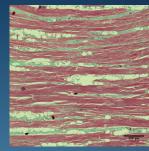
Example of muscle tissue samples



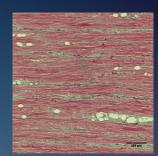
Baseline



2 Months After



Baseline



2 Months After