

360° VOLUMETRIC HEATING QUANTITATIVE IMPROVEMENT IN A VAGINAL TISSUE

SAFETY AND MECHANISM OF ACTION OF NON-INVASIVE RADIOFREQUENCY TREATMENT FOR VAGINAL LAXITY: HISTOLOGICAL STUDY IN THE SWINE VAGINAL MODEL

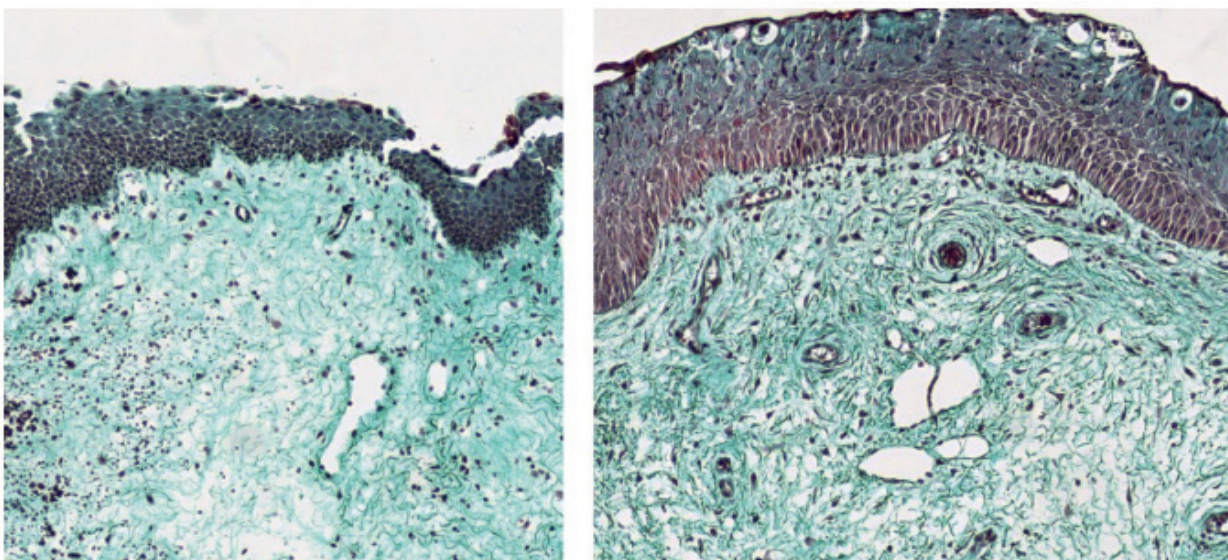
David E. Kent MD¹, Jan Bernardy MVD²

1. Dermatologic Surgery Specialists, Macon, USA
2. Veterinary Research Institute Brno, Czech Republic

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HIGHLIGHTS

- In-vivo porcine vaginal model was used in the study.
- **36.8%** increase in the amount of elastin fibers in the tissue.
- **17.1%** increase in the amount of collagen fibers in the tissue.
- The vaginal wall thickness increased by **32%**.



Comparison of vaginal wall thickness after the 1st treatment (left) and 1-month follow-up (right).

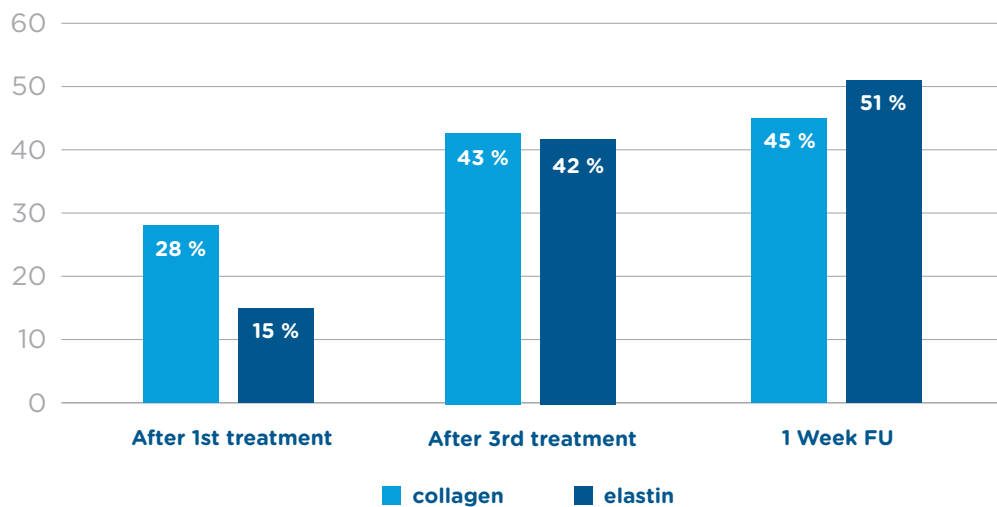
STUDY DESIGN

- The goal of this study was to **evaluate quantitative** changes before and after volumetric heating of the vaginal wall.
- Three pigs under general anesthesia received **8-minute treatments** once a week for **three weeks**.
- **Biopsy specimens** and **ultrasound video measurements** were obtained after each treatment and follow-up session.

CONCLUSIONS

- The activity of fibroblasts and fibrocytes increased by 16%.
- The 360° Volumetric heating induces vaginal neocollagenesis, neoelastogenesis, and thickening of vaginal wall.
- **Volumetric heating** of vaginal tissue **produced quantitative improvement** in the vaginal tissue organization.

Elastin and Collagen Content in Tissue Samples



Collagen and elastin content measured after the therapies and at the follow-up.