EFFECTS OF CRYOFREQUENCY AT DERMAL AND HYPODERMIC TISSUE: CASE STUDY.

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BACKGROUND: The cryofrequency therapy was developed with the combination of cold (cryotherapy) and heat (radiofrequency) application, causing a thermal shock on adipose tissue and reducing it, stimulating collagen, decreasing sagging skin. The thermal shock is believed to alter local metabolism.

OBJECTIVE: To investigate the effects of cryofrequency at the dermal and hypodermic tissues.

MATERIALS AND METHODS: This is a case study. The sample consisted of one woman, 39 years old, with an interest in abdominoplasty surgery, presenting adiposity and flaccidity located in the infra-umbilical region. Eight applications of cryofrequency were performed before her plastic surgery, in dorsal decubitus, infraumbilical region on the left side, the right side served as control. The parameters used were: 450w of frequency, bipolar mode, area of 12cm of height by 14cm of width, during 08 minutes per area, one session per week. The evaluation was performed before the 1th, 4th and 8th session. In all the evaluations PAFAL was used, besides the ultrasonography, photography, body weight, perimetry and plicometry.

RESULTS: The infraumbilical plicometry was reduced by 6 cm. With regard to weight, a decrease of 2.7 kg body weight and a BMI reduction from 25.7 to 24.7% were observed before the surgery. Ultrasonography data shows a decrease in the thickness of the adipose layer on average of 0.6 mm. In the histological analysis, after the surgical intervention, the dermis with greater number of fibroblasts and inflammatory cells, besides a greater quantity of neoformed collagen tissue.

CONCLUSIONS: The application of cryofrequency promoted reduction of adipose tissue and increased collagen production.