



AESTHETIC AND COSMETIC DERMATOLOGY (LASERS SEPARATE CATEGORY)

A STUDY ON THE EVALUATION OF THE DIFFERENCE IN PROVIDING INTERACTIVE GUIDES FOR AT-HOME AUTOMATIC DUAL DEPTH CARE IFUS (INTENSIVE FOCUSED ULTRASOUND) DEVICES

Taekyun Kim⁽¹⁾

Rezienna, Research & Development, Seoul, Republic Of Korea⁽¹⁾

Introduction: Efforts to bring dermatological technology to home have been continued. Because increases in women's social participation result in a lack of leisure time, home-use aesthetic devices using lasers, galvanic and RF are already in the market. Especially, IFUS devices are designed to replace the probe with a different one for treating in various depths. Also, they are designed to generate uniformed coagulation density. Therefore, even experts draw the protocols on the skin to have uniformed coagulation density. If the density differs from part to part, results become uneven. Also, treating the same spot repetitively can occur side-effects. Therefore, it's crucial to provide an interactive treatment guide for the home IFUS devices.

Objective: To evaluate differences in uniformity of coagulation density by providing an interactive guide for home IFUS devices or not.

Materials and methods: 20 women volunteers are registered. The group A used automatic dual-depth IFUS device with interactive guides and the group B used the IFUS device with a user manual. Both treated on the optically transparent phantom. By comparing the coagulation of the phantoms, uniformity, the numbers of the coagulation for each layer and User Feedbacks were analyzed.

Results: the coagulation uniformity of group A's phantom was higher than that on the group B's by 37%. Group A made the same number of coagulation but group B is different. Group A had 30% more people who thought they had used the device correctly. Also, two of group B and none of group A answered they had difficulties in recognizing the progress of the treatment.

Conclusion: Providing the interactive application guide contributed to increasing the coagulation uniformity and helped users to recognize the treatments progress. Therefore, the providing the guide helps accurate usage and effectively prevents side-effects from the





uneven coagulation density and repeated usage on one spot.

