

ABSTRACT
BACKGROUND: Plasma exeresis is an evolving technique for nonsurgical treatment of several skin conditions. Reflectance confocal microscopy (RCM) is a noninvasive tool that allows the "in vivo" imaging of the skin.

OBJECTIVE: To evaluate the clinical improvement and collagen remodeling of the upper eyelid dermatochalasis after plasma exeresis.

METHODS: Ten patients were subjected to 3 interventions of plasma exeresis. Photographic and RCM images were acquired at T0 (baseline) and T1 (4-6 weeks after final plasma exeresis). Eyelid dermatochalasis was rated as absent, mild, moderate, and severe according to the facial laxity rating scale, at clinical images at T0 and T1. An expert RCM evaluator classified collagen according to the predominant pattern of reticulated, coarse, huddled, or curled at T0 and T1.

RESULTS: Clinical improvement of 2.6 ratings was observed at clinical evaluation. Collagen was classified as long straight fibers in all cases, according to RCM images.

CONCLUSION: Plasma exeresis in this pilot study shows promising remodeling effects on the collagen of the upper eyelid, as viewed by RCM, and clinically improved appearance for the patient cohort, without any serious adverse events. This study suggests that plasma exeresis could be a valid solution for eyelid dermatochalasis, but further studies are required. PMID: 28930794 DOI: 10.1097/DSS.0000000000001267