

Chromolite™ : A Clinical Review

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INTRODUCTION

The application of Intense Pulsed Light from a flash lamp driven device has been used cosmetically for over a decade in the United States. The primary goal with these devices has been the improvement in both pigmented and vascular lesions of the face and other body locations. The procedure for the face is often advertised as a Photofacial™, a procedure developed and named by Dr. Patrick Bitters, Jr. of California.

Many manufacturers have introduced Intense Pulsed Light as a product for this and other similar procedures. One of the latest is the Chromolite™ System distributed in the United States by Genesis Biosystems, Lewisville, Texas. The Chromolite™ has several unique features. The first is the ability to treat for 200,000 pulses without lamp exchange. The second, and more remarkable, is the convenience of user exchange of the spent flash lamp. The used flash lamp is removed in a method similar to exchanging AA batteries with the replacement flash lamp simply being dropped back into the Chromolite™ hand piece. The third is the open optical cavity of the hand piece allowing light to remain captive against the skin while eliminating the need for optical or thermal conductive gel. Last, the Chromolite hand piece uses an air circulation system to cool the flash lamp assembly. By using an air-cooling system, the hand piece can be designed to be much lighter and more ergonomic than other systems on the market.

MATERIALS AND METHODS

A series of ten patients were recently treated with the Chromolite™ in a regimen of three treatments scheduled about four weeks apart. Photographs were taken in both visible and ultraviolet light spectrums to monitor changes in pigmented lesions. The areas treated included faces, chest or décolleté, and hands. In the initial treatment the patients were photographed both before and after treatment to illustrate any excessive redness or bruising from the procedure. For the remaining treatments the patients were photographed prior to the treatment. Finally, one final set of photographs was taken six weeks after the third treatment. In the series of treatments the energies were safely selected in an attempt to avoid blistering, hyperpigmentation,

hypopigmentation or scarring of the patient. Each subsequent treatment allowed for an increase in energies of about 10% as the tolerance of the patient's skin and the darkness of the treated lesions were evaluated. This increase is common practice for all intense pulsed light devices. Some, but not all of the patients, utilized additional cooling for comfort before or after treatment. Cooling gel was not used during any of the treatments on any of the patients.

RESULTS

None of the patients developed complications, as listed above, from the treatments. The initial treatments began as low as the 30% range with the final treatments being as high as 70%. An energy level of 70% can be considered as reasonably conservative for many Fitzpatrick Type I-III patients with this device. Each patient was asked to rate the pain of the treatment on a scale from 1-10, with 10 being unbearable pain. The average pain score reported across all patients and all treatments was 1.03. Therefore it was observed that the Chromolite™ could be successfully used without gel with minimal discomfort to the patient.

SUMMARY

The Chromolite™ Intense Pulsed Light device from Chromogenex and Genesis Biosystems proved to be a safe and effective device for treating pigmented lesions on the face, neck, chest and hands. The improvement experienced by the patients varied according to the numbers and intensity of the lesions; visible improvement was recorded. As with any treatment modality, total clearance of the treated lesions is not always possible. However, we also noted that continued and more aggressive treatment commonly led to the additional clearance of unwanted lesions.

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