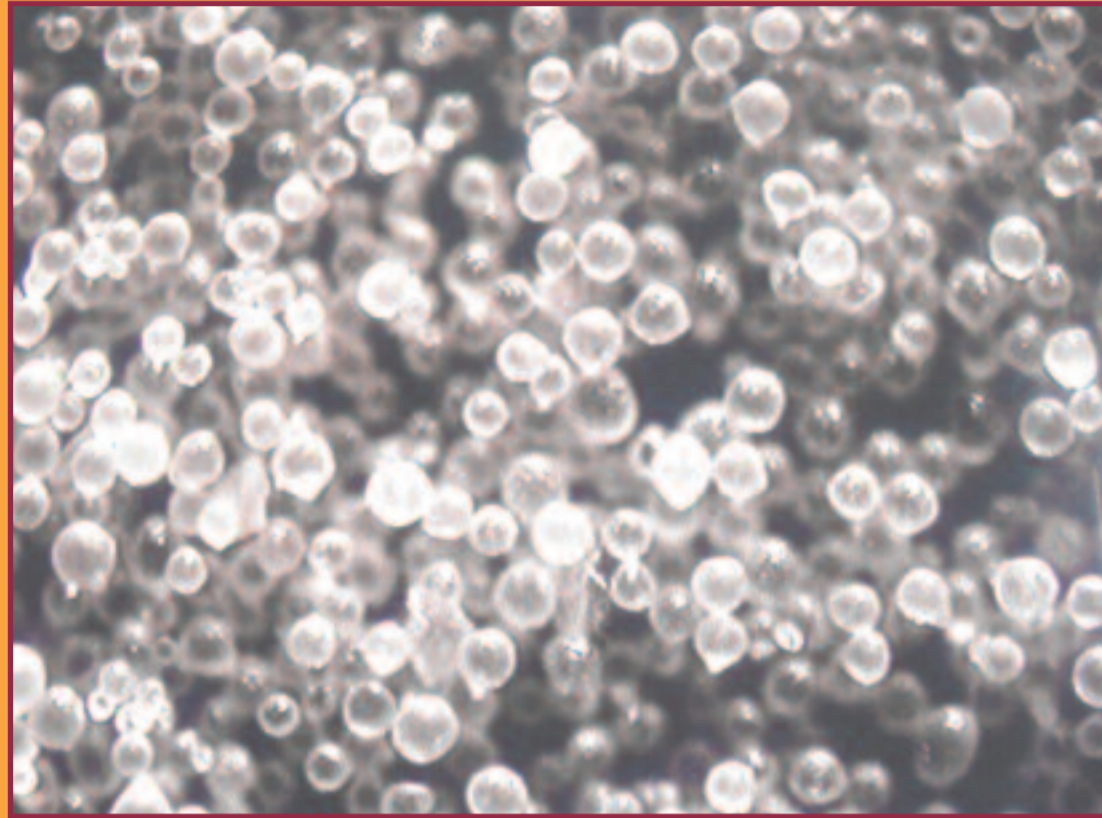


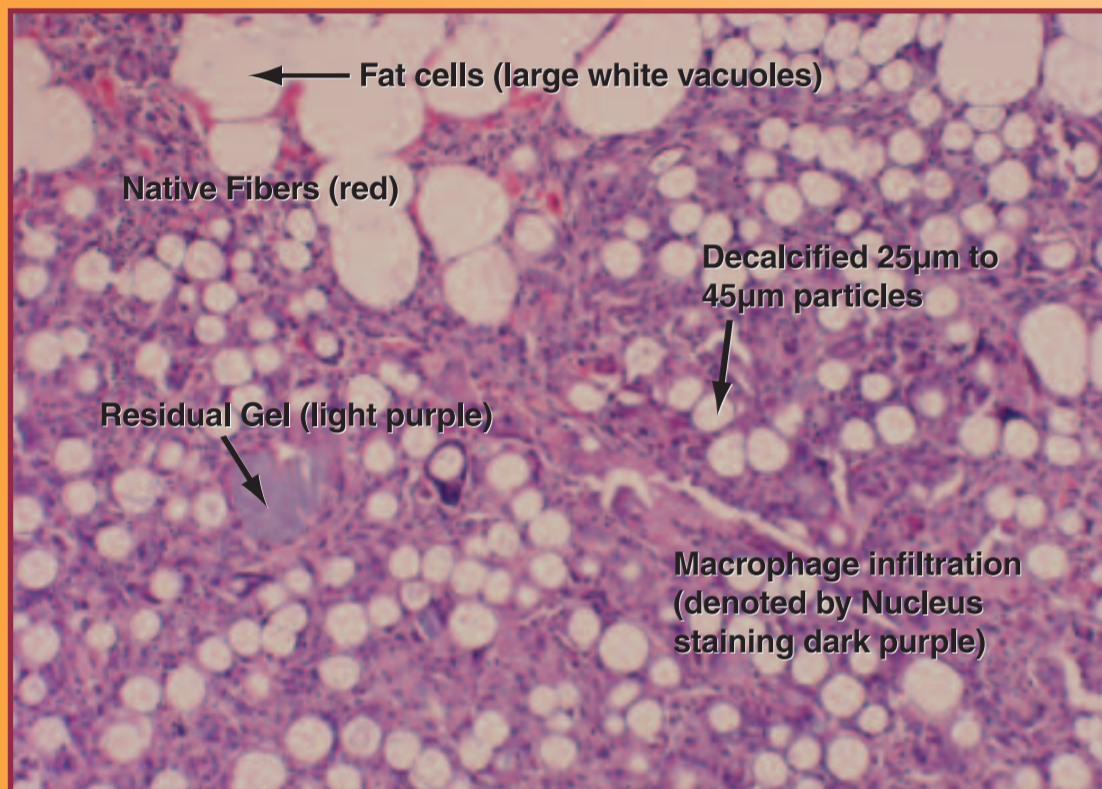
**Henry A. Mentz, III, M.D., FACS • Amado Ruiz-Razura, M.D., FACS • German Newall, M.D., FACS
Christopher K. Patronella, M.D., FACS** From the Aesthetic Center for Plastic Surgery—Houston, Texas, U.S.A.

BACKGROUND INFORMATION:

Calcium hydroxylapatite has been used for many years by surgeons and multiple medical specialists. In 1999 it was suggested its use in the US as an injectable filler for soft tissue augmentation for facial rejuvenation. The product is available in the US market (Radiesse-BioForm Medical, Franksville, Wis.) as an injectable implant made of a cohesive synthetic filler of biocompatible microspheres of calcium hydroxylapatite (CaHA). This product is different from other tissue fillers because it is not Hyaluronic Acid, not Collagen, not Silicone and not Fat.



The product is composed of smooth microspheres of Calcium Hydroxylapatite CaHA (30%) and suspended in an aqueous gel carrier of sodium carboxymethylcellulose, glycerine and water (70%). These consistently shaped and sized particles have proven to be safe and biocompatible while allowing gradual tissue ingrowth.



New Tissue Growth Around Particles

This microphotograph illustrates the scaffolding effect of gradual tissue ingrowth that develops within 8-10 days after injection. This effect has been reported to be present up to 30 months after implantation.

OBJECTIVE:

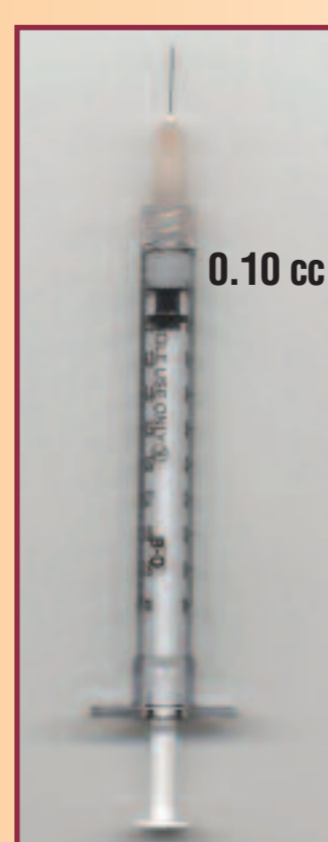
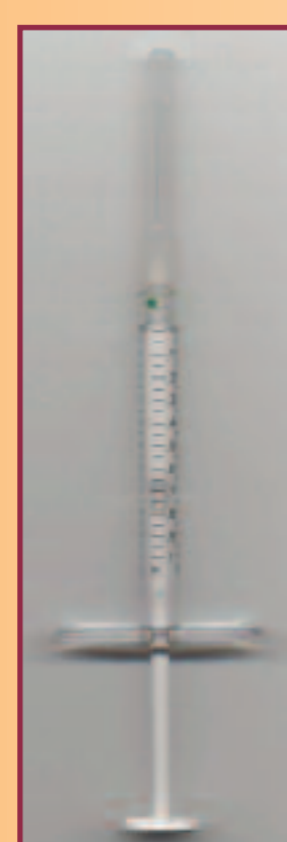
The purpose of this study is to present our clinical experience with the use of this synthetic filler for the treatment of deep facial lines and folds, and for skeletal tissue depressions affecting the nose and forehead.

MATERIALS AND METHODS:

- Microspheres of hydroxylapatite were injected as a gel with sodium carboxymethyl cellulose, glycerine and water .
- Fifty patients were treated from February 2002 to March 2005.
- The product came already prepared in a 1cc syringe.
- No allergy tests were required and vials were stored at room temperature for future applications.
- The manufacturer's vial was divided into 10 insulin syringes. Each syringe contained a 10th of 1cc for the precise correction of small defects.
- Each syringe had a 27g needle used to infiltrate below the dermis.
- No anesthetic was used.
- A bag of ice was place on the post injection site.
- Patients were evaluated at one week, one month, 6, 12 and 24 months.



IN OUR STUDY THE PRODUCT THAT COMES ALREADY PREPARED IN A 1 CC VIAL, WAS DIVIDED INTO 10 INSULIN SYRINGES. EACH SYRINGE HAD ONLY 1/10 OF A cc FOR PRECISE APPLICATION.

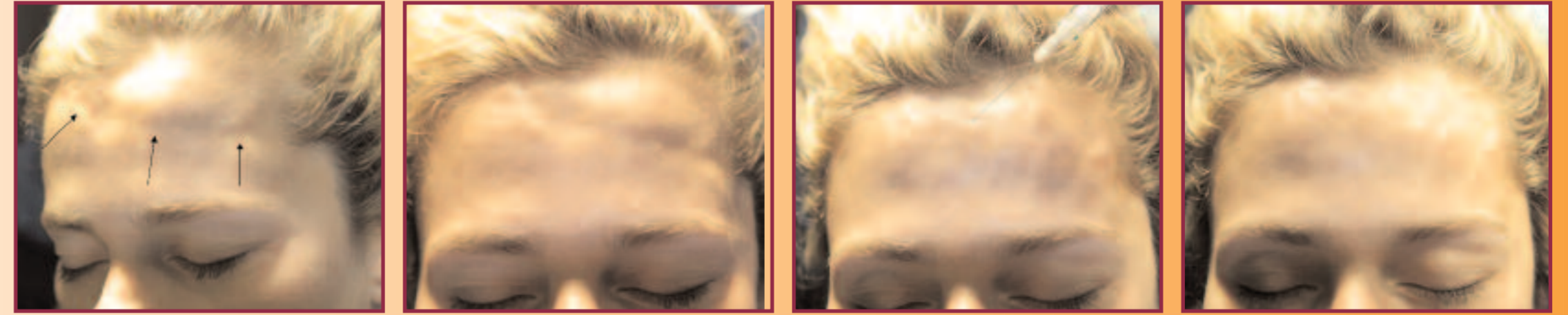


Our indications for treatment were deep skeletal defects secondary to: post traumatic scars in the forehead, post craniotomy and post septum rhinoplasty bony defects of patients who were previously asymmetric. The facial soft tissue defects included: wrinkles, folds, and skin asymmetries in the lower 2/3 of the nose and post facelift defects.

* Pictures courtesy of Miles Graiver, M.D. and Patricio Jacovella, M.D.

RESULTS:

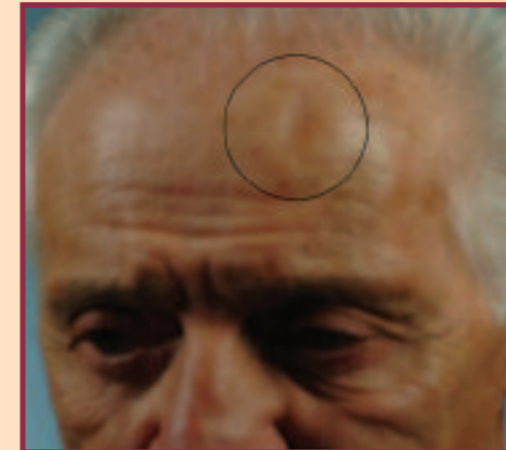
FOREHEAD DEFECTS



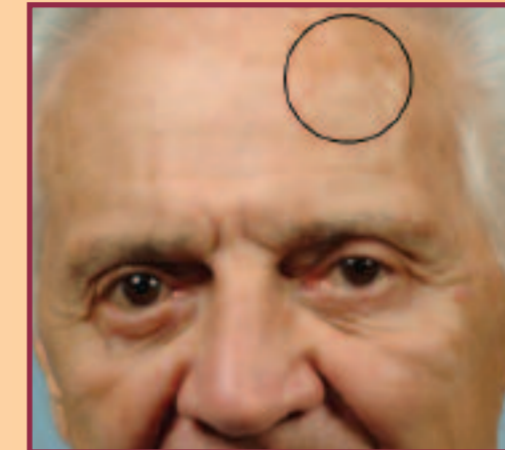
39 YEAR OLD FEMALE WITH A PAST HISTORY OF HAVING A FRONTAL BONE FRACTURE

INJECTION OF THE FILLER TO CORRECT THE FOREHEAD DEFECT

IMMEDIATE POST OPERATIVE RESULT



PRE OPERATIVE VIEW



IMMEDIATE POSTOPERATIVE

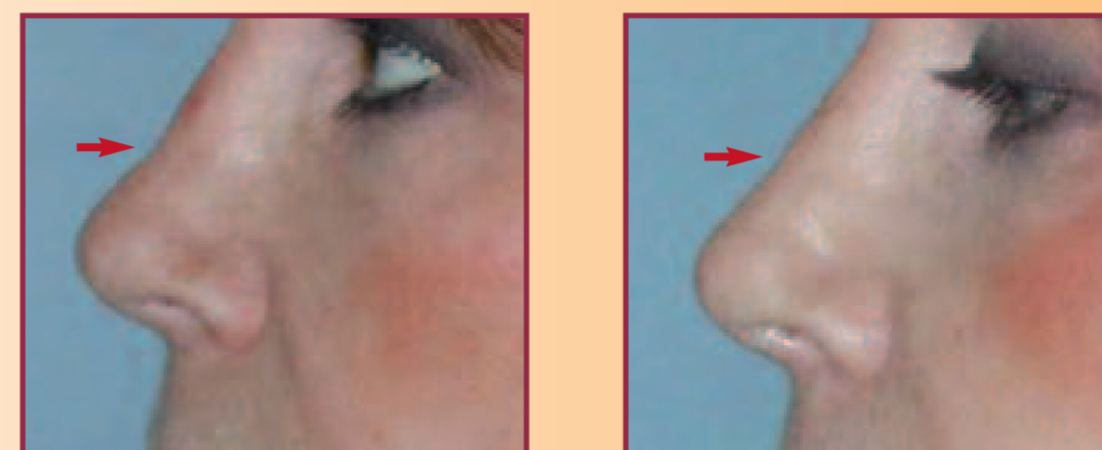


BEFORE (LATERAL VIEW)



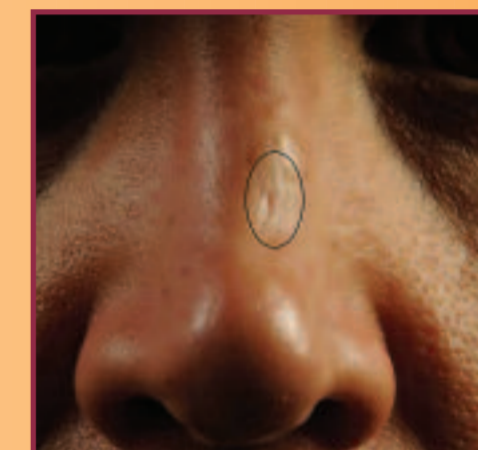
AFTER (LATERAL VIEW)

POST-RHINOPLASTY DEFECTS

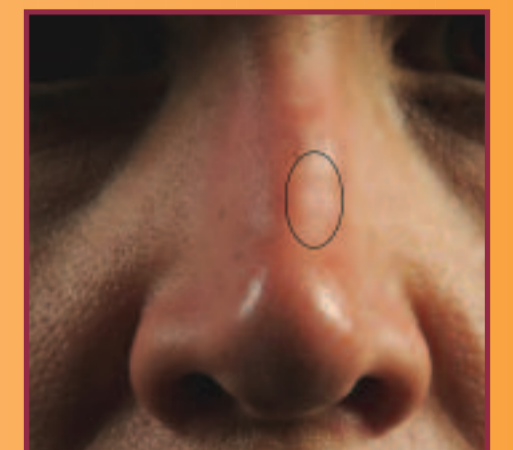


PRE-INJECTION

POST-INJECTION



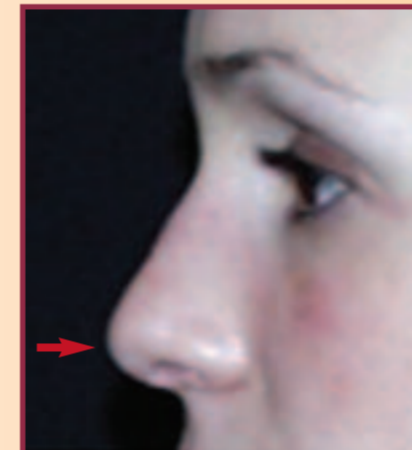
PRE-INJECTION



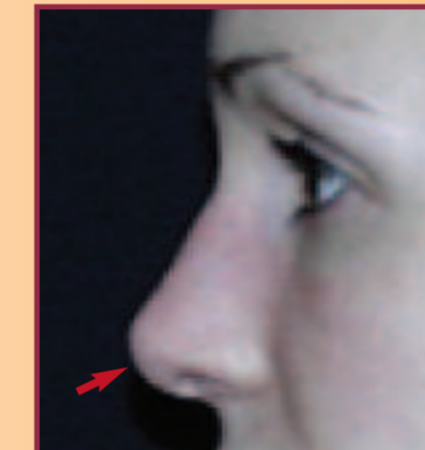
POST-INJECTION

NASAL TIP PROJECTION

18 MONTH POST OPERATIVE RESULTS *



PRE-INJECTION



POST-INJECTION .05 cc

CHEEK AUGMENTATION AND NASOLABIAL FOLDS



BEFORE *



AFTER *

NASOLABIAL FOLDS



PRE INJECTION

18 MONTH EFFECT

POST INJECTION 1.0 cc



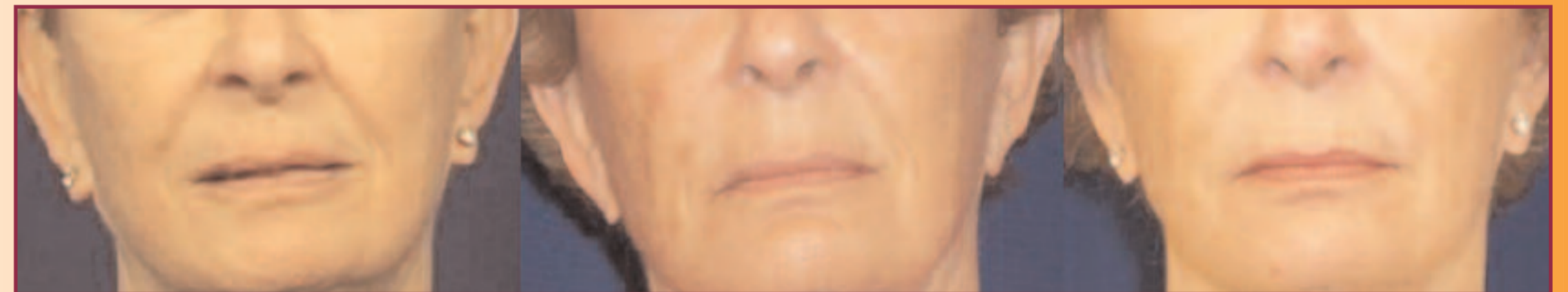
PRE-INJECTION

12 MONTH EFFECT

POST-INJECTION 0.8 cc

LONGEST FOLLOW UP

24 MONTH EFFECT *



PRE-INJECTION

22 MONTHS 1.4 cc

24 MONTHS +0.6 cc

CONCLUSION:

To this date 50 patients have received this treatment with a 24 month follow up period. A second injection of 0.1 cc was needed in 7 patients to correct soft tissue defects. (This was not needed in bony or cartilagenous defects) No significant complications have been encountered. All patients tolerated the procedure well and were satisfied with the result.

- The correction of small skeletal defects has maintained up to 24 months.
- In our hands, lip augmentation with this filler has given unpredictable results.
- We have obtained excellent results in the forehead, nose, and nasolabial folds.
- Cost can be a major drawback. (\$400 to \$1,200 per treatment)
- We are very optimistic with the results at 24 months. A longer follow up is currently undertaken with more patients, and other applications, in order to determine long lasting effects.

FOR ADDITIONAL INFORMATION CONTACT:

Amado Ruiz-Razura, M.D., FACS, FICS

Medical Director-Education, Training & Clinical Research

THE AESTHETIC CENTER FOR PLASTIC SURGERY

12727 Kimberley Lane # 300 • Houston, TX 77024

Tel: (713) 799-9999 • Fax: (713) 463-9674

Dr.Ruiz@mybeautifulbody.com

www.mybeautifulbody.com