

Hand augmentation with Radiesse® (Calcium hydroxylapatite)

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ABSTRACT: The hand has remained a considerable treatment challenge, as new soft tissue fillers have arrived in the esthetic marketplace. The challenge has been the result of both the multiple visits required for treatment in, for example, autologous fat grafting and the simple management of pain in the innervated areas of the hand between the bones.

This paper introduces a novel, noticeably less painful approach to treatment of the hand with calcium hydroxylapatite (CaHA; Radiesse®, BioForm Medical, San Mateo, CA). Anesthetic is added to the compound prior to injection, resulting in a homogenous admixture of CaHA and anesthetic. A bolus of the mixture is injected into the skin, using tenting, and then spread throughout the hand.

The result of this approach – mixing anesthetic with CaHA – is treatment that is easier to massage and disseminate, less painful to the patient than conventional hand injection, and characterized by less swelling and bruising, with minimal post-treatment downtime.

KEYWORDS: calcium hydroxylapatite, hand augmentation, Radiesse®

Introduction

Hand augmentation is part of the armamentarium of hand rejuvenation. In both men and women, volume restoration in the hands can provide a plumper, more youthful appearance, reduce skin laxity and wrinkling, and reduce the prominence of underlying structures such as bones, tendons, and veins (1).

The ideal filler for this purpose effectively adds bulk and volume and is durable enough to withstand repeated dynamic motion. Autologous fat grafting is one strategy for volume restoration.

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However, it may require several visits and injections, and necessitates the removal of fatty tissue from another site on the body (donor site). Furthermore, results of autologous fat grafting may not be predictable.

Other soft tissue fillers are also increasingly employed for augmentation of the hands (2). One such filler is calcium hydroxylapatite (CaHA; Radiesse®). This communication presents a novel technique that optimizes the use of CaHA for hand augmentation. Although CaHA is approved for facial esthetic use in the United States, its off-label use for hand augmentation has not been reported in the literature until now.

Technique

Combining the soft tissue filler with the anesthetic

To begin, 0.1 mL of plain 2% lidocaine is introduced into the 1.3 mL syringe of Radiesse® through a