

Soft-tissue augmentation with hyaluronic acid and calcium hydroxyl apatite fillers

KELLEY PAGLIAI REDBORD*, MARIANO BUSO† & C. WILLIAM HANKE‡

*Private Practice, Washington DC; †Private Practice, Coconut Grove, Senior Attending of Dermatology at Mercy Hospital in Miami, Voluntary Assistant Clinical Professor of Dermatology at the University of Miami, Florida, and ‡Private Practice, Carmel, Indiana, Clinical Professor Indiana University, Vice-Chairman, Department of Dermatology, St. Vincent Hospital, Indianapolis, Indiana

ABSTRACT: Soft-tissue augmentation with hyaluronic acid and calcium hydroxyl apatite are among the most widely used minimally invasive cosmetic treatments for the correction of contour deficiencies and wrinkles of the face without the risk, recovery time, and expense of a major surgery. Training and experience in the art and science of fillers is essential for the successful creation of a more youthful and natural appearance. An understanding of the different products, the injection techniques, the indications, and the potential complications of each filler are paramount to success.

KEYWORDS: calcium hydroxylapatite, hyaluronic acid, soft-tissue augmentation

Introduction

Today's patients are seeking skin rejuvenation to achieve a natural and youthful appearance through minimally invasive procedures with minimal down time. The skin's natural aging process manifests itself in the form of contour changes, wrinkles, the depletion of subcutaneous fat, and the loss of collagen, elastin, and bone. Soft-tissue augmentation with hyaluronic acid (HA) and calcium hydroxylapatite (CaHA) are among the most widely used nonsurgical cosmetic treatments for the correction of contour deficiencies and wrinkles of the face without the risk, recovery time, and expense of a major surgery. The demand for minimally invasive procedures grew from 2008 to 2009 with botulinum

toxin having a 157% increase and fillers having a 245% increase according to the American Academy of Cosmetic Surgery (1). The use of fillers is both an art and a science. An understanding of the different products, the injection techniques, the indications, and the potential complications of each filler are paramount to successful use. In a time when many other specialties and untrained providers are using fillers, it is critical that dermatologists remain the unquestioned experts in this field.

Indications

Soft tissue augmentation can correct contour deficiencies and help restore a youthful appearance (2,3). In understanding photoaging and the use of dermal fillers, it is important to not only fill lines but to understand volume loss in the dermis and in the deeper structures of the face such as the fat, muscle, and bone (2–4).

Address correspondence and reprint requests to: Kelley Pagliai Redbord, MD, FAAD, Private Practice, 1120 19th Street, NW, #250, Washington, DC 20036.