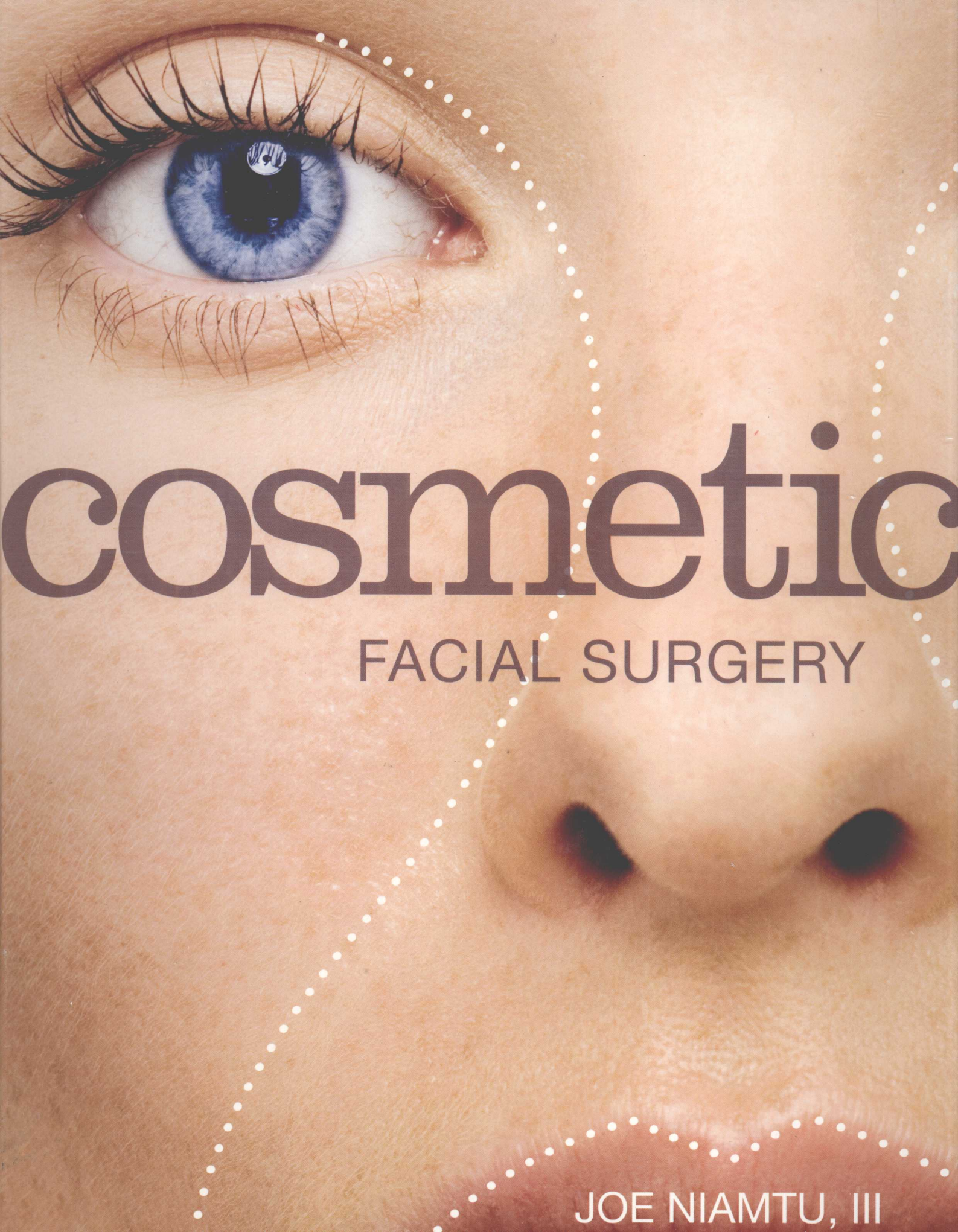

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FACIAL SURGERY

JOE NIAMTU, III

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JOE NIAMTU, III, DMD, FAACS

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Dedication

This text represents the pinnacle of my academic and clinical career to date and the communal effort of those around me.

When I wrote the final chapter I felt like a weight had been lifted from my shoulders, but that was only the beginning of the work. Elsevier employees John Dolan, Courtney Sprehe, and Karen Rehwinkel then began barraging me with thousands of pictures (there are 3,300 in this book!) to review and chapters to proof. One of the hardest things for an author is to read his or her own work. Since it is original and you wrote it, it is hard to concentrate. John, Courtney, and Karen have been paramount in keeping me on track; they are the most gifted and hardest workers I have ever had the pleasure of working with.

I dedicate this book to my parents Joe Niamtu, Jr and the late Elsie Niamtu, whose guidance and nurturing instilled in me the quest for success and the attribute to never, ever quit, no matter what. I was raised with the advice that an ordinary person can achieve extraordinary goals with hard work and dedication and to never lose sight of one's goals.

I would be remiss not to include my wife April in this dedication as she became a "book widow" for the 12 months of continuous writing, photography, filming, and editing required for a single-author text of this size. She gave up many date nights and social events, and supported me to the fullest as I was slumped over my computer, sometimes for 11 hours in a single day. Her support was invaluable.

Finally, I dedicate this book to my two special needs sons, Joey and Evan Niamtu. These angels have many challenges in their lives and they are my soldiers. They have taught me so much about love and about life, and they are my heroes. They cannot walk or talk and will never write a book, but their smiles and inspiration provide me the fortitude and drive in my life, personal and academic.

Foreword

We are honored that Dr. Joe Niamtu has asked us to write the foreword for his new book, ***Cosmetic Facial Surgery***. Please allow us to introduce to you Dr. Niamtu and his book. We have known Joe for approximately 15 years and have always appreciated his energy, enthusiasm, and knowledge. At the same time, his sense of humor enlivens whatever topic he is addressing, and in consequence, he is much in demand as a world-class expert and excellent communicator.

Dr. Niamtu is passionate about cosmetic surgery. He is a Fellow of the American Academy of Cosmetic Surgery and has served on the board of the Cosmetic Surgery Foundation. He appreciates the value of having numerous specialties contributing to the world of cosmetic surgery and also that not one specialty can "own" the cosmetic world.

Joe is a surgeon, author, and teacher who has written hundreds of articles on the topic of cosmetic facial surgery, which includes many different areas in this field. In addition, he has edited two previous cosmetic surgery texts and contributed to more than 20 chapters in other textbooks. He has trained hundreds of doctors from numerous specialties and lectures on average at 20 meetings a year.

Dr. Niamtu was honored when Elsevier Publishing invited him to write this text. It has 17 chapters, and to produce a book of this size as a solo author (with the assistance of Dr. Cuzalina for the rhinoplasty chapter), is a herculean task. It was his goal to create a book that presents information that is accurate, up to date, and clear. The book has over 3,300 photographs and nearly 800 pages of text, making it very comprehensive. It is designed to present step-by-step descriptions of procedures covering diagnosis, surgical mapping, the procedure itself, postsurgery considerations, and complications. Chapters on clinical photography, evaluating the cosmetic patient, and cosmetic surgery anesthesia make this a complete and well-rounded text.

Dr. Niamtu has committed 2 years of his life to translating his 30 years of facial surgery experience into this valuable reference text. We hope you will enjoy reading it as much as we have.

ALASTAIR AND JEAN CARRUTHERS
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Preface

From Idea to Opus

While strolling through the exhibit hall at a meeting in 2007, I walked by the Elsevier booth and was stopped by an Editor. He told me that he had read and enjoyed many of my writings and, much to my surprise, asked if I would be interested in writing a textbook on cosmetic facial surgery for Elsevier. I told him that it was something I had always wanted to do and that I have cosmetic facial surgery friends all over the globe from every specialty and that we could put together a world-class text. The Editor rather abruptly cut me off and said that he wanted me to be the sole author! This caught me off guard. Although I have written hundreds of articles on cosmetic facial surgery, as well as contributed to more than 20 textbooks and authored several small textbooks, I knew that writing a sole-author text that covers the entire panorama of contemporary cosmetic facial surgery would be a daunting task. The Editor assured me that I "could do it" and that writing the book on my own would maintain the voice and practical nature of my teaching and he asked me to consider it. I have to be honest. I kind of back-burnered the idea and put it in my "someday I will do that" bucket list. Each time I entertained the thought of taking on the project I got an uneasy feeling, knowing the serious amount of work that it would require. I was already spending entirely too much personal time lecturing, publishing, and teaching while trying to balance a busy cosmetic facial surgery practice and a marriage with two severely mentally and physically disabled children. Again, each time I thought about writing this big, sole-author text, I quickly put it out of my mind.

I have always been the type of person who hates to turn down a challenge, and this particular challenge kept gnawing at my mind. Writing a definitive text on cosmetic facial surgery was something that I always intended to do, but I envisioned it as something I would do later in my career. Cosmetic facial surgery is my passion and I wanted to leave a legacy of the wonderful knowledge I have learned to the profession that I enjoy so much. I have always been a teacher at heart and here I was, being offered the chance to write a book on what I love for the most-respected textbook publisher in the world. Pretty hard to turn down! So in September 2008, while on a plane to speak at a meeting (I do some of my best writing on airplanes!), I pulled out my laptop and put together a table of contents for 17 chapters that would encompass the major procedures in cosmetic facial surgery. Bang! There it was. I had started my book.

Over the next year I began to work on the chapters outlined in the table of contents. I wanted this book to be a text that would interest students, residents, and experienced practitioners alike. I wanted it to be a book that was so comprehensive and had so many color photographs that it would cross all specialty lines involved with cosmetic facial surgery. I wanted it to be an atlas that would not simply sit on a surgeon's bookshelf, but one that would become tattered and worn from serving as a great surgical reference. All of these thoughts led me to search for an unofficial title for the book, which came to be called "My Opus". If all of this sounds boastful, it is not at all. I am a very humble person, but was raised with an extremely hard work ethic (thank you Joe Niamtu, Jr.). I was taught that if a person puts everything they have into a project, the result will usually be good. Any surgeon that has ever written an article is aware that sometimes it is easy to cut corners when adding information that requires research, exactness, and credibility. To that end, if I was unsure of a fact, I stopped writing and started researching.

One thing that made this text possible was my obsession with clinical photography. Over the past 12 years I have taken over 80,000 surgical pictures and have photo documented all of my procedures, complications, and patients, much to the dismay of my wonderful staff who tirelessly puts up with my stopping surgery, cleaning the field, and taking high-quality pictures. My staff took many of the photos and did a great job. While writing this text, if I came across a poor-quality photo that would not complement the Opus, I retook the photo on the next case I performed. I also created many of the diagrams used in this book, spending countless hours with the camera and Photoshop—definitely a task of awesome proportion!

I begin this text with chapters on facial aging, evaluating the cosmetic surgery patient, digital photography, and anesthesia. It took several weeks of writing to complete these chapters. It was after that, however, that the real work began. My goal was to start at the top of the head and write chapters detailing contemporary diagnosis, surgery, followup, complications, and case presentations and work my way down to the clavicles. Over the next 10 months I became a keyboard hermit and less of a husband and father. There were weekends when I typed for 11 hours a day and my fingers hurt. At work, I typed between patients. Slowly but surely, the text began to take shape.

Although this is a single-author text, rhinoplasty is a procedure that I rarely perform. I needed an author for the rhinoplasty chapter that would complement this text. I have met some of the leading rhinoplasty surgeons in the world and thought about asking one of them to do a chapter, but my fear

was that since they are so recognized and have written extensively they would present me with an anemic chapter of material that they had laying around from previous writings. With this thought, I decided that what I really needed was an excellent rhinoplasty surgeon with lots of experience. Coupled with these requirements was the need for someone that is as driven as I am and who could deliver superlative writing and photography on schedule. My dad always told me that "if you want something done, ask a busy person". With all of this in mind, there was only one person that I knew could fit that bill and that was Angelo Cuzalina, MD, DDS. In addition to being president elect of the American Academy of Cosmetic Surgery, Angelo is as involved as I am with teaching, lecturing, publishing, and practicing. Since he has "can't say no" disease, I asked and thankfully he accepted and provided a world-class rhinoplasty chapter.

How long does it take to write a comprehensive text on cosmetic facial surgery? The answer is about 2 years, and that is 2 years of daily work, not sporadic toil. This has been the hardest project I have ever done in my life and will likely remain my biggest, as the required commitment truly necessitates putting the rest of your life on hold. My honest hope is that the readers of this book will agree that it is a useful resource and valuable addition to their practice and knowledge base. It was truly my honor and privilege to be selected for this text and a labor of love to write the "Opus" of my career.

JOE NIAMTU, III

Features and Organization

Key Features

- **Comprehensive coverage**—the full range of procedures from the upper face to the lower face/neck area
- **Accessible, easy-to-grasp writing style**—first-person narrative teaches concepts based on real cases and experiences, making the surgical procedures tangible and easy to understand
- **Over 3,000 illustrations**—extensive number of drawings and before and after photos help clarify important concepts and techniques and show the dramatic results that can be achieved
- **DVD**—videos showing the author performing the procedures discussed in the book bring the surgeries to life

Organization

Chapter 1: The Aging Face—addresses regional facial aging, upper facial aging, midfacial aging, nasal aging, lower facial aging, and aging in the submental region

Chapter 2: Diagnosis of the Cosmetic Facial Surgery Patient: The Art of the Consult and the Office Patient Experience—addresses how to have a productive consult, how to choose the right patient, the preoperative appointment, the day of surgery, and postsurgery followup

Chapter 3: Clinical Digital Photography—addresses the photography equipment (including cameras and software), taking and making photos, radiographs, ultraviolet images, and archiving

Chapter 4: Anesthesia Considerations for Cosmetic Facial Surgery—looks at the mechanism of local anesthetics, sensory anatomy of the head and neck, local anesthetic techniques, local anesthesia of the neck, tumescent anesthesia, and conscious sedation

Chapter 5: Mini Open Brow Lift: The Transfollicular Subcutaneous Approach—looks at the technique of transfollicular subcutaneous brow and forehead lift (TFSBFL), an alternative to other brow-lift techniques, including endoscopic brow and forehead lift (EBFL)

Chapter 6: Brow and Forehead Lifting—focuses on endoscopic and open-brow techniques, including upper facial diagnosis, patient acceptance of brow and forehead lifting, the surgical procedure, and complications

Chapter 7: Cosmetic Blepharoplasty—looks at orbital anatomy, aging conditions of the eyelids and periorbital areas, diagnosis and patient selection, treatment planning, preoperative marking, surgical preparation and anesthesia, instrumentation, upper-eyelid incision, lower-eyelid blepharoplasty, alternative treatments, and complications

Chapter 8: Rhinoplasty—designed to provide a good, basic knowledge and covers topics such as anatomy, the nasal musculature and blood supply, nasal bone and cartilage anatomy, examination and consultation, clinical evaluation of the nasal tip, treatment planning, external versus endonasal technique, incision options, open rhinoplasty, and complications

Chapter 9: Cervicofacial Rhytidectomy (Facelift)—addresses the history of facelift surgery, facelift anatomy, patient selection, determining status for potential cosmetic facial surgery, preoperative consultation workup, facility, instrumentation, the day of the surgery, anesthetic considerations, facelift procedure, SMAS techniques, postoperative care, short scar/weekend facelift, simultaneous laser skin resurfacing, concomitant or ancillary procedures, revision facelift surgery, complications and their prevention, postsurgical revision, and the informed consent procedure

Chapter 10: Facial Implants—looks at midface implants (including implant selection, preoperative planning, surgical placement, postoperative care, and complications) and addresses chin implants, mandibular angle implants, and custom implants

Chapter 11: Cosmetic Otoplasty and Related Ear Conditions—addresses ear deformities and the two techniques that can be applied to most common ear deformities, the Mustardé and Davis procedures, and also looks at earlobe reduction, the repair of torn earlobes, complications in earlobe repair, and keloid excision

Chapter 12: Skin Resurfacing—looks at both laser resurfacing and chemical peels, popular adjuncts in the contemporary cosmetic facial surgery practice

Chapter 13: Neurotoxins in Cosmetic Facial Surgery—looks at botulinum toxin A, including its history and physiology, clinical usage, nasal indications, perioral treatment, facial pain/TMJ/headache, and complications

Chapter 14: Use of Injectable Fillers in Cosmetic Facial Surgery—looks at recent historical overview of facial fillers available in the United States, tissue deposition of injectable fillers, treatment considerations, injection techniques, diagnostic decisions, patient expectations, complications, and lip implants

Chapter 15: Lip Reduction (Reduction Cheiloplasty)—looks at lip reduction, including diagnosis and consultation, differential diagnosis, lip anatomy and histology, the surgical procedure, subtotal lip reduction, postoperative care, complications, and lip shortening

Chapter 16: Cosmetic Removal of Nevi and Lesions With 4.0 MhZ Radiowave Surgery—addresses the technique for aesthetic removal of nevi and various other lesions, rhinophyma, postoperative care, and complications

Chapter 17: Laser Treatment of Vascular Lesions—addresses 532- and 940-nm wavelengths in solid-state lasers, treating larger or deeper vessels, equipment considerations, pigmented lesions, anesthesia concerns, and complications

DVD Features

CHAPTER 5

Trichophytic Brow Lift
- Part 1
- Part 2
- Part 3

CHAPTER 7

Unilateral Upper and Lower CO_2 Blepharoplasty

CHAPTER 8

Open Rhinoplasty

CHAPTER 9

Facelift
- Part 1
- Part 2
- Part 3
- Part 4

CHAPTER 10

Extraoral Chin
Small Combined Submalars
- Part 1
- Part 2

CHAPTER 11

Davis and Mustardé Otoplasty
- Part 1
- Part 2

CHAPTER 12

TCA Peel

CHAPTER 13

Botox—Marking and Three Areas

CHAPTER 14

Juvederm Comprehensive Filler Needle and Cannula
Juvederm Injection to Nasolabial Folds and Lips

CHAPTER 16

Ellman Large Cheek Mole

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1

The Aging Face

Aging is a physiologic process of the body in response to the passage of time. Since the beginning of time, people have sought treatments to retard or reverse aging, with little avail. Aging can be accelerated by intrinsic and extrinsic factors. Aging cannot be stopped or reversed, but its effects can be mitigated. Trying to make a 60-year-old patient look 30 is unreasonable; a 60-year-old patient who wants to look as good as possible for 60 is very reasonable.

It is imperative that cosmetic surgeons fully understand the pathophysiology of aging, and educating patients on this process also helps them appreciate the basis for rejuvenation. Although we may feel we know much about aging, in reality we know little. Most textbook descriptions of facial aging are very mechanical and relate to loss of volume and support. Although this is certainly a factor and important to reversing the effects of aging through cosmetic surgery, there are many other intrinsic factors that make aging happen. Most cosmetic facial surgery patients are female, and the nuisances of metabolic aging influences are significant. Menopause produces decreased estrogen levels with elevated androgen levels, which contribute to epidermal and dermal changes. The decrease in basal metabolic rates (in men and women) facilitates weight gain and fat distribution in unwanted places such as thighs, abdomen, hips, buttocks, face, and neck. Add the ravages of childbearing to the skin and muscle, and it is easy to understand the aging process in females. Subcutaneous fat also decreases, which affects the support of the skin. The face and neck are rich in glandular structures that are less frequently discussed in volume loss but are probably moderate contributors. Finally, osteoporosis plays a key role in bone resorption; the majority of women in their fifth decade are osteoporotic. Osteoporotic changes also occur in males and in both sexes contribute to facial skeletal and dental resorption. As the facial skeleton shrinks, even more soft-tissue support is lost.

One unique factor to facial aging is that in most cultures, the face is exposed. Clothes can masquerade somatic aging, but the face and hands give it all away.

Like all other theories or processes, surgeons and anatomists argue about what exactly happens during aging. Although most surgeons agree that atrophy, ligamentous laxity, and ptosis are causative factors, others argue against this. What is universally agreed upon is that aging is a gradual process of structural weakening, and its effects begin in the third decade and progress throughout an individual's lifetime. Aging is basically a process of deflation, similar to the transition from grape to raisin (Figure 1-1).

Babies and toddlers have full, rounded faces with full, convex contours. Adolescence includes rapid but disharmonious growth of bone, cartilage, muscle, and fat, which produces a sometimes awkward appearance in the preteen years. Through the teen years, puberty produces secondary sexual characteristics, including rapid growth phases that produce hereditary but predictable and distinguishable facial changes. Middle age brings the onset of aging changes that progress until death, as described later in this chapter.

The youthful face is tapered like an upside down egg, owing to the distinct volume and tight tissue retention (Figure 1-2, *A*). The aging face is more a reverse taper, similar to a right-side-up egg, due to the descent of volume and fat-compartment changes (Figure 1-2, *B*).

Aging changes are not only from volume loss and support changes but also intrinsic and extrinsic factors[1-3] (Box 1-1). It is interesting that biological aging can sometimes exceed chronologic aging, and we all know 45-year-olds who look 60 (or the inverse).

Lifestyle and heredity are significant contributors to the aging equation. Some aging factors are controllable whereas others are not. Studies of monozygotic twins have revealed that aging is affected greatly by environmental and lifestyle factors, as measured by physical appearance. The factors that exert the greatest influence seem to be substance or alcohol abuse, sun exposure, and emotional distress.[4] These aging changes are shown with supporting images in the various procedure chapters.

In the first clinic I wrote, Dr. Tom Faerber contributed a chapter on facial aging. To compare aging changes, he performed an interesting study in which he obtained computed tomography (CT) scans on his 9-year-old daughter, 42-year-old

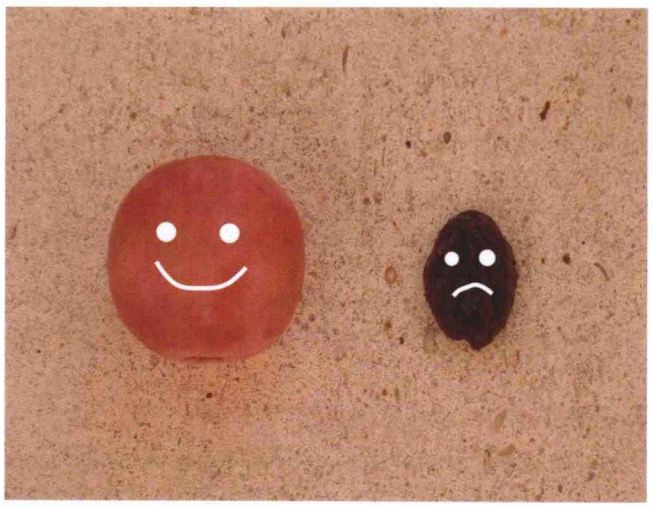

FIGURE 1-1. The analogy of a grape transforming into a raisin symbolizes the loss of volume in facial aging.

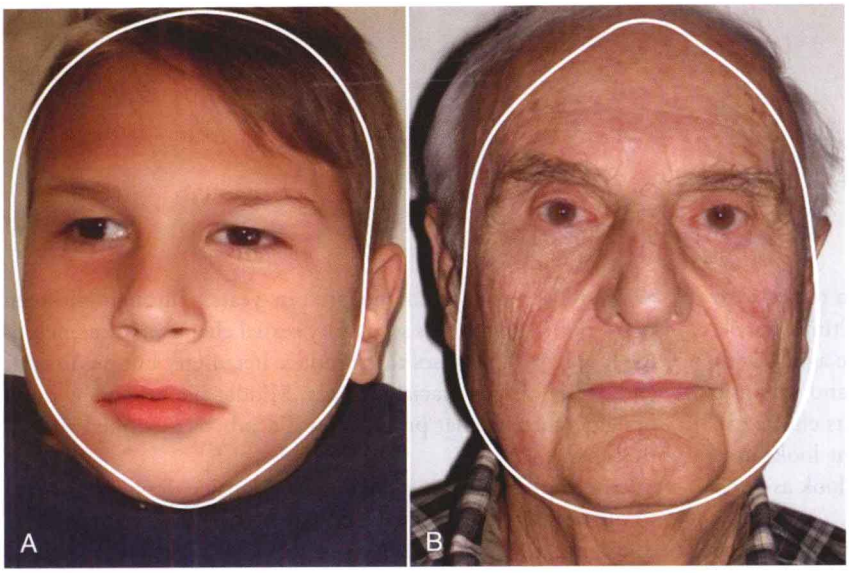

FIGURE 1-2. The youthful face is the shape of an upside-down egg; the volume is in the midface, with a tapering lower face **(A).** The aging face has volume loss, descent of tissues, and loss of the taper, giving it a right-side-up egg shape **(B).**

Box 1-1 Etiology of Aging

Intrinsic Aging
- Cellular senescence
- Decreased proliferative capacity
- Decrease in cellular DNA repair capacity and chromosomal abnormalities
- Hormone reductions
- Oxidative stress
- Gene mutation
- Fat and muscle changes
- Bone and cartilage remodeling
- Loss of dental structure

Extrinsic Aging
- Ultraviolet radiation
- Environmental factors
- Smoking
- Ethanol abuse
- Gravitational effects
- Elasticity changes
- Emotional stress

wife, and 75-year-old mother-in-law. These women's ages were separated by roughly 35 years.[5] Of particular note is that the youthful face is convex, whereas the aging face is concave due to fat atrophy, muscle atrophy, and gravitational and ptotic changes (Figure 1-3). A pattern of muscle atrophy was demonstrated in the masseter and buccinator muscles in the oldest family member. The parotid gland maintained its volume, but the surrounding perimuscular and subcutaneous fat showed atrophy. Fat and muscle atrophy in the temporal, buccal, and malar regions were also seen and contributed to the concavities in those regions that develop with age, as evidenced in the progressive CT scans.

Osseous volume-loss changes have also been implicated in midfacial aging.[6,7] Other studies show osseous volume increases in the lower face.[8]

Regional Facial Aging

The most logical means to address facial aging and rejuvenation is to start at the top and work downward. If the novice surgeon keeps this in mind, an orderly progression is always completed with consultation, diagnosis, and treatment.

Skin

The most plentiful facial tissue is skin. The facial integumentary, like the exposed hands, rarely gets a rest from the ravaging effects of the environment. Photodamage from sun exposure is especially harmful and coupled with extrinsic factors such smoking can accelerate the effects of aging.

Photodamage describes aging changes of the skin from chronic ultraviolet (UV) light exposure. Cumulative photodamage can be seen in almost every patient by comparing the sun-exposed and sun-protected areas of skin (Figure 1-4). The most obvious clinical cutaneous aging changes include markedly increased skin roughness, increased mottled hyperpigmentation, increased loss of elasticity, increased wrinkling, and sallowness.

Genetic contributions to skin aging result in numerous biochemical, histologic, and physiologic changes: a reduction of vascularity, increased dermal/epidermal thickness, collagen changes, proteoglycan and dermal cellularity, and loss of elastic fibers.[9-11]

Photoaging causes functional and anatomic modifications in the exposed regions. Ultraviolet B (UVB) radiation produces direct damage to the DNA of skin cells and also modulates the activity of cytokines and adhesion molecules.[12,13] Ultraviolet A (UVA) radiation initiates the formation of reactive oxygen species (ROS), which also damage nuclear and mitochondrial DNA and activate matrix metalloproteinases (MMPs).[13]

Histologically, the effects of skin photoaging include epidermal thickening, keratinocyte atypia, loss of polarity, and increased melanogenesis[14] (Box 1-2). A fragmented and disorganized dermal fibrillar network is present and forms amorphous groups.[15] Collagenous changes occur in the appearance of fragmented collagen fibrils, senescent fibroblasts, loss of function of glycosaminoglycans, and alterations in the cutaneous microvasculature.[16]

Contributing to exogenous skin aging is the decrease in skin functions that occur with age: decreases in cell replacement,

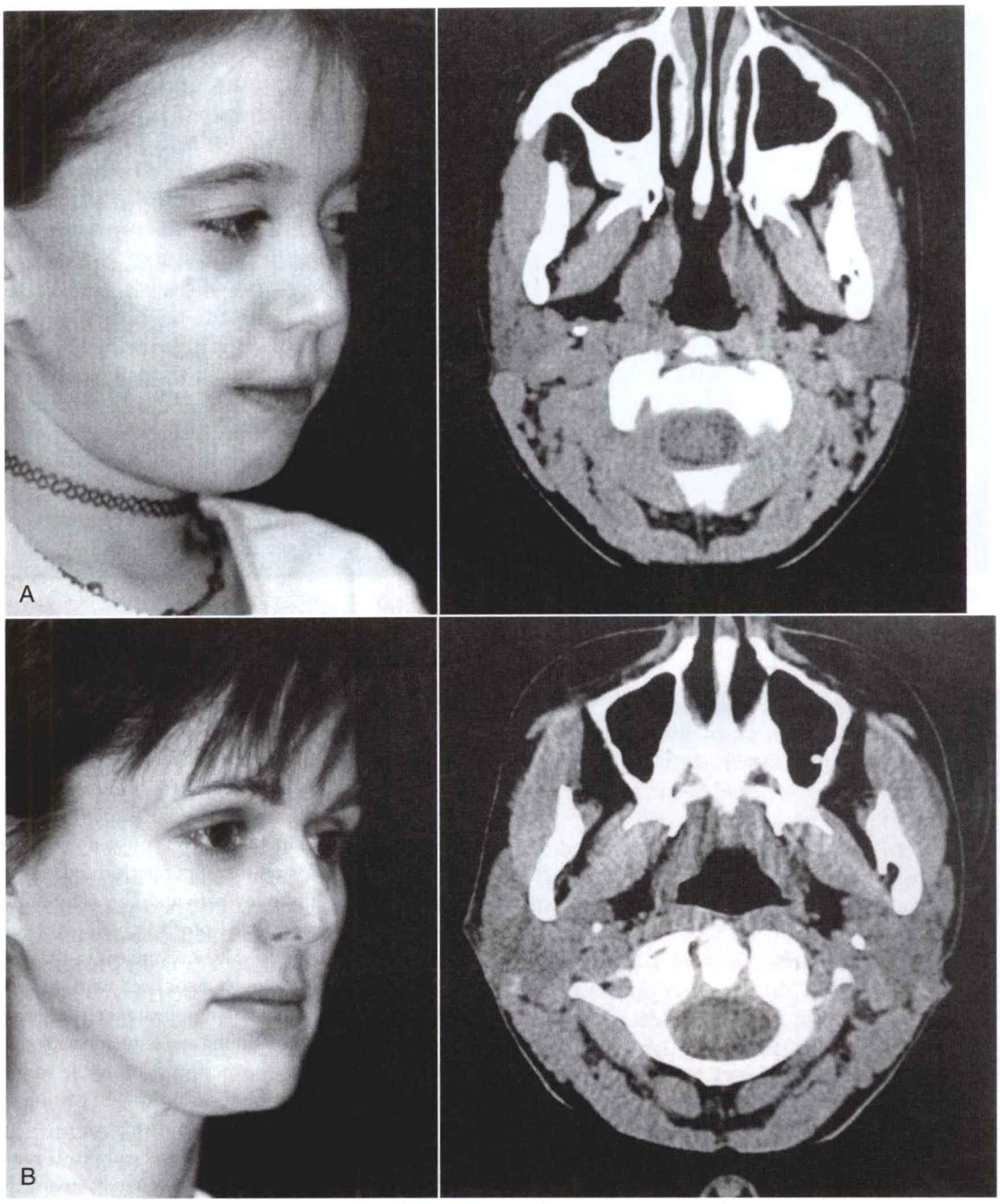

FIGURE 1-3. **A,** Computed tomography (CT) scan showing the facial anatomy of a 9-year-old female. **B,** CT scan showing the facial anatomy of a 42-year-old female.

Continued

Box 1-2 Histologic Effects of Photoaging

- A thickened, more basket-woven stratum corneum
- A thinner, more atrophic epidermis
- Epidermal atypia
- Irregular melanin dispersion in the epidermis
- Decreased glycosaminoglycans in the dermis
- Abnormal-appearing elastic fibers in the dermis

injury response barrier function, sensory perception, immune and vascular responsiveness, thermoregulation, sweat production, sebum production, and vitamin D production.[5]

Upper Facial Aging

Hair

Aging in the scalp manifests as the pigment changes of graying, thinning, hair shaft fragility, pattern baldness, and recession. These changes are largely genetically controlled and less at the

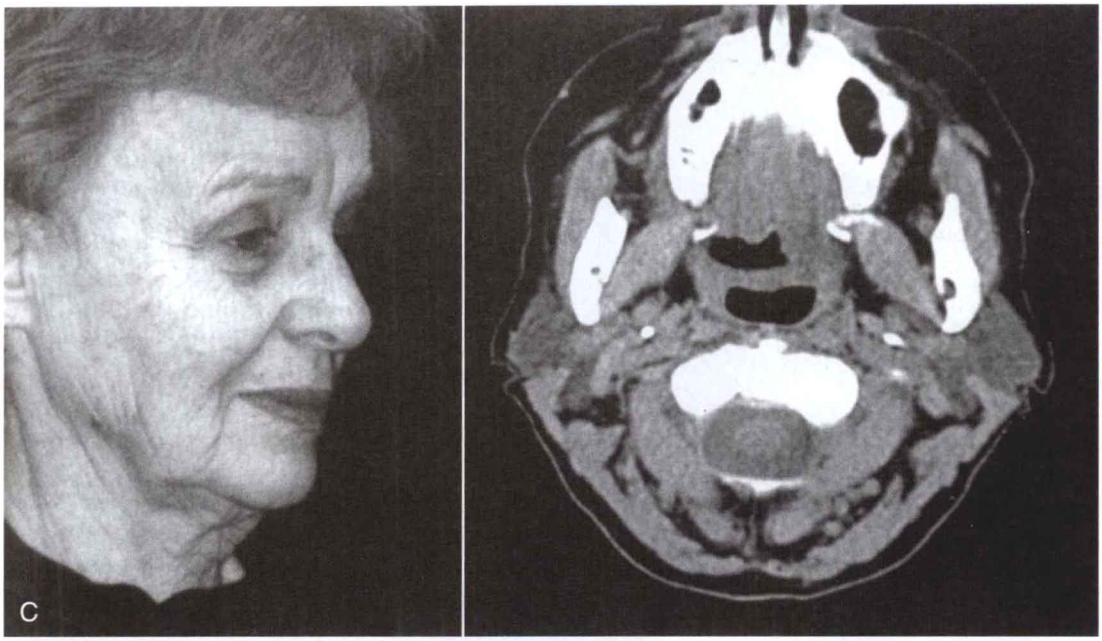

FIGURE 1-3, cont'd C, CT scan showing the facial anatomy of a 75-year-old female. (From Faerber TH: Evaluation of the aging face. In Niamtu J (ed): Cosmetic facial surgery. Oral Maxillofac Surg Clin North Am, pp 523–530, 2000.)

FIGURE 1-4. Sun damage is evident on most individuals, and the difference between the sun-protected and sun-exposed skin is obvious.

mercy of the environment compared to the skin. Additionally, "hair aging" is less of an indicator of age; some 20-year-olds lose their hair, while some 70-year-olds have a full head of thick, dark hair.

The aging scalp is treated surgically with follicular grafts, flaps, and other techniques. The medical treatment of hair loss, although in its infancy, will probably overcome surgical treatments in the lifetime of many of the readers of this text. The FDA clearance of bimatoprost (Latisse, Allergan Inc., Irvine, CA) is an indicator of things to come.

The Forehead and Brow

Younger people have smooth foreheads. Photodamage with its resultant skin changes, tissue ptosis, and gravity all contribute to brow and forehead changes. Continual flexing of the frontalis muscles creates horizontal forehead rhytids.

Although some people, even in youth, never have elevated or arched brows, many do. Most youthful females have brows that arch at the junction of the central and lateral brow (which corresponds to the lateral pupillary limbus). The youthful male brow lies at or slightly above the superior orbital rim. The aforementioned aging changes coupled with the atrophic changes in brow fat and the upper periorbital complex cause the brows to descend in many patients. This is manifested as lateral hooding and/or generalized ptosis, which gives the appearance of smaller eyes (Figure 1-5). In severe cases, the eyebrow sits on the lashes. A ptotic brow associated with upper periorbital changes produces a sad, tired appearance that leads some individuals to spend their waking lives subconsciously raising their brows. Any surgeon who performs brow lift surgery can attest to the difficulty—if not impossibility—of getting some patients to relax their brow for a preoperative photo.

The treatment for brow and forehead ptosis is an endoscopic or open brow technique. Unfortunately, many patients who should have a brow lift end up with blepharoplasty. This can actually worsen the aging situation by further pulling down the brow. The correct diagnosis of brow and forehead ptosis is paramount in aesthetic rejuvenation.

The upper facial mimetic muscles allow us to communicate with complex facial expressions, but continual flexing of the procerus and corrugator muscles takes a toll by causing rhytids in the glabellar region. The "11" is what some patients call the two prominent, vertical glabellar rhytids. Treatment of glabellar rhytids includes injectable neuromodulators, injectable fillers, radiofrequency nerve ablation, laser skin resurfacing, and muscle disruption with concomitant brow lift.

Upper Eyelids

The upper lids are inseparable from brow and forehead aging, because the ptotic brow enhances upper lid skin redundancy.