

PREFACE

*I do not know what I may appear to the world;
but to myself I seem to have been
only like a boy playing on the seashore,
and diverting myself in now and then
finding a smoother pebble or a prettier shell than ordinary,
whilst the great ocean of truth lay all undiscovered before me.*

SIR ISAAC NEWTON
Brewster's Memoirs of Newton

Why do so many smart surgeons struggle with rhinoplasty or stop performing it altogether? Is it the limited access? Is it the technical skill required, the complex anatomy, the narrow margin of error, or the lack of binocular vision? Or is it simply that the nose is an idiosyncratic little body part that will not follow the laws that Nature has established for every other type of surgery?

It was not always this way. During my plastic surgery residency in the mid 1970s, rhinoplasty was a simple operation. There were very few rules. Every preoperative nose was too big, and so the solution was always reduction. We were taught to recognize thick-skinned patients and not operate on them. If the airway was obstructed, we would remove part of the septum and reduce the turbinates. Patients who had imperfect outcomes were rejected for further surgery, because nothing could be done to help them. They had been poor rhinoplasty candidates.

Therefore many surgeons agreed with McDowell, writing in 1978:

During the last 15 years, evidence has been increasing that the “pay dirt” lode in the great mine of rhinoplastic information is nearly exhausted. The nose is a small organ with a rather simple anatomical structure; in two-thirds of the century, the fine investigative surgeons at work seem to have exhausted most of the possibilities for desirable structural changes in this small and simple organ. The situation is not unlike that which has existed for 50 years with regard to operations for indirect inguinal hernia.

That very same year, the first edition of Dr. Sheen’s *Aesthetic Rhinoplasty* was published. I met Dr. Sheen in July 1978, just after finishing my residency, and read a typescript of his book, then at the printer. I was captivated. The logic and order of the surgical steps made more sense than anything I had read on the subject, and I saw how his principles of support and structure applied not only to the unoperated nose, but could also be used to rehabilitate secondary and tertiary patients, whose deformities had been considered inoperable until then.

But Dr. Sheen’s words were only part of the spark that ignited my interest in rhinoplasty: he performed magic in the operating room. Dr. Sheen was a rapid, efficient, technically gifted surgeon; but it was his clarity of goals, energy, and excitement—and even more than that, his *wonderment*—that made his surgery so remarkable and such a catalyst for my own work. Dr. Sheen’s contributions to rhinoplasty expanded over the next 30 years. His techniques and innovative, often iconoclastic, observations became the modern framework within which we all discuss rhinoplasty: recognition of middle vault collapse, the inverted-V deformity, the patient’s aesthetic, the importance of the “ethnic” nose, and the unbalanced top-heavy or bottom-heavy nose (disproportion); and his concepts of lesser resection—not more—for thicker-skinned patients, omitting osteotomy and the low-to-high osteotomy, the airway ramifications of the narrow nose, inadequate tip projection, camouflage for asymmetry, the two-surface concept for alar wedge resection, and the use of the alar lobule as a composite graft.

And these are the big contributions: dorsal and tip augmentation to treat supratip deformity; identification of the middle crus, the low radix, short nasal bones, and alar cartilage malposition; the techniques of spreader grafts, the shield tip graft, and crushed cartilage grafts; the use of the ear as a cartilage and composite graft donor site; and many new concepts for using rib grafts. His observations became our new paradigm, and his terminology became our rhinoplasty lexicon.

Armed with this new information, I entered practice in New Hampshire, eager to apply what I had learned and create astonishing rhinoplasty results—I fell flat on my face. Nothing I saw or did resembled the diagrams in my atlases or the magic that I had seen in Dr. Sheen’s operating room. Nothing behaved the way it should.

When I reduced the dorsum, why did the middle third look narrower, and why did the nose shorten? Why had the columella become lower, the alar rims more arched, and the nasal base larger and blunter? I had not touched them. Why was rhinoplasty so different from all the other operations I had learned? This was not magic—it was black magic.

I determined to understand what was going on. I didn't believe in idiosyncrasy; I believed in biological laws—but I had to decipher what they were. I tried to relate the postoperative changes to what I had done and to the preoperative deformity. When there were outcome differences between apparently similar noses, there had to be a reason. And most important, what was the relationship between nasal appearance at the end of the operation and its appearance a year later? It made no sense to discuss aesthetic goals with my patients if I had no idea how to achieve them. How could the surgeon learn to control the postoperative result? I resolved to break The Rhinoplasty Code.

This book is a product of my 30-year adventure into nasal phenomenology, function, and technique. It summarizes what I know today. Because Dr. Sheen's texts have become such standard reference works, the reader familiar with them will recognize comforting similarities. My Patient Studies have used Dr. Sheen's format, describing the deformity and patient goals, the surgical plan, and the postoperative analysis. I have included many hundreds of intraoperative photographs that demonstrate those intraoperative changes that are important for the reader to learn and that show the grafts used in each patient. And I have included many examples of sequential postoperative changes so that the reader may observe how each type of nasal shape and intervention matures as time passes.

But there is much here that I hope the reader will find new and educational, and that will help direct treatment. Part I describes not only *static* anatomy but *dynamic* nasal anatomy—how things move during surgery and afterward—a phenomenon almost unique to rhinoplasty and one reason that it is so difficult to learn. Chapter 3 explains why rhinoplasty is a right-brain operation that trades heavily in balance and proportion, and shows the reader how to access right-brain function on command. Chapter 4 summarizes the results of 17 years of airway research and relates physiology to surgical practice so that surgeons can reliably ensure that each of their patients breathes better postoperatively. Chapter 5 analyzes the four critical anatomic variants that most often make the difference between successful and unsuccessful results.

Part II explores rhinoplasty as an operation: why rhinoplasty is difficult, rhinoplasty planning in the abstract, and applied concepts and aesthetics. It concludes with a widely applicable method for creating an operative plan.

Part III covers basic concepts and techniques in the primary surgery. I explain how a surgeon can teach himself or herself rhinoplasty in the same way that I did. In the operating room, I demonstrate the interactive nature of rhinoplasty step by step, so that the reader can learn to interpret intraoperative signals and artifacts as they occur, understand them, and react to them. Part III also details graft harvesting and technique for each graft used in primary rhinoplasty. Following this is a chapter that discusses the typical postoperative course and a chapter devoted to postoperative problems, including my own complications.

Rhinoplasty deformities may seem limitless, but they are not. By and large, they form patterns. Likewise, their surgical solutions form patterns. Part IV introduces an icon system that reduces the operative plan for each case to a schematic, located at the top corner of every page on which the case is described. Soon the reader will be able to link the schematics, relate the icons to the solutions and to the deformities that they correct, and therefore begin to see these deformities as recognizable groups with associated characteristics. This recognition is the beginning of familiarity with The Code. Part IV also contains analyses of the treatments of the common and less common primary rhinoplasty shapes.

Part V discusses secondary rhinoplasty—its unique techniques and donor sites—and treatment of regional or generalized deformities.

Not all unfavorable rhinoplasty results are technical. Perhaps even more unfortunate than unfavorable results are surgical successes in unhappy patients. These difficulties occur along a spectrum, and their pathophysiology is complex—related, I believe, to both the patient's self-esteem and prior interpersonal relationships. Part V therefore concludes with a discussion of body dysmorphic disorder and lessons that I have learned from my own unhappy patients.

As these volumes grew, so did the need for a certain amount of purposeful repetition. Though one clinical example might have sufficed in a few instances, I have tried to show several so that the interested surgeon might be able to match an upcoming case to elements of the clinical examples, and thus be more rapidly guided toward a successful solution. In doing so, I have tried to show ranges of outcomes; and where there were postoperative problems, I point them out. Showing only perfect results would not be teaching, but marketing, and that is not the purpose of this book.

There is still a void in rhinoplasty learning; therefore there must be a void in rhinoplasty teaching. Some rhinoplasty techniques have become devilishly complex and abstruse. I have deliberately tried to do the opposite in my own work and in my teaching. The reader may therefore wonder why there aren't many more technical variations. But rhinoplasty is not difficult because too few techniques have been

described, but rather because many surgeons do not yet fully understand its right-brain nature, how to make a diagnosis that directs treatment, the importance of controlling skin sleeve movement, and that no rhinoplasty is a success unless it ensures an optimal airway. Nature's laws are consistent, regardless of the surgical approach. Thus the principles in this book apply whether the surgeon uses grafts or sutures, columellar or mucosal incisions. There is perhaps no other operation that so completely integrates balance and harmony with the surgeon's technical skill and spatial intelligence, and so thoroughly tests the surgeon's ability to uncover and produce the patient's aesthetic goals.

That is the *craft* of rhinoplasty. But there is also the *magic*: balanced noses look smaller than unbalanced noses, even when they have been augmented. Dorsal and tip grafts correct supratip deformity without skeletal reduction. Raising the dorsum decreases apparent nasal base size. There are many other apparently paradoxical effects unique to rhinoplasty.

Good rhinoplasty is also brain surgery. It can rehabilitate damaged self-confidence in ways that are best measured by changes in the patients' eyes. That is perhaps the greatest magic of all.

Most rhinoplasty surgeons have been confounded by the operation at one time or another. Even Dr. John Roe, to whom we are indebted for much of what we do in rhinoplasty today (including the endonasal approach) noted, after performing only four rhinoplasties:

There is no class of operations that demands in every case a more careful preliminary study of all the conditions presented—not only in respect to the abnormal state of the tissues to be operated on, but also in respect to the possibility of obtaining the desired surgical result—than the operations required for the correction of nasal deformities.

It is to the surgeons who may benefit from a better understanding of the operation, and to all of our patients, that I offer the text that follows.

Tap into the magic.

Mark B. Constantian

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