Evidence-Based Bunion Surgery
Balas and Boren [1] studied the diffusion of discovery in the medical professions and found that the average lag time for adoption of new ideas and practices in medicine, based on the best current evidence available, is 17 years. There are many reasons that a surgeon may be slow or even resistant to adopt new information; certainly, the sheer volume of information that is presented in the health sciences every year makes it difficult for physicians to capture and incorporate all new ideas. In a landmark philosophical analysis of medical errors, Gorovitz and Macintyre [2] proposed that there are two fundamental reasons for medical errors. The first is ignorance, or the fact that the answer to a question has not been discovered. This mode of failure is forgivable, because we do not yet have the answer. The second reason is ineptitude, which they defined as failure to acknowledge or put into practice information that does exist due to internal or external bias. The evidence-based medicine triad—which always includes the patient’s goals, the physician’s clinical experience, and the best evidence we have available to us at the time—must be the basis for quality care. This, however, requires extensive time and energy to investigate and understand the wealth of data. The goal of this book is to consolidate the information available to us for the treatment of bunions, with a focus on critically analyzing the successes and failures of the most common procedures and provide this capture of information for providers.

I have no doubt that every one of us has had a bunion procedure that we performed on a patient that we wish we could have a “mulligan” on, perhaps even several of them. We wonder: Why did the bunion recur? Why does the toe still not look clinically “normal” to the patient or surgeon? Was it the fixation, the patient characteristics, or just a “bad” bunion? We struggle to identify the root cause of the failure because we feel we did everything correctly: We chose the right procedure based on the algorithm we were given, we performed it technically correctly, we educated the patient on the postoperative expectations and recovery, yet we don’t get an ideal outcome every time. The “why” may not be the execution, but rather a failure of the algorithms themselves. It has been my experience with practice and research of bunion surgery that we spend a great deal of time and energy modifying existing techniques and algorithms, which in fact does not lead to innovation and true discovery in many cases. Continual minor modifications of a technique without consistently measurable improvements might suggest a flaw in the very basis of our understanding of the problem. Innovation almost always comes from the willingness to reject the status quo and a complete departure from
convention. It is all too common for us, myself included, to justify what we do by the statement “this is what works in my hands.” This statement is very common and is about as far from evidence-based medicine as can be due to the following biases, which are inherent in our human nature: We remember our good results with priority; we rationalize our bad results; we avoid the evidence if it questions our autonomy; we avoid the evidence if it affects our financial position; and we demonize those that seek to change the current cultural norms. This will seem to some readers to be hypercritical; however, to truly grow and improve, we need to recognize our internal and external biases and make every attempt to distance ourselves.

The patient is why we ultimately decided to write this book. As a foot and ankle specialist, patients come to us expecting the best treatment that is based on the best science and knowledge available to us at the time. This book is different than many surgical texts, in that it is not focused narrowly on technique; rather, the priority is examination of the current evidence and how it applies to the patient and the procedure. As the reader will note, there are extensive citations, not just supporting a particular procedure or viewpoint but also examining the failures and shortcomings. In fact, some readers may find many of the chapters to have a negative perspective on a popular procedure that we have all practiced for many years, while other techniques and procedures that are not currently as popular are supported by the preponderance of the evidence. Certainly, many of the ideas, along with the current available evidence, are incomplete and may be flawed based on our current understandings, and these ideas will need to be continually examined further through additional research. We hope to spark the imagination and passion of young scientists and surgeons to fill in the gaps that exist.

There are many people to thank for their help with this project. I am indebted to the authors and contributors for their hard work, past surgeons and scientists for their contributions to our knowledge, and the publisher for their willingness to take on this project. I also want to acknowledge the countless mentors whom I have learned from and many students whom I have learned with over my career. I am also thankful for Alexander, Andrew, Weston, and Mindi, who all helped with this text through their support of my career.

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