

Preface

## External Fixation Techniques for the Foot and Ankle



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*Guest Editor*

Although 40 years ago there was no such thing as an orthopedic foot and ankle surgeon, today this specialty holds great appeal. A part of our specialty's rapid nascence has resulted from the recent influx of attention that is focused on treating foot and ankle pathology, a formerly overlooked art—maybe even an afterthought—at least by orthopedic standards. Many of today's promising new biomedical companies and advancements are exhibiting unprecedented application to complex foot and ankle problems; quick purview of current scientific literature and research labs in the United States reveals each to be more replete with projects that are devoted to improving foot function. The past few decades have allowed us to understand much about our historically biased investigative focus. For example, we have learned that polytrauma patients often are bothered more by their foot injuries than any other part of their musculoskeletal system and that wonderfully functional total knee and hip replacements are of no use if the foot also is not working well. Our response has been a flurry of good science that has revolutionized treatment technology that is amenable to many perennially challenging foot and ankle problems. The use of external fixation stands out as one of the prime examples of such success.

This issue of *Foot and Ankle Clinics* is meant to summarize the many state-of-the-art roles that are played by external fixation in foot and ankle care. The advent of minimally invasive surgery has increased our appetite for the advantages that

are offered by extraskkeletal fixation and have broadened its application as a bona fide treatment option among many foot and ankle disorders. These articles represent technique- and illustration-driven symposia that are written by experienced orthopedic surgeons regarding their expertise with the many variations of external fixation that are used for foot and ankle deformity, including Ilizarov, hybrid, articulating, and spatial frame configurations. They cover the basic biomechanics of external fixation and its role in limb length discrepancy, joint subluxation, acute trauma, arthrodesis, distraction arthroplasty, metatarsal lengthening, and deformity correction for clubfoot, Charcot foot, cavus foot, and tibial malalignment. Some novel alternatives to the mainstay uses of external fixation, and what can be anticipated on the horizon, round out the discussion.

External fixation is likely here to stay as the preferred treatment modality for certain foot and ankle problems. It remains an important evolving technology for others, however, and there is no doubt that modern orthopedics shall continue to demand our familiarity with extraskkeletal fixation and its indications. Although improvement of “the ex fix” to care for the foot and ankle seems assured, as foot and ankle specialists we must stay committed to translating any future design metamorphoses into applications that successfully meet the ever changing needs of our patients.

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