

# Preface

Emily was driving toward the basket, a move she had done a 1,000 times before. She went up for the shot, and upon landing, her knee gave way. She felt a shifting in her knee microseconds before she heard a “pop.” After dropping to the court and grabbing her knee, she was carried off the court by her concerned coach and trainer. They wrapped her knee in ice packs and sent her to see her doctor in hopes it was not a devastating ACL injury. Her visit with me, an Orthopedic surgeon, would confirm a diagnosis of an ACL tear – a seeming death sentence for so many athletes.

Upon hearing her diagnosis, her questions were numerous and understandably so. “Will I play again?” “Will I be as fast as I was before my injury?” Her most pressing question was “When can I get back on the court?”

ACL injuries affect the lives of hundreds of thousands of people every year. The patients who sustain these injuries and the families, teammates, coaches, and health-care providers, who care for these patients through their injury and recovery, all have questions related to this injury. Currently, we know the answers to some of the questions. For the most part, we know that patients can get back to sports after ACL injury, and with proper training, their performance can be where it was before the injury. Other questions we do not know the answers to, such as who will develop arthritis after their ACL injury and how that can be prevented.

Great work is going on in this field in an effort to prevent injury and to improve treatment options for our ACL-injured patients. In this book, we attempt to distill all of this information to make the science behind the treatment of ACL injuries more understandable. As you will see, much has been learned in this field, but there is substantial room for improvements.

Emily went on to have ACL reconstruction surgery and is back playing basketball. She underwent an extensive period of rehabilitation, and her mom feels she is playing even better now than before her injury. But still we wonder – can we someday return the joint to a more normal status? Can we prevent arthritis in these patients as they get older? Can we get the ACL to heal after a tear, rather than replacing it with a tendon graft? When given the right biological signal, could

ligament repair be a better long-term solution for Emily and individuals like her? These questions keep us, and many other doctors and researchers, working toward an improved understanding of the ACL and its response to injury. We hope you enjoy the material presented here, and we also hope the work in this area will lead us to better solutions for the treatment of ACL injuries, solutions which will involve repair and regeneration of this crucial ligament instead of its replacement.

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The ACL Handbook

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