The development of Elbow Arthroscopy and the advances in technique have evolved as the result of many contributions by surgeons over the last 15 years. Many years before, Burman in the 1930s first affirmed that the elbow joint was nearly impossible to be explored arthroscopically and eventually only the anterior compartment could be examined. In the last several years, academic surgeons in North American reported technical advances that evolved this procedure from being a highly demanding and not so frequent procedure, to one that can now be used with confidence by appropriately trained surgeons. Surgeons focusing on upper limb disorders, approaching the elbow from the shoulder or wrist perspective, reported studies introducing arthroscopic anatomy, portals, and surgical arthroscopic approaches to several elbow pathologies.

First of all, it is necessary to know the anatomy, particularly the periarticular neural and vascular structures, and their relative relationship to the joint and portals, to minimize risk of possible complications. This is particularly important, due to close proximity of the major nerves. In fact, the initial reports of elbow arthroscopy indicated an excessive risk of neurological and vascular complications. As safer techniques were introduced, the prevalence of complications decreased. The great work of these pioneers dedicated to the advancement of elbow arthroscopy has allowed young surgeons to perform this procedure following thorough guidelines and avoiding risks.

The International Society for Arthroscopy Knee Surgery and Orthopaedic Sport Medicine (ISAKOS) several years ago produced an Arthroscopic Atlas of several joints, including the elbow, and then completed a Standard Terminology Project in order to allow surgeons from all over the world to have the same guidelines and the same language in practicing and reporting elbow arthroscopy surgeries.

The Education Committee of ISAKOS charged us, Luigi Pederzini, Marc Safran and Greg Bain, to describe the basic techniques, as well as the more advanced aspects of elbow arthroscopy to allow surgeons to follow the same safe guidelines and to better understand simple and more difficult procedures. The authors who are involved in this project, humbly, have been considered by some to be experts and pioneers of elbow arthroscopy, providing a perspective of elbow arthroscopy from North America, Australia, and Europe. As the reader, you will
find these papers of extremely high quality, and may convey the high level of the authors’ work and their ability to teach complex procedures in a simple way.

Anatomy is thoroughly introduced referencing safe portals and methods to avoid risk of associated neurovascular complications. Arthroscopic technique is a chapter that provides the anatomy, including portal anatomy, and tips and techniques to perform safe elbow arthroscopy. Further, this chapter serves as a platform on which the more complex concepts are built and described in the following chapters. The chapter on osteochondritis dissecans (OCD) gives an in-depth and detailed description to diagnose and treat this pathology, which occurs frequently in young athletes with as yet still unclear natural history and long-term outcomes. Still connected to sport activity but also to heavy manual workers, epicondylitis is exhaustively presented explaining meticulous techniques and encouraging results. Elbow stiffness remains a common complication after conservative or surgical treatment of elbow pathologies.

This chapter assists the surgeon in describing the causes of stiffness and provides indications for when and how to treat these cases arthroscopically. It also outlines the limitations of arthroscopy and directs the surgeon on when to revert to open surgery in the more complex cases. Arthroscopic treatment of elbow fractures and the future of elbow arthroscopy provides a window into the future, opens new horizons and challenges for elbow surgery. Complications in elbow arthroscopy is one of the most important chapters in this book and the authors provide a review of the milestones in our learning curve and suggest how to avoid these negative results.

This book assists the developing surgeon to be able to perform elbow arthroscopic surgery. For the experienced surgeon, it is a good reference and brings him up-to-date with the latest developments. For the academic surgeon it invites challenges to advance elbow surgery into a new era. The editorial team is proud of what we have been able to produce with the wonderful support of the contributing authors. We thank them for their extremely precious contribution and to ISAKOS for the opportunity to serve the Society in such an important role.

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