Minimally Invasive Surgery of the Foot and Ankle

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Preface

Orthopedic surgeons have already embraced minimally invasive procedures such as total and partial knee replacements, total hip replacements, and rotator cuff repairs. Inevitably, the technical challenge, the requests of patients and the imagination of surgeons has prompted more and more of us to perform surgery through small incisions in the foot and ankle. We already routinely perform arthroscopy of the ankle, subtalar, and first metatarsophalangeal joints, and many surgeons have become conversant with soft tissue endoscopy of the hindfoot and tendoscopy of the peroneal, the tibialis posterior, and the flexor hallucis longus tendons. These have the clear advantages of less morbidity and faster recovery than the equivalent open procedures, and there is enough scientific background to justify their use. Traditionally, the Achilles tendon lends itself to less invasive surgical approaches, and many surgeons have developed less invasive techniques to repair acute ruptures, reconstruct chronic ruptures, and deal with Achilles tendinopathy.

In the field of forefoot surgery, the concept of not having to perform extensive soft tissue dissection and perform extra-articular surgery is appealing. For example, in hallux valgus surgery there are several procedures which, using a subcapital osteotomy with marked lateral displacement of the capital fragment, avoid excision of the bunion, and therefore remain totally extraarticular. Theoretically, they should minimize post-operative stiffness. Sparing of soft tissue, less post-operative pain, less problems with wounds, better cosmesis, shorter operating times, shorter hospital stay are all benefits of minimally invasive procedures.

Minimally invasive techniques are not free of complications. The main problems are connected to poor knowledge of anatomy, and, in osteotomies, to less than optimal placement of the osteotomy. Less invasive techniques are not 'better' than traditional, open techniques: at best, they are equivalent in terms of patients' satisfaction and objective outcome measures, with hopefully less soft tissue complications and better cosmesis.

With this in mind, we present in this book procedures by many of the pioneers in less invasive surgery of the foot and ankle. These techniques can be powerful, and should not be embraced without full knowledge of the open procedures, and without appropriate anatomical knowledge and supervised training. The list of techniques presented is by no means exhaustive, and in this vibrant field we expect that may more will be described soon. Above all, we report a new philosophy of less and minimally invasive surgery, prompting the reader to understand that which procedure to use in a particular patient is very much a question of horses for courses, and of surgical skills and training.

Nicola Maffulli Mark Easley

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