There is no simple lateral ankle sprain

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KSSTA is proud to present a special issue on ankle joint disorders following a lateral ankle sprain. Lateral ankle

sprains remain the single most frequent injury in modern sports. With the growing knowledge on ankle joint disorders, it appears that this injury causes more damage to the ankle joint than was previously assumed. Previously, few papers have investigated the concomitant injuries that may be associated with a “simple lateral ankle sprain”. The editors have selected peer-reviewed articles for this current special edition, which present updated scientific information on the pathologies associated with an ankle sprain. We hope that the reader will be in a position, after reading this edition, to incorporate this information into common daily practice when managing ankle injuries and in this way reduce the morbidity associated with this seemingly innocuous condition. The cornerstone of clinical practice is sound knowledge of surgical anatomy. For this reason, we have decided to republish Golano’s article on the anatomy of the ankle ligaments as the leading paper in this issue with an addendum from one of Golano’s former co-workers, Mik Dalmau Pastor, representing the Barcelona School of Orthopaedic Surgical Anatomy [5].

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In addition to the traditional diagnosis and treatment strategies for ankle sprains commonly described, this volume also explores new studies optimising the early management of these injuries. Bekerom et al. [14] present the results of a randomised controlled trial on functional treatment for lateral ankle ligament injuries and they also report on a systematic review on the value of the use of non-steroidal anti-inflammatory drugs (NSAIDs) [15].

Several studies report on the results of open surgical treatment for ligament injuries in both the chronic and acute setting; White et al. [23] report that a high number of their professional athletes return to sports after early open repair of acute injuries. Potential beneficial results of an arthroscopic lateral ligament reconstruction over the classical open reconstruction have been extensively discussed at congresses in recent years. As a consequence of the emerging controversies in arthroscopic versus open repair, there are several manuscripts detailing the relative merits of one technique over the other. This includes novel arthroscopic visualisation of the lateral ankle ligaments [13], a biomechanical analysis of an all-inside arthroscopic modified Broström operation for chronic lateral ankle instability [9] and the first results of an arthroscopic anatomical reconstruction by Guillo et al. [6].

A lateral ankle sprain may also cause pathology in the peroneal tendons, as well as a rupture of the superior peroneal retinaculum resulting in a peroneal tendon dislocation. Two systematic reviews provide an overview of the results of patients treated for peroneal tendon dislocation as well as proposing a rehabilitation programme after surgical treatment for peroneal tendon ruptures [18, 19].

The vascularity of the peroneal tendon, often implicated in its poor reparative potential, has been elegantly described in an anatomical study leading the section on peroneal tendon disorders [20].

The research group from Vail, Colorado, USA, presents an interesting paper on the radiographic identification of the primary structures of the ankle syndesmosis. This paper is the leading paper of the section on syndesmotic injuries [22]. The Ankle and Foot Associates (ESSKA-AFAS) also present consensus papers on the classification and management of acute isolated syndesmotic injuries [16, 17].

A lateral ankle sprain may cause a cartilage injury as the medial talar dome impacts on the distal tibial plafond. This may initiate the development of an osteochondral cyst through cracks in the subchondral plate, destabilise a previously stable osteochondritis dissecans lesion or create an osteochondral fracture leading to chronic pain from a talar osteochondral lesion (OCL). Different aspects of the morphological findings in juvenile OCLs are presented by Roßbach et al. [10] comparing MRI findings with arthroscopic findings. Results of various surgical treatment

protocols for primary OCLs are presented—ranging from autologous osteochondral transplantation [4] to the Lift Drill Fill Fix (LDFF) procedure, a new arthroscopic talar cartilage preserving technique [8].

The vast majority of arthritic disease in the ankle joint is post-traumatic, following either a sprain or a fracture. Therefore, this current edition also examines treatment strategies for end-stage post-traumatic arthritis of the ankle. Franceschi et al. [3] present a systematic review of the results of ankle fusion with an intramedullary nail, and the Amsterdam school presents medium-term results of posterior arthroscopic ankle fusion for post-traumatic ankle osteoarthritis [2, 7].

With the vast increase in the number of ankle surgeries, there is need for evidence-based knowledge on the prevention of venous thromboembolism (VTE) in ankle surgery and this is provided by a meta-analysis by Calder et al. [1].

In order to adequately measure the outcome of orthopaedic interventions, it is increasingly important to validate the outcome scores being used, and therefore, the last section is devoted to a discussion about validation and responsiveness of scoring systems. Important changes are also made to the Dutch version of the Foot and Ankle Outcome Score (FAOS) [11, 12, 21].

This special issue is composed of research manuscripts that have attempted to describe, evaluate and further the treatment of the “simple lateral ankle sprain”. Collectively we hope that they will help the reader continue to pursue clinical excellence in treating these injuries. In addition, we hope that this volume will stimulate further debate, research and ultimately improve the management for this common sport-related injury in the future.

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