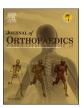
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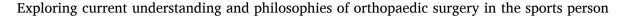
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Editorial





Acute fractures and soft tissue injuries in sport are a major clinical problem for athletes, as they can require prolonged rehabilitation, and require a long time to return to sport. David Beckham, Michael Owen and Henrik Larsson, to name a few, have two things in common: they are all high-profile athletes, and they all suffered a fracture or ligamentous injuries whilst playing their sport, and they were never quite the same even after they had 'healed'. At least 8000 sports and another 8000 indigenous sports and sporting games¹ are practise, and it is easy to overlook the anguish of the athlete at being unable to continue playing, the anxiety about whether and when they can return, and the onus on the treating physician to provide the optimal treatment possible to facilitate this. Those of us privileged in dealing with such patients do not necessarily have the luxury of keeping such patients in plaster on crutches for several weeks, as they gradually settle back into sedentary jobs, with only minor sporting endeavours.

Optimal clinical management of sports injuries relies on a robust understanding of the basic science principles associated with these pathologies, and their rehabilitation strategies. When athletes do experience an injury, we enter a completely different 'ball game', with major differences in mechanism of injury, locations and patterns. Also, the physiological status of the patient, their pre-injury functional level, the physiological response and the functional expectation all differ from what we encounter in everyday life. As such, while certain key factors from generic care can be translated into the management of athletes, the principles and practice of sports trauma management require specific defining, to provide optimal treatment and outcomes for these patients. ^{2,3}

The foundations of sports medicine were first established in Ancient Greece and Rome, where an emphasis was made on physical conditioning, diet and hygiene. Within the Indian subcontinent, sports medicine has been practised from 1000 B.C, when the uses of therapeutic exercises were described in the Arthava-Veda, and in 600 BCE, the founding father of medical science and surgery in India, Susruta, has left important information on the relationship between health and activity. $^{4-6}$

The first modern school in sports medicine was established in Milan in 1958, by Professor Rodolfo Margaria. Italy is one of the few countries with a solid, long established, state funded public system of pre-participation medical examinations for sports activities. People playing sport are organised by national federations, and have to compulsorily undertake an annual medical visit to obtain a certification of eligibility to play. Since 1950, it has been mandatory for all professional and amateur athletes to obtain such medical certification for eligibility to play a sport. More recently, screening tests and physical examinations are also sport-specific being based on regulations from the

Ministry of Health, for competitive sport activity for disabled people (1993) and professional sport activity (1995). All athletes must undergo an annual preventive screening protocol including a past medical history, clinical evaluation, urinalysis, electrocardiogram at rest, and pulmonary function tests. $^{10-12}$ This evaluation can only be performed by a board-certified Sports Medicine Physician, who is legally responsible for the accuracy of the assessment, and makes the final judgement on eligibility to participate in sport. 10

Today, with the ever increasing worldwide popularity of athletic endeavours, the chances of sustaining a limb-injuries is greater. Therefore, a holistic/multi-disciplinary approach to providing diagnostic, preventive, curative, and rehabilitative care and guidelines has become accepted and well established. A number of professions, including surgeons, physician, nutritionist, psychologist, physiotherapists and rehabilitation specialist, work together with athletes, trainer and/or coach. 13 This applies not only to professional but also to recreational athletes, and active individuals demand expertise and sport-specific knowledge. In addition to the aforementioned mentioned issues, there are the moral, legal and health-related challenges, such as, for example, the thorny issue of performance enhancement, surrounding professional athletes, which further contribute to the unique and complex picture presented to the health care professionals who treat them. Furthermore, it must be appreciated that the management of such injuries should be developed to facilitate the earliest return to sport with the lowest morbidity possible. As such, several adaptations to 'traditional' management may be advocated in athletes. A sound understanding of the biomechanical principles of fracture management allows the clinicians to appropriately select the optimal management technique for rapid return.

Thus, many well organised societies, associations, committees, federations and groups, inspect the limb injuries that affect this populace, combining their efforts to deliver optimal care and preventive measures in an area of increasingly specialised interest, knowledge and expertise. It is also important to encourage and support scientific research in this area to develop safe and more productive fitness programs to increase sports participation. Many of these groups promote the study and development of sports medicine throughout the world and make significant contributions in the area of prevention. Injury prevention forms a key component in reducing the incidence and morbidity of acute sportrelated injuries. The key basic principles that allow a comprehensive understanding and subsequent application of this topic include injury surveillance, the development of injury prevention equipment and techniques, and the integration of such practices to assess if they are safe and effective. All of these enhance the quality of health care for those engaged in physical activity, through education and research in prevention, assessment, treatment and rehabilitation of injuries. 15

This issue provides an array of informative articles by specialists and those actively involved in orthopaedics and sports medicine/surgery, investigating various aspects including variation in models of injury and biomechanics e.g., heel pain. ¹⁶ Articles focus on the variation of field and off field treatment, ¹⁷ discuss injuries in sports such football. ¹⁸ Other articles will tackle difficult topics e.g., *Partial tear of the distal biceps tendon* ¹⁹ and the best treatment modalities, and patella instability ²⁰ and new techniques in ankle ligament reconstruction.

This allows you to explore the limits and the other control mechanism to restore athletes to health and offer greater depth towards this 'accelerated' care model for athletic patients, addressing the key basic principle and extend the envelope in injury treatment. The editors wish the reader every success in translating the knowledge from this issue, to provide optimal care for the injured athletes who will come under their care.

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