EDITORIAL

Olympic special feature editorial

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The International Olympic Committee (IOC) was founded in 1894 by Baron Pierre de Coubertin, only a year before Roentgen discovered X-rays and imaging as a specialty was born. Perhaps this happy coincidence explains why so much imaging is used in the diagnosis and management of sports injury. The first games of the modern era under the IOC was held in Athens in 1896, although there were several attempts prior to this to relight the Olympian spirit. Technically, these are the summer Olympic Games, which alternate with the winter Olympic Games every 2 years.

During the preparation for this event many elite athletes will be training and competing for the honour of representing their country. Some will not succeed because they did not quite make their mark or time at their trials, and some will succumb to an injury which will hold them back, however temporarily, at that vital moment.

It is hoped that these athletes will inspire the next generation to partake in more sport at a higher level and in their turn become champions of the future. Again, it is likely that these junior athletes will also sustain a number of, hopefully, minor injuries which we will see in our daily practice.

In addition to the athletes there will be a large number of people who will work tirelessly behind the scenes to make the event successful. Part of this group of people will consist of a number of medical and paramedical support staff. Included within this are the radiographers and radiologists who will provide the imaging services that will be required to help make decisions as to whether an athlete is fit enough to compete. They will be working to provide a rapid and accurate imaging service to the teams and team members during the run-up to and during the 2012 Olympics. There will be CT, radiography, ultrasound and MRI facilities on site for the athletes when required by the medical teams, which will

truly be providing imaging at the point of care for the Olympic family.

What we have tried to do with this special feature is give some insight into the thinking, not only of the radiologists but also of the clinical staff who assess the competitors. To do this we have asked a clinician, Dr Ian McCurdie, who has expertise in sports medicine, and a physiotherapist, Dr Michael Callaghan, who has much experience of working at this level, to provide some insight as to the problems they encounter when examining athletes performing at this level. This hopefully will give us greater insight into the type of questions the clinical staff will ask so that we can provide them with better answers.

This can be summarised as confirmation of accurate diagnosis; information to help inform management planning and decisions on when to return to sport; screening and assessment; and, finally, technical assistance with certain procedures (*i.e.* injections).

Sport-related injuries can be broadly divided into acute, traumatic injuries and chronic, overuse injuries.

We have asked radiologists, all of whom are members of the British Society of Skeletal Radiologists, to give guidance with respect to imaging. Liong and Whitehouse discuss stress-related injuries in bone—better described as fatigue fractures—and describes the features of such fractures and their effect on sporting ability [1]. Hodgson et al look at the imaging of tendons and ligaments, with a discussion of acute and chronic tendon injury and the way this alters their imaging characteristics [2]. There is a balance between ultrasound and MR and their use in acute and overuse injuries. Lee et al discuss muscle injury and the use of MR and ultrasound in the imaging of muscle, as well as the grading of muscle injury (on both MR and ultrasound) and how it relates to loss of sport-related activity [3]. Campbell and Dunn discuss potential interventional procedures to provide treatment and relief when required [4], and Callaghan discusses musculoskeletal imaging in sport from a physiotherapy perspective [5]. Finally, McCurdie looks at the outlook and needs of the sports physician in sport and exercise medicine [6].

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It is hoped that you will also find this of interest and that it will be useful in attending to the athletes of the future who are going to be inspired by this Olympic event. We thank all those who will give their time to provide this service to the 2012 Olympics and hope that it will prove to be an entertaining, inspiring and trauma-free event.

References

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