

# The role of the sports physician

***Sports medicine is an emerging specialty. With the London Olympics on the horizon and the government encouraging people to be more active, more people are likely to participate in sport. But what role will sports physicians play in this new, more active society, and how can they complement physicians and surgeons in the provision of health care?***

Sports physicians can be described as specialists in musculoskeletal medicine or as musculoskeletal physicians. The majority of sports physicians' workload will probably be involved with a sporting or active population but does not have to be exclusively related to those involved in active sport. In reality, sports physicians see any patient with a musculoskeletal or soft tissue injury. Likewise, their workload is not confined to those involved in elite sport as these provide the minority of a sports physician's workload.

The training required to become a sports physician runs along the same lines as any other speciality. There is a recognized 5-year training course incorporating sports injury management, acute trauma, general practice, public health, rehabilitation, team sport management with anti-doping issues and the psychology of sport governed by the Faculty of Sport and Exercise Medicine which sets the standards of the speciality within the UK. To set up a clinic in sports medicine a doctor would have to complete the training course or show equivalent training via Article 14 of the Postgraduate Medical Education and Training Board to attain a Certificate of Eligibility for Specialist Registration in sport and exercise medicine.

Sports physicians require knowledge of dietary and nutritional needs for sport, injury prevention, return to sport after injury, the wider code of banned medicines within sport, the psychology of sport and biomechanics of the human body. They will also have knowledge of exercise and ill health and the promotion of exercise and sport with exercise prescription.

Sports physicians are based either within the hospital or outside in the community. There are four main roles or functions:

1. The musculoskeletal clinics
2. The team sports physician
3. Promoting sports and health
4. Chronic ill health management.

## The musculoskeletal clinic

Sports physicians can work in private or NHS-run musculoskeletal or soft tissue injury clinics where their role will be one of assessment, diagnosis, investigation with imaging, haematology, compartment pressure study tests, nerve conduction tests and electromyography as well as the administering of local anaesthetic injections that are used as an aid to diagno-

sis. Once a formal diagnosis has been made then a treatment plan can be instigated. This may include rehabilitation, referral to physiotherapy or other specialties such as orthopaedic surgeons, podiatrics and biomechanics, strength and conditioning coaches, soft tissue massage or to radiologists for ultrasound-guided injections. The sports physician then acts as a facilitator or coordinator to ensure that treatment is following an expected course and that goals set by the sports physician are achieved with the predicted time frame. The patient can then be advised on returning to normal activity or sport in a re-graded way in keeping with the rehabilitation process.

The type of injuries seen in such a clinic can be divided into acute traumatic and overuse injury. Acute traumatic injuries include anything from acute sprained ankle to shoulder dislocation to an acute muscle injury or ligament rupture. Conversely, overuse injuries present over a period of time or as an acute exacerbation of a chronic condition. These include tendinopathies, compartment syndromes, instability syndromes, stress fractures and bone overload syndromes as seen in various types of groin injuries.

There is significant overlap between the conditions seen in these sorts of clinics and those seen in general orthopaedic and rheumatological outpatient clinics. It is important to remember, however, that the sports physician is purely non-surgical, unlike the orthopaedic surgeons, and that inflammatory conditions are best managed by rheumatologists. There is, however, a large population of patients who can be adequately managed by the sports physician, who has the skills not only to diagnose and coordinate treatment, but also to advise on rehabilitation and prevention of further injury.

It is important that the sports physician has close liaisons with other medical specialities. Most sports physicians within the NHS are based in dedicated musculoskeletal clinics or in supportive clinics to the orthopaedic departments often run by GPs with a special interest. The majority of full-time sports physicians work in the private sector, either in isolation or in multidisciplinary clinics in close contact with physiotherapists, podiatrists, conditioning coaches, osteopaths, chiropractors, masseurs and nutritionalists to provide a 'complete' service to the patient.

Now that sport and exercise medicine has been recognized as a speciality one would hope that NHS clinics would be more popular, but it is likely that primary care trusts will only fund such clinics in conjunction with

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exercise prescription or exercise for chronic ill health clinic. This would involve sports physicians being more proactive with illness rehabilitation, e.g. cardiac, respiratory disease or improving the health or weight of patients who are not 'ill', rather than managing injury.

### The team sports physician

For those sports physicians lucky enough to look after either professional or amateur athletes involved in team sports, there is the opportunity to extend their role. A team physician becomes closely involved in the mechanics of how a team or club functions. There is close liaison with team physiotherapists, masseurs and conditioners as well as the coaches and management.

Although team players are still registered with a GP, in reality they often contact the sports physician for all matters medical. This can include advice on general medical issues, often for both themselves and their families, as well as advice on their injuries, which are managed in conjunction with the physiotherapist. Rehabilitation plays a big role here with the pressure to return to sport as soon as possible. The role is extended to include injury prevention, or prehabilitation, as certain muscular or biomechanical deficiencies are identified on either a pre-participation or signing screening medical. Likewise, the sports physician will advise on which medications are allowed and not allowed under the World Anti-Doping Agency regulations. In conjunction with this players often enquire about nutritional reports together with supplementation and ergogenic aids (supplements which are legally allowed and which may improve performance, e.g. creatine, carbohydrate and protein loading).

The sports physician also plays an important role in psychological support both of the management and of the players in what can become a stressful team environment. Sport is an emotional environment with a fine line between winning and losing, playing well and feeling you can't perform – the sports physician can provide personal psychological support to players when they feel they are not functioning as well as they could and can involve specific sports psychologists to help with this. This aspect of the role can be very rewarding but it helps if the sports physician actually enjoys the sport his/her team plays, as standing on the touchline on a cold, wet, dark winter's afternoon is not always as glamorous as it may seem.

The main challenge of working with a sports team is to provide a good standard of care to the players of the team as individuals while maximizing the potential of the team as a whole. It may not be in the interests of a player to play at the weekend but if he doesn't play the team may suffer. It is balancing this potential conflict as well as pressures from coaches to get players back on the pitch that makes working in a team challenging. Ultimately the sports physician is there for the benefit of the player ahead of the team, but ideally both benefit from his/her actions. The sports physician is often prac-

ticating in less than ideal circumstances such as on the edge of a pitch in the pouring rain or in the back of a changing room with no medical services nearby.

### Promoting sport and exercise

The sports physician plays an important role in promoting exercise and sport for all by encouraging or prescribing exercise and healthy attitudes to diet and exercise either in the clinic as part of injury rehabilitation or to the general public or family of patients regarding the benefits of exercise. The intent is to prevent illness and injury by prescribing exercise to maximize function and minimize disability in the healthy population. There is a drive to reduce obesity, reduce the incidence of diabetes, heart disease, hypercholesterolaemia and an increased psychological wellbeing by promoting exercise and good health. The sports physician, together with the GP and hospital consultants in the outpatient department, plays a role in promoting exercise and good health.

Exercise prescription is the way in which patients are advised on duration, intensity and frequency of exercise and it is within the realms of the sports physician's role to advise very specifically on this, often within strict guidelines so as to promote safe progressive exercise regimens for patients. Currently this is usually limited to small groups of patients, e.g. those who have had a myocardial infarction, but if there were more sports physician-run health promotion clinics this could be extended to chronic illness rehabilitation. This would be the best way to promote healthy exercise by patients being referred to sports physician by GPs, hospital consultants or community physicians. Patients who could be referred to this clinic would include those after an illness, e.g. cardiac or respiratory event, or those with a chronic illness – respiratory, diabetes, obesity, hypercholesterolaemia, hypertension, depression or other metabolic conditions.

### Chronic ill health management

In conjunction with promoting sport and exercise sports physicians specifically promote exercise and rehabilitation for those with chronic illnesses. There is a general awareness of the benefits of exercise and rehabilitation following cardiac surgery or cardiac events as well as the benefits of exercise in those with respiratory conditions, such as asthma and chronic airflow limitation (Fentem, 1994). Patients with other chronic diseases such as diabetes, cancer, chronic fatigue, depression, myalgic encephalomyelitis and infectious mononucleosis can all benefit from a re-graded, prescribed rehabilitation programme. This facet of the sports physician's role is often untapped as, although patients receive excellent post-hospital care, it is often the end stage of this rehabilitation and the promotion of more intensive exercise is left to the patient to complete, often without further supervision. There are several centres of end-stage rehabilita-

tion throughout the country and internationally that specifically concentrate on not only successfully rehabilitating the patient back to his/her pre-morbid level, but also take the patient one step further to try to prevent a recurrence of the initial medical condition.

## Conclusions

The sports physician fulfils several roles and fills a gap between several hospital and community specialties. It could be argued that if there were more sports physician clinics within the NHS to see patients with non-surgical musculoskeletal injuries then perhaps orthopaedic surgeons would have a higher conversion rate of patients seen in clinic progressing to surgery. It remains to be seen whether there are more sports physician clinics within the NHS and/or connected to emergency departments in the future. With the development of the Faculty of Sport and Exercise Medicine (UK) over the last 3 years together with an increasing population of qualified and experienced sports physicians, it is hoped that it is only a matter of time before this specialty has its own department within most general hospitals. [BJHM](#)

## KEY POINTS

- Sports physicians work with a wide range of patients, not just elite sportspeople.
- The four main roles of the sports physician are to run musculoskeletal clinics, work with sports teams, promote sports and health, and to manage chronic ill health.
- In future, sports physicians could play a much bigger role in health promotion, if resources allow.

*Conflict of interest: none.*

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