

## Elective at Olympic Park Sports Medicine Centre - Melbourne

Sarah Murphy April 2011

My guide book described Melbourne as the sports capital of Australia - in both watching sport and participating in it. This provided great insight into the endless sports fanatics that filled the sports medicine clinics at Olympic Park Sports Medicine Centre (OPSMC) during my placement. The patients ranged from children to grandparents, from professionals to enthusiasts. However they were all similar in their desire to get back to participating to the maximum in their chosen activity.

My placement at OPSMC was spent sitting in clinics, mostly with sports physicians but also with visiting surgeons and physiotherapists. This gave me a good all-round multidisciplinary feel for sports medicine. The private nature of the Australian health care system meant that patients referred themselves or were referred by a GP or physiotherapist. I was therefore able to get a feel of how a privately run health care system works compared to the NHS.

During these clinics I was able to develop my examination skills with some teaching from the various physicians. There was also the opportunity to perform Shockwave therapy on patients with tendinopathy - which was great experience for me, but a rather more painful one for the patients!

Due to the variety of patients that were seen at OPSMC I was able to experience some 'paediatric' sports medicine which is an area I have had little exposure to in the past. It was interesting to witness the dynamic between doctor, child and parent, which was sometimes difficult due to a parental desire for the child to return to sport. It was clear to me that managing this is a skill that comes with experience and is one that I hope to develop in the future.

I was interested to see if there were the same large number of patients presenting to OPSMC with back pain compared to my sports medicine experience in London. Back pain was certainly a common presentation. However, I think the number of patients presenting with low back pain was lower than in the UK.. There may be several reasons for this. Due to the private nature of the Australian health care system, GP's, chiropractors and physiotherapists can refer patients with low back pain to specialist spine clinics. This may therefore account for the fewer number of patients compared to my experience in the UK. Interestingly, studies support this difference in prevalence - with the point prevalence of back pain in the UK being 37% compared to 26% in Australia. 1, 2 However, this still suggests that back pain is a relatively common condition in both country's with a potential of large economic burden.

Along with the routine work related postural low back pain, facet joint pain and disc pathology, some interesting cases in the clinic for me were of Pars Interarticularis stress fractures in children. This is an overuse injury in young and adolescent athletes, commonly in those who participate in sports that involve repetitive spinal motion, especially lumbar flexion/

extension, and to a lesser degree, rotation for example gymnastics, volleyball, soccer, rowing and swimming. In particular a 15 year old rower presented with focal right side low back pain which had been grumbling for a few months but she had recently experienced some more acute pain. A bone scan showed a 'hot spot' at the L5 level and a focused thin slice CT scan at this level demonstrated a unilateral right side fracture of the Pars Interarticularis. The management of a Pars fracture is around 6 weeks rest from activity, core strengthening physiotherapy work and a graded return to sport. It is the negotiation of this management plan with the patient that I found interesting. In this particular case the patient rowed during the summer terms and played netball and athletics during the winter terms, with no more than a week's rest in the last few years. She was a highly motivated individual who clearly valued her sport. Educating her into the importance of the rest period in the management and more realistic long term training strategies to prevent further injuries was essential in providing her with a good recovery.

As well as spine pathology there was wide range of injuries both acute - such as ACL ruptures, shoulder dislocations and muscle strain and chronic injuries- such as Achilles tendinopathy, tennis elbow and patello-femoral pain. This variety allowed me to identify patterns in injury presentation and also see the how differently acute and chronic injuries are managed. The placement at OPSMC also introduced me to several treatments I had not encountered in routine use before, such as Protein Rich Plasma Injections, Autologous Blood Injections and Ultrasound Shockwave Therapy for tendinopathies. These therapies were used relatively frequently in patients with tendinopathy who were not responding to conservative management. This gave me the opportunity to review the evidence base for such practices. Nitrate patches were another therapy used for chronic tendon pathology and pain, particularly tennis elbow and Achilles tendinopathy, that I was unfamiliar with. Low dose patches are quartered, with one of these being stuck to the site of maximal tenderness. I took the opportunity to read up on this and found a number of articles of interest which demonstrate that Glyceryl trinitrate patches can significantly reduced pain after 8 weeks of use.

The Australians love their sport. During my 4 weeks in Melbourne the Aussie rules football season was in full swing, with the city going crazy on Anzac day for an annual big match between two of the major clubs, with 90,000 fans filling the Melbourne Cricket Ground, more than the London 2012 Olympic stadium capacity! Not only do they watch sport but participate too. There was a 14km running race through the centre of Melbourne, where the main streets were closed and filled with 30,000 participants and many more spectators. I experienced their love of running by joining the mass of city workers in their daily afternoon jog around 'the tan' - the most popular running track around the botanical gardens.

Melbourne is not just a city for sports lovers. It is a great city for foodies - the enormous Queen Victoria market with amazing delis, meat, fruit and veg stalls. Lots of little cafes and bars where Melbournes' food and coffee lovers sit outside and enjoy the food and wine. There is also the



buzz of culture, shows and museums to enjoy.

Of course, there's the small matter of the weather! As they say, if you don't like the weather in Melbourne, wait five minutes and it will have changed. And it's true. Even as a hardened Londoner, I got caught out in a tremendous downpour when a sunny morning turned nasty.

In summary, my placement at OPSMC allowed me to experience a branch of medicine which is barely, if at all, covered in undergraduate medical training and brush up on my joint examination skills. This was a great experience both in confirming my passion for sports medicine and broadening my horizons in considering the possibilities of working abroad in the future.

### **References**

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