

ELECTIVE (SSC5a) REPORT (1200 words)

A report that addresses the above four objectives should be written below. Your Elective supervisor will assess this.

Given my future career ambitions within sports medicine, I was keen to undertake an elective within this field. Fortunately, I organised four-weeks at my local football club, AFC Wimbledon. Whilst here I was fully integrated into the medical team. This provided me with the opportunity to gain a true insight into the medical provisions in professional football and how this works in the context of the wider team.

During my elective, I witnessed a wide variety of presenting medical complaints. Unsurprisingly in football, most fell into the musculoskeletal category, and related to the lower limb. Daily, these included dealing with bruising, knocks, muscle and tendon tightness, blisters, and finger injuries to name a few. The importance of managing these efficiently and effectively is crucial to not only ensure player welfare, but to prevent worsening and reduce the likelihood of more significant issues.

At the other end of the spectrum, the more serious injuries acquired during high intensity training and games fall mostly into the soft tissue category. Examples of those witnessed include: injury to the ankle namely, anterior inferior talofibular ligament tears; those involving the calf, medial gastrocnemius tears and high impact induced haematomas; medial collateral ligament tears at the knee; and some biceps femoris hamstring tears. Further to this, I was able to witness the post-surgical rehab of one player who had undergone a pyramidalis-anterior pubic ligament-adductor longus complex (PLAC)⁽¹⁾ surgery following a tendon rupture. Away from the lower limb, other issues included a shoulder dislocation and muscular complaints of the back, heightened due to the accrued stress across the season. Moreover, the impact of elite sport on these young athletes was demonstrated by players of 20-years-old suffering from vertebral stress fractures.

All such injuries, require weeks of recovery and rehabilitation, a process I was fortunate to witness. This included assessment, imaging and diagnoses in the clinic. A gym and strengthening plan would then be drawn-up to gradually transition from low to high impact work, before undertaking outdoor rehabilitation and re-joining squad training. Throughout this journey, the athletes would constantly be re-assessed, progress monitored, and once fit preventative strapping provided to reduce re-injury.

Away from injuries, it is important not to forget the management of pre-existing conditions like asthma, type-1 diabetes, and coeliac disease. All of these pose their individual difficulties and treatment needs to ensure player safety. The latter raises a unique aspect of sports medicine, around doping policies, and the need for Therapeutic Use Exemptions (TUE). Asthma, for instance, requires a TUE to enable legal administration of steroid inhalers. Such rules and regulations around medications, supplements and vitamins requires vigilant prescribing. Whilst at the club, I got to witness such conversations with players about whether certain supplements were legal and around the miss-use of codeine as a sleep aid post-injury, highlighting the importance of player education on this subject.

Other areas of focus encompass the ever-present risk of cardiac-related issues, which can be missed on screening and require prompt management, hence the requirement of an individual holding an Advanced Trauma Medical Management in Football certificate at all training sessions. Infection control and risk management, in a team environment and whilst travelling, is an additional complexity, emphasised by COVID-19. Lastly, my time at the club fell during Ramadan, and I got to see the difficulties of balancing adequate nutrition and hydration for training with the constraints of fasting.

Until this point, the focus has been physical illness, but mental health is equally important, and as well researched runs in parallel with physical health⁽²⁾. The importance of this can be evidenced by the high number of risk factors: day-to-day stressors to perform at high levels; handling poor performance; maintaining team relationships in high intensity situations; coping with rapid and unanticipated changes; all in addition to the anxiety of sudden severe injuries and coping with one day training at high intensity to the next moment being confined to crutches. An example of such a psychological issue, was a player who suffered concussion, and 6 months on continued to struggle with symptoms despite ruling out any physical cause. This consequently required referral onto a sports psychologist

to delve into any issues around the situation, highlighting the long-lasting effects of concussion but also the psychological burden of football.

Shifting focus, whilst at the club I was keen to understand how health provision was organised. The medical team is led by the lead physiotherapist, who assesses players, organises rehabilitation plans, liaises with the team manager about player status, and treats patients with the support of the club doctor. The doctor undertakes further assessment, imaging, prescriptions, and referrals. Additionally, crucial to the team are sports therapists who ensure player welfare, treatment, and rehabilitation daily. This all occurs in parallel with sports science who are crucial to optimising player performance by managing warm-ups, monitoring GPS data like distances covered, and focus on nutritional intake. Support roles also come in the form of the chiropodist who treats the players and staffs' feet which is undeniably important. On a match day, the team is further supplemented by the pitch doctor and paramedic, providing on-pitch support, as well as crowd doctors. Consequently, every aspect of player and staff care is considered and catered for.

When comparing my experience at AFC Wimbledon with the wider global sporting world, there is a great amount of symmetry in terms of musculoskeletal injuries being the predominant complaint and juggling this with the overall health of each player and their specific needs. Like most of the world, sports medicine in the elite field is handled in the private setting, rather than NHS-funded. In terms of doping, UK Anti-Doping governs the UK, which runs in accordance with the World Anti-Doping Code and hence adherence is global.

Away from elite sport, it is important to adapt lessons from sports medicine to benefit public health. Physical activity has long been recognised as crucial to promote physical and mental health. The former by reducing blood pressure⁽³⁾, lipid levels, insulin response and glucose control⁽⁴⁾, therefore reducing the high burden of diabetes, obesity, cardiovascular disease and cerebrovascular disease⁽⁴⁾. In children, this subsequently decreases future disease⁽⁵⁾, whilst in the elderly improves strengthening and stability to reduce fall-risk⁽⁶⁾. Potentially, more importantly, are the mental health implications. This is particularly pertinent when considering the World Health Organisation projections of mental health complaints worldwide as the predominant source of disease burden by 2030⁽⁷⁾. Such direct benefits from exercise include: improving mood, reducing anxiety⁽⁵⁾, whilst improving quality of life which indirectly improves ones psychology⁽⁸⁾. Alongside the positives of exercise, sports medicine can teach us lessons around nutrition; building-up strength safely; managing injury and undertaking rehabilitation. Altogether, lessons from sports medicine can enable healthcare to undertake a more preventative than reactive strategy to disease, and consequently is a crucial aspect of health economics⁽⁵⁾.

In conclusion, this placement has provided me with a glimpse of what a career in sports medicine can look like, whilst also demonstrating what it is like to be apart of the professional sporting environment. I got a true awareness into the various medical issues that present in an elite football club. Furthermore, witnessed the prevention over treatment management approach, and how the medical team is integrated within the wider team.

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