

A Chiropractor's Journey Through Sports & Exercise

Dr Alex Pucciarelli

mbarking on my journey to become a chiropractor and Accredited Exercise Physiologist (AEP) was not simply about pursuing a career; rather, it emerged from a genuine desire to ease the burden of sporting and musculoskeletal injuries in athletes and the general population. My base training was a Bachelor of Exercise and Sport Science at the Australian Catholic University (ACU), which laid the foundation for future clinical training. My firsthand experiences with longer-term injuries (Anterior cruciate ligament and an avulsion fracture), and desire for specific knowledge and skills, propelled me towards completing a Master of Chiropractic at Macquarie University, and a Master in Clinical Exercise Physiology at Charles Sturt University (CSU).

My interest in sports and exercise chiropractic led me to actively pursue work alongside competitive athletes. I work closely with Blacktown City's 1st grade team in the NSW National Premier League competition (football/soccer). This has provided hands-on experience and an opportunity to apply chiropractic knowledge and skills directly within the field-of-play, as well as insights into the diverse challenges and demands faced by athletes.

A defining moment along my journey was the opportunity to present our group's Master of Chiropractic research project on the global stage at the 2019 Federation of International Sports Chiropractic symposium in Berlin. Titled 'A Workforce Study of Sports Chiropractic in Australia,' our research unexpectedly garnered accolades (2nd place prize) and shed light on what I believe is an important service offered by the profession, sports and exercise chiropractic. This research experience ignited an unknown passion within, and a curiosity that I needed to explore via further academic pursuits.

I have just completed a Master of Research (MRes) at Macquarie University,



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where I have taken a deep dive into my focussed area of sports chiropractic interest. My thesis, titled 'Subsequent and Recurrent Injuries in Football Players,' aimed to understand the complex factors contributing to repeat injuries in soccer players, with a viewpoint of potentially targeting injury prevention strategies in the future. My graduate research training was undertaken in the Department of Chiropractic under the primary supervision of Associate Professor Michael Swain, associate supervision of Dr Reidar Lystad (Australian Institute of Health Innovation) and adjunct supervisor of Associate Professor Katie de Luca (Central Queensland University).

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Key findings to arise from my research on subsequent and recurrent injuries in football:

- Repeat injuries are indeed common and often create greater time-loss than the index injury.
- 2. They most often affect muscles/ tendons, constituting around 75% of all subsequent and recurrent injuries (ligament/joint capsule injuries make up the next largest group at 20%).
- 3. These injuries almost exclusively affect the lower limbs (98%), of which the thigh region accounts for 50% of the injuries (followed by the ankle 25% and hip/groin region 20%).

Having undertaken this research, I can now work to develop and implement strategies to help football players successfully return to play and stay on the field, and meaningfully contribute to their team's performance in the competition. My future research interests lie in developing preventative programs and potentially evaluating them for effectiveness.

In football, where the demands on athletes are high and the risk of injury common, implementing effective preventative strategies could make the difference between winning and losing. Prevention strategies in football are ideally informed by epidemiological research and can take many forms. For example, this may include strength and conditioning programs for well athletes (prior to injury occurrence), or the delivery of tailored care for injured soccer players, including individualised

programs that implement specific return-toplay strategies that address key risk factors for future reoccurrence.

Research on the severity (time lost from play) of different types of injuries is also helpful as it provides a basis for recovery time, to help set expectations for players and coaching staff and potentially avoid rushing return-to-play decisions and reinjury.

As a sports and exercise chiropractor, I utilise evidence-based care by integrating sports injury research into decision-making alongside athletes, coaches, support staff, and healthcare team members. Centering evidence informed discussions around

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the athlete helps foster collaboration and ensures alignment among all involved in their care.

Importantly, this approach educates and empowers athletes to take control of their wellbeing, with a focus on minimising recurrent injuries while maximising return-to-play and on-field performance.

My journey to becoming a sports and exercise chiropractor has included a culmination of academic endeavours and practical experience. This has involved working closely alongside researchers at the university, semi-professional football players, coaches, and support staff at the club, and a multidisciplinary team of close colleagues in clinical practice. My work now often integrates chiropractic care, exercise physiology, strength and conditioning and injury prevention strategies, whether that be treating acute injuries on the field or

designing comprehensive rehabilitation programs.

As I'm sure many will attest, the journey to becoming a sports and exercise chiropractor is characterised by dedication, passion, and perseverance. For me, the pursuit involved specific targeting of new knowledge and skills, including professional development activities and formal higher education. It has been a fulfilling experience, and I would encourage interested sports and exercise chiropractors to seize the opportunity to grow and improve by undertaking a program of graduate research. Moreover, come and join in the next Sports and Exercise Clinical Practice Group symposium, it is an exciting area that continues to chart new ground in research, education, and clinical practice.

By harnessing our collective expertise, embracing evidence-based practices, and fostering collaboration, sports and exercise chiropractors can attain new levels of excellence in the field. I encourage others to join in pushing boundaries, empowering athletes, and setting high standards. If you have any questions on where to begin or if you are interested in collaborating with me in the future, please do not hesitate to reach out via email alex.pucciarelli93@gmail. com



Dr Alex Pucciarelli is a highly qualified and dedicated chiropractor and Accredited Exercise Physiologist (AEP) with a robust educational background and a passionate commitment to addressing sporting and musculoskeletal injuries. Dr Pucciarelli holds a Bachelor of Exercise and Sport Science, a Master of Chiropractic and a Master in Clinical Exercise Physiology.

