Tackles, tears and troubles... a South African Sports Medicine Association perspective

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RUGBY RETURNS

Rugby Sevens returns to the Olympics this August after an absence of over 90 years. South African Seabelo Senatla, pictured on the cover, is one of a number of international Rugby Sevens players with poetic-sounding names. Akira Ioane (New Zealand), Nathan Hiramama (Canada), Collins Injera (Kenya) and Savenaca Rawaca (Fiji) have titles of similar allure for rugby commentators. The truly international reach, fast pace and tempo of the sport vilify the Olympic motto of '*Citius, Altius, Fortius*'. However, the debates surrounding the risks of collision sport, the discussions around injury epidemiology and prevention as well as the ubiquitous grey cloud of doping are unlikely to evaporate in the midst of Olympic euphoria. This South African Sports Medicine Association (SASMA)-led *BJSM* edition scrutinises these aspects of sport.

TACKLES...

The contentious call by a group of UK-based 'health experts' for a ban on tackling in school rugby¹ has provoked much print and social media comment,² both official^{3,4} and provocative.⁵ The widely followed Dr Ross Tucker carefully analyses the data in a global sporting and scientific context (see page 921). He illustrates how assessment, estimation and evaluation of risk should precede policy implementation. Banning tackling at youth level may actually have detrimental effects for the sport. Read why.

An emerging theme in the sports and exercise medicine literature, and collision sport in particular, has been that of injury prevention. With the tackle identified as the main area of risk, emerging South African rugby researchers Dr Nick Burger and Dr Sharief Hendricks (see page 932) fly the BokSmart flag. They led a cohort study that illustrated the importance of contact skill training and the correct technique to employ in tackling

based on technical and video footage criteria developed by Australia's Dr Tim Gabbett.⁶ The tackle is, of course, also strongly associated with concussion in rugby. Bath's prodigious rugby researcher, Professor Keith Stokes, illustrates how return to play in the same season after a diagnosed concussion is associated with a 60% increased risk of *any* time loss injury. A re-evaluation of graded return to play protocols and postconcussion rehabilitation incorporating proprioception, neuromuscular control and coordination may be appropriate.

TEARS (...AND TESLAS)

A recurrent ACL tear must be one of the most despondent scenarios faced by an athlete (and the medical team). Lead author Polyvios Kyritsis, from Erik Witvrouw's Qatar group, eloquently outlines six key discharge criteria for mitigating re-rupture risk. These are key findings for rehabilitation therapists, who would do well to print out Yann Le Meur's (@YLMsportScience) accompanying infographic (see page 952). This paper deserves the wide access (free) that comes with being Editor's Choice. In a similar vein, PhD candidate Nirav Maniar illustrates how isometric strength, passive straight leg raise and dynamic strength measures can guide return-to-play decisions after hamstring tears (see page 909). And, from China and Germany, Dr Wei Dong's systematic review and meta-analysis examines tennis elbow 'tears' (see page 900). Who has not been tempted to opt for the 'quick fix' option of a corticosteroid infiltration?

Today, most would associate the term 'Tesla' with South African-born disruptor and billionaire Elon Musk's electronic car company. But the 'T' more pertinent to musculoskeletal radiology is the unit of magnetic flux density applied to MRI. In two editorials, Professor Ali Guermazi and Professor Frank Roemer ask the pertinent question, 'How often has 3T changed my treatment decision compared to 1.5T?', and then outline the uses for T2 mapping and compositional MRI for diagnosing articular cartilage damage (see pages 894 and 896).

TROUBLE

What would the Games be without a doping scandal? Will meldonium, that well described first-line therapy for diabetes(!),

raise its head? (by the way, @dnunan79 wrote an excellent *BJSM* blog on the topic⁷). Hong Kong's Professor Chan advises on avoiding doping trouble and comments on research into psychological, social and educational variables (see page 898).

PROUDLY SOUTH AFRICAN

Rounding off the South African contributions is Professor Martin Schwellnus and colleagues' SAFER study, which spotlights the high incidence of acute illness in competing endurance runners and the benefits of pre-race medical screening (see page 939). Martin has recently become Director of the Institute for Sport, Exercise Medicine and Lifestyle Research, Faculty of Health Sciences, University of Pretoria. This is an IOC research centre (one of only nine in the world).⁸ While enjoying the poetic rhythm of the Sevens Rugby Olympians, look out for some excellent work from this clinical and research group as South African sports clinicians continue to tackle issues, prevent tears and avoid trouble.

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