Written evidence submitted by Maggie Stacey

Evidence for the Concussion in Sport Enquiry

I am a specialist vestibular rehabilitation physiotherapist and work in both the NHS and for The Institute of Sport, Exercise and Health (ISEH). My role at the ISEH is within the concussion clinic MDT and involves the assessment and treatment of people who have ongoing symptoms following a concussion. I will see sports people from all levels of sport as well as non-sports people who have suffered a concussion as a result of accidents.

I would like to submit evidence based upon my work experience at the ISEH concussion clinic, where I have worked for the past four years. Having listened to the live debate so far, I felt there was an absence of input from both sports coaches and sports physiotherapists. The evidence given by both Monica Petrosina and Eleanor Furneaux demonstrated an abscence of protocols and incorporation of guidelines, in addition to inconsistent knowledge and support within the immediate management of sports-related concussion, from both the coaches and medical personnel. This is not to say that they are at fault. I am often made aware by top level sports clubs physiotherapists and medical officers, that they are keen to have access to training within this area, as they do not feel fully equipped to be able to manage ongoing symptoms following concussion. I have recently provided training for a premier league rugby club at their request, which will most likely be funded by the club themselves. I also have concerns that unless such training is provided under a clear set of guidelines and protocols, knowledge will be incomplete and can cause more harm than good.

If the sports medical personnel are trained to use more specific screening tools, they are more likely to be able to recognise when a sports person is not yet ready to return to play and would benefit from further specialist assessment. At present, they rely upon certain computerised cognitive tests, the SCAT 5 and the resolution of symptoms to help guide them with return to play. However, there is research which indicates that the physiological process of recovery extends beyond the time of symptom resolution.

More specific screening tools such as the VOMS (Vestibular Ocular-Motor Screening) and the M-CTSIB (Modified Clinical Test for Sensory Integration and Balance) would be able to identify more subtle impairments within the vestibular system, which may not be causing current symptoms, but are likely to make the sports person more vulnerable to further injury, including additional concussions. We often see sports people who have had concussions several months previously, have completed the Return to Play process and been symptom free for a number of weeks or even months, and then develop symptoms again. These are often in association with more minor knocks to the head. They are then found to have subtle, underlying deficits within the vestibular and/or oculomotor system which were likely to have been caused by the original concussion and went undetected during their sports medical management process.

It should be noted that whilst the recent Concussion: Clinical Practice Guidelines (Journal of Orthopaedic & Sports Therapy, 2019) support the use of such screening tools, there is a need for further research. However, this should not prevent their implementation under the right guidance and monitoring. Medical sports personnel would need initial training in how to use these tools effectively and this training should be part of their professional, mandatory requirements. Implementation and monitoring would ideally be performed by their professional governing body, such as the RFU or FA.

The average time for resolution of symptoms in adults following concussion is ten days. The current Return to Play in rugby of six days is therefore too short and could increase the risk of further brain injury as well as other injuries. The long-term risk of returning to play whilst the brain is still recovering should also be an important consideration in this regard.

The justification of this shortened return to play is based upon the current measures mentioned above, which are incomplete and can also be predictable. Sports people, as suggested by Eleanor in her evidence, can learn the test procedures and manipulate them in order to return to play sooner. Additional screening tools, that focus on the vestibular system, which is often disrupted by concussion, should therefore be considered.