Minutes of the Fourth Ordinary Meeting

Held on Thursday 1st March 2018

Joint Meeting with Manchester Medical Society

Dr Steve McNally, Head of Football Medicine & Science, Manchester United Football Club and

Prof Wagar Bhatti, Consultant MSK Radiologist, University Hospital of South Manchester.

Minutes from

Dr Steve McNally, Head of Football Medicine & Science, Manchester United Football Club

<u>Utilizing CT, MRI & Ultrasound in Professional Football</u>

Dr. McNally began his lecture by outlining his historical connections with the Liverpool area having been born, raised and educated at school on the Wirral then returning to do postgraduate training after his University education at Nottingham. Having completed a year of Pathology training at Broadgreen Hospital he then completed vocational training before taking up a GP principal post in Netherton and Bootle.

It was during this time that Dr. McNally was able to develop an interest in Musculoskeletal medicine and Sports medicine in particular alongside Occupational medicine which has many similar themes and principles. He was appointed Honorary Club Doctor to Marine Football Club in Crosby in 1993 then Academy Doctor at Liverpool Football Club in 1998 whilst still working as a GP. He was also Medical Officer to several England National Football Teams at development, semi-professional and disability levels. In 2006 he was appointed to a full-time position as Club Doctor to Manchester United Football Club where he has remained ever since being promoted to Head of Football Medicine & Science in 2011. During that period he has overseen a significant expansion in medical and performance support services to Professional and Academy teams including the first ever in-house Medical Imaging Department in World Sport in 2013.

This lecture described the particular nuances of having an Imaging Department within a Sports Club environment and the benefits and challenges that posed; the very private and exclusive nature of these facilities was a clear advantage when dealing with high profile athletes but does not preclude the Club as an Employer and Service Provider from following necessary Health & Safety and Clinical Governance processes, in fact scrutiny was stringent given the unusual nature of this facility. He described the equipment available, the training background of those using it and the wider clinical support network for reporting and compliance with governance and safety legislation.

A wide range of clinical applications was described including Cardiac screening and surveillance alongside standard diagnostic imaging for health conditions and injuries. He introduced the concept of 'Performance Imaging' which had been developed by collaboration with experts and academics in other fields of Radiology and Sport and highlighted how imaging can assist with aspects such as Body Composition, Muscle Quantification and Physiology, Tendon stiffness etc., all of which can assist the athlete and coach with respect to training programmes, recovery practices and even talent identification or stratification. Advances in Neuroimaging are enabling quantification of Brain structures which may be of value in monitoring footballers for the development of Chronic Traumatic Encephalopathy following repeated head trauma. Similarly early detection of pre-degenerative joint cartilage changes may help reduce the future frequency of Osteoarthritis in Knee and Ankle joints both of which are highly prevalent in professional footballers compared to baseline populations.

Muscle strains and ligament sprains are the most common injuries encountered and form the bulk of a Football Medical Department's workload; Dr. McNally explained in detail the various classification systems he uses in line with differing imaging modalities and clinical presentations in order to establish a clear diagnosis, a likely prognosis and to guide subsequent treatment and rehabilitation. Surveillance imaging can also assist with injury prevention and this area will expand further in the near future with the advent and refinement of advanced post-processing MRI techniques.

Minutes from Prof Waqar Bhatti, Consultant MSK Radiologist, University Hospital of South Manchester.

Coming soon...