



Appearance and Performance Enhancing Drugs: The Pressure to Perform

Tavis Piattoly – Taylor Hooton Organization

Presentation Objectives:

1. Identify the signs and symptoms of anabolic androgenic steroid use.
2. Identify dietary supplements that are 3rd party tested and free of banned substances.
3. Describe how to educate athletes on the signs, symptoms, and potential side effects of anabolic androgenic steroid and dietary supplement use.
4. Identify dietary supplements that are supported by the scientific evidence compared to those being marketed without evidence.

Speaker Biography:

Tavis Piattoly, MS, RD, LDN is the Sports Dietitian and Nutrition Consultant for Tulane University's Athletic Department, Tulane Institute of Sports Medicine's NFL Players Association Brain and Body program, Fairchild Sports Performance in Houston, Traction Center for Sports Excellence, and Covington Orthopedics. He was the Sports Dietitian for the New Orleans Saints from 2006-2013 and New Orleans Pelicans from 2008-2013. He has been fortunate to have had the opportunity to design the nutrition programs for boxing champions Bernard Hopkins and Roy Jones Jr. along with working with a long list of Olympic, NFL, MLB, and NBA athletes to various college and high school programs.

He is also the co-founder and Director of Sports Nutrition education for ***My Sports Dietitian*** (www.mysportsdconnect.com), an online sports nutrition education company that helps athletes of all levels improve their eating habits to enhance performance, recovery, and health through the guidance of a Licensed Sports Dietitian. He is also the co-founder of My Sports Dietitian University, an online Sports Nutrition Mentorship program for students interested in becoming more competent in the field of sports nutrition.

www.mysportsduniversity.com

He is a 13 year veteran Sports Dietitian who also has worked with Dietary supplement companies on product formulation and education. He is a regular presenter and lecturer at local, state, and national conferences and Universities on the topics of Dietary Supplement Use in Young Athletes, Dietary Supplement Safety for High School, College and Professional Athletes, and Sports Nutrition Principles for Athletes.

Knowledge Gap:

Anabolic androgenic steroid (AAS) use is rapidly becoming a public health problem for the United States as well as many Western countries. A national survey administered by the Partnership of Drug Free Kids examining over 3,000 high school students demonstrated 7% admitted to using anabolic steroids while 11% admitted to using human growth hormone.¹ The



British Medical Association Board of Science and Education revealed the prevalence in UK fitness centers to be around 13%, whereas in dedicated bodybuilding gyms, the prevalence rate peaks at almost half of all members.² While AAS have legal therapeutic use for specific medical disorders, healthy individuals use and abuse them to enhance physical performance or alter their physique.³⁻⁵

However, AAS is not the only consideration with athletes trying to obtain an edge on the competition. Dietary supplements are also an avenue athletes turn to in order to enhance performance and alter their physique. The dietary supplement industry is unregulated and by being so, supplement makers do not have to scientifically prove the products they are marketing are safe before consumption. Furthermore and even more concerning is they don't have to prove their products contain what is on the label. Because of the weak regulations and lack of policy, supplements are at risk to becoming contaminated or adulterated with harmful ingredients. This can occur deliberately by the manufacturer (i.e. adding steroids to protein powder) or accidentally (i.e. cross contamination in the manufacturing facility).

Athletic trainers may interact with individuals who use or intend to use AAS, therefore, it is imperative that athletic trainers understand these prohibited substances so they can identify a current user while educating those who are considering using with the current and accurate evidence to avoid potential negative consequences.

Additionally, according to the NATA's 2012 Position Statement⁶ on Dietary Supplements, Athletic Trainers must be knowledgeable regarding basic nutrition and supplement use and must be able to educate their athletes regarding the efficacy, safety, and legal issues associated with the use of supplements.

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Evaluation and Treatment of Vestibular Ocular Dysfunction following Sport Related Concussion

Dr. David Carr & Dr. Becky Bliss

Presentation Objectives:

1. Participants will be introduced to common impairments of the vestibular-ocular system that would trigger further investigation through utilization of the Vestibular Ocular Motor Screening tool (VOMs).
2. Participants will gain hands on training performing the Vestibular Ocular Motor Screening tool (VOMs) components to be implemented in post concussive evaluation when warranted.
3. Early rehabilitation strategies will be covered and participants will be able to identify which exercises to utilize based on results of the VOMs.
4. Participants will be able to recognize importance of early identification of vestibular-ocular impairments and role of the Athletic Trainer/Vestibular Specialist relationship in returning athletes to activity.
5. Participants will craft and create rehab instruments for their own clinical use and be able to identify how they are used.

Speaker Biography:

Dr. Becky Bliss is an Assistant Professor in the Doctor of Physical Therapy Program at Wingate University in Wingate, North Carolina. Dr. Bliss has advanced certifications in Neurological Physical Therapy, ImPACT Physical Therapy, Advanced Vestibular Rehab, and Neuro-Development Treatment of Adults with Hemiplegia. She has focused her research and clinical practice on physical therapy intervention in concussion management.

Dr. Carr is an associate professor at Missouri State University. With over 20 journal publications, Dr. Carr has made numerous presentations at state, district, national, and international meetings. Dr. Carr has recently begun a new line of research into vestibular rehabilitation in collaboration with his co-presenter Dr. Becky Bliss.

Knowledge Gap:

Recent literature has shown 50-70% incidence of visual and/or vestibular dysfunction following concussion injury and recent clinical advances in examination and treatment of post concussive symptomology involving these systems has been updated and published.¹²³⁴⁵⁶⁷ Athletic Trainers are the first line of defense in sport related concussion and can play an important role of early identification of driving symptomology which subsequently can decrease recovery time and potentially decrease incidence of Post Concussive Syndrome (PCS).⁸⁻¹⁰ Early interventional strategies may lead to decreased

1. McCrory P, Meeuwisse W, Dvorak J, et al. Consensus statement on concussion in sport—the 5th international conference on concussion in sport held in Berlin, October 2016. *Br J Sports Med*. April 2017;bjsports-2017-097699. doi:10.1136/bjsports-2017-097699.
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3. Honaker JA, Criter RE, Patterson JN, Jones SM. Gaze Stabilization Test Asymmetry Score as an Indicator of Previous Concussion in a Cohort of Collegiate Football Players. *Clin J Sport Med*. 2015;25(4):361-366. doi:10.1097/JSM.0000000000000138.
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7. West TA, Marion DW. Current recommendations for the diagnosis and treatment of concussion in sport: a comparison of three new guidelines. *J Neurotrauma*. 2014;31(2):159-168. doi:10.1089/neu.2013.3031.
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Neuroimaging in Sports Concussion

Dr. Peter Stanwell

Presentation Objectives:

Describe current imaging techniques, research and clinical case studies regarding the brain and exposure to acute and chronic concussion.

1. Express the latest directions of clinical diagnosis of concussion and discuss the on-going controversies related to imaging and concussions
2. Integrate current research into patient care decisions in the evaluation and referral for sports concussion in physically active patients

Speaker Biography:

Dr. Peter Stanwell is a medical imaging research scientist with a strong interest in understanding the biochemical and biophysical changes that occur following brain injury. He has a goal of providing quantitative metrics, via MRI scanning, to inform evidence-based strategies to optimise medical treatment of traumatic brain injuries. Peter is seeking to achieve this by working with Dr Alexander Lin, Brigham and Women's Hospital, and Dr Susan Whitfield-Gabrieli, McGovern Institute for Brain Research at MIT, for the duration of his Fulbright Scholarship, and by strengthening existing collaborative ties between these Centres and the University of Newcastle. While in Boston, Peter is looking forward to increasing his technical research skills in fluorescence microscopy and brain connectivity methods, and expanding his knowledge of implementation science to facilitate translation of his research findings beyond the academic community to deliver positive healthcare, community and societal outcomes following traumatic brain injury.

Knowledge Gap:

Concussions in sport continues to be a significant problem in athlete patient healthcare. The complexity of symptoms, differential diagnosis, plan of care and clinical decisions for healthcare providers are all critical pieces in ensuring appropriate care and safe return to sport decisions by the sports medicine team (1). In some cases, it is important to have appropriate imaging to help establish levels of trauma to determine the way forward in patient care. Continued advancements are being made in technology and the role of neuroimaging in diagnosis and treatment of concussion (2, 3) and therefore it is necessary for Athletic Trainers to better understand the role of neuroimaging as it relates to concussion.

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HIPAA/FERPA in the Age of Electronic Communication

Kevin Stalsberg

Presentation Objectives:

1. Introduce clinicians to HIPAA/FERPA.
2. Differentiate the variety forms of electronic communication and how HIPAA/FERPA can play into these communications.
3. Identify legal uses of these forms of electronic communication.
4. Explain common ways to maintain compliance with HIPAA and FERPA.

Speaker Biography:

Kevin Stalsberg is currently an outreach athletic trainer for the University of Kansas Health Systems and provides healthcare to Shawnee Mission North High School in Overland Park, KS. Kevin received his undergraduate degree from the University of Wisconsin-Platteville and was part of the University of Tennessee-Chattanooga's first graduate athletic training class. He has worked in a variety of clinical settings including the collegiate and professional settings. For the last 10 years, he has been practicing as a secondary school athletic trainer. Kevin is the District 5 representative to the NATA Professional Responsibility in Athletic Training Committee and is the chair of the awards sub-committee for the PRAT.

Knowledge Gap:

In the 2016 Professional Responsibility Work Group survey results, 60% felt that confidentiality/privacy was the most significant LER issue facing athletic training today. This presentation will address that need.



Cultivating Care: A Social Determinants Approach to Patient Advocacy

Morgan Rakestraw & Kodee Walls

Presentation Objectives:

1. Understand the newly adopted ICF Disablement model and how diversity awareness plays a role in providing effective healthcare.
2. Understand the social determinants of health and the importance of creating a welcoming and supportive environment for people from diverse backgrounds and with diverse identities.
3. Create a plan on how to best address health inequity in your community/organization/environment.

Speaker Biography:

Morgan Rakestraw is the Clinical Coordinator of Athletic Training at Kansas State University. She is a Registered Orthopedic Technician (ROT) and also provides athletic training services for the School of Music, Theatre and Dance as well as Council Grove Jr/Sr High School. She has a Masters degree from University of Nevada, Las Vegas and graduated with her athletic training degree from Kansas State University. She has worked clinically as a certified athletic trainer in collegiate and high school athletics, as well as the performing arts and military setting.

Kodee Walls is a Staff Psychologist at Kansas State Universities' Counseling Services. Her doctoral degree is from Ball State University and her primary interests are working with college students on issues related to anxiety, depression, grief and loss, and identity concerns. Her passion is for diversity and working with LGBTQ individuals. She also takes time to raise awareness about mental health concerns in order to decrease stigma related to help-seeking.

Knowledge Gap:

In 2015, NATA adopted the ICF disablement model as the universal model for our profession. This talk may be an introduction the model for some clinicians. The focus will be on the environmental and personal factors of the model that also effect the patient. These factors are areas that athletic trainers lack in addressing as well in our clinical skill set. To better address these factors, the speakers will focus on health equity and social determinants of health and the vital role athletic trainers can play as healthcare providers. Athletic trainers are not as diverse as their patient population with 81% of the profession identifying as white. To better address social determinants of health that affect our patients, we have to have a better understanding of minority cultures and diversity aspects. The speakers hope each clinician will walk away with a plan to better address health equity in their communities and organizations.



Bridging the Gap Between Rehabilitation and Performance in the Adolescent Throwing Athlete

Jason Yoder, DPT

Presentation Objectives:

1. Review basic anatomy of the physis and surrounding structures related to adolescent's growth and development.
2. Provide understanding of the Salter Harris Physeal Injury Classification system.
3. Demonstrate appropriate upper quarter progressions related to throwing.
4. Increase understanding of lower body hip engagement, stability, and dynamic control in the throwing athlete.
5. Discuss appropriate implementation of weighted balls during end phase rehab progressions.
6. Demonstrate throwing drills related to baseball that can be performed in the clinic.

Speaker Biography:

Jason Yoder is currently the manager of Sports Rehabilitation with the Sports Medicine Center at Children's Mercy in Kansas City. He has over 8 years of experience in the realm of orthopedics and sports medicine. During that time frame he has had the opportunity to complete a variety of professional presentations for peers as well as community outreach most notably in the overhead athlete, baseball operative and non-operative cases, and adolescent injuries. Jason tries to take a holistic approach to the treatment and assessment of all of his athletes with consideration for recovery from the specific injury, injury prevention, and performance.

Knowledge Gap:

There continues to be an increased demand on our young athletes from early specialization and year round organized sports participation. With Athletic Training coverage expanding to club based programs, middle school, and continuing in High School the need to understand management of injuries across the athlete's development is critical. This course will focus on understanding the growth plate, management of these injuries, and specific cases. We will also expand treatment knowledge beyond the "throwers 10" to ensure appropriate control of the upper quarter through utilization of the kinetic chain. Clinical progressions will be demonstrated for the upper quarter including proper use of weighted balls. There will also be increased understanding of how to get our throwers to "use their legs and core" in relation to their throwing motions.



Upper Extremity Injuries in the Overhead Throwing Athlete

Dr. Trevor Gaskill, M.D.

Presentation Objectives:

1. Describe current techniques, research and clinical case studies regarding the upper extremity injuries in the throwing athlete
2. Express the common mechanisms of injury for upper extremity injuries in the throwing athlete
3. Integrate current research into patient care decisions in the evaluation and referral for upper extremity injuries in the throwing athlete

Speaker Biography:

Dr. Gaskill earned his Bachelor of Science degree from Kansas State University. He completed his medical degree at the University of Kansas School of Medicine with honors. His orthopaedic residency training was completed at Duke University Hospital and completed fellowship training in sports medicine at the renowned Steadman Clinic in Vail, CO. During this training he helped care for the US Ski and Snowboard Teams and many professional athletes.

Following fellowship training, he served 4 years within the Navy as a sports medicine surgeon at Naval Medical Center Portsmouth, a tertiary referral center and surgeon-training program for Navy medicine. While there he served as team physician for the east coast Naval Special Warfare community and acted as Chief, Section of Sports Medicine, during his final year. After returning to Manhattan, Kansas more than 10 years later he has been in private practice at the Orthopaedic and Sports Medicine Center and holds an affiliation as a Team Physician and Adjunct Clinical Professor for Kansas State University.

His current interests include the treatment of shoulder, elbow, and hip athletic injuries. He has received several OREF grants and has been published and presented in numerous journals and national conferences. He serves as a reviewer for the American Journal of Sports Medicine, the Journal of the American Academy of Orthopaedic Surgery and an editorial board member of the Journal of Arthroscopy. He is recognized as a Master Instructor by the Arthroscopy Association of North American and the Orthopaedic Learning Center.

Outside of professional endeavors, Dr. Gaskill enjoys spending time outdoors and at Kansas State athletic events with his wife and their three children.

Knowledge Gap:

A continued challenge in medical care of the physically active patient is the competence in the evaluation, diagnosis, referral and treatment of overhead throwing patients with upper extremity injuries (1). As seen in the literature, the participation in sports of younger patients continues to increase and an increased occurrence of injuries is also evident (3). As patients



mature and continue to stay active, the shoulder continues to be a challenge for healthcare providers who are treating patients with increased in symptoms as the patient ages (4).

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