

# Conference Report: 2018 STMS North American Regional Conference

Hilton Head Island, South Carolina, February 16-18th, 2018

**Adriana Acuna, MS, ATC, OTC**  
**Brian Harvey, DO**

This year's STMS North American Regional Conference gathered members and distinguished guests to the Sonesta Resort located in beautiful, tennis-friendly community of Hilton Head Island, South Carolina. The conference began as the PTR International Tennis Symposium concluded with presenters such as Dr. Ben Kibler and Dr. Mark Kovacs sharing their professional expertise with both organizations. The International Tennis Performance Association (iTPA) also had a notable presence, in partnership with STMS, with many of the attendees holding some level of iTPA certification. With the Shipyard Van Der Meer Tennis facility conveniently located adjacent to the resort, it allowed for several on-court demonstrations for attendees to further develop coaching strategies, warm-up techniques, identifying movement patterns, and progression of tennis-specific training methods.

The conference had attendees widely representing various facets of professionals who play a vital role in working with the tennis athlete, including physicians, coaches, physical therapists, athletic trainers, chiropractors, and fitness professionals. On Saturday, the conference kicked off with Dr. Neeru Jayanthi welcoming everyone and providing an overview of the STMS and PTR mission and initiatives. With the intent to promote the sport and progress the future of evidence-based tennis medicine, a call for expansion of interest in participation from those working with tennis athletes was emphasized. Dr. Ben Kibler followed with information regarding "Load Management in the Competitive Player: Serves or Hours?" He highlighted how on-court hours and serves are both type of exposures that possible lead to injury and that it is important to be cognizant of the acute/chronic ratio load of a player. He provided evidence indicating that serve volume is a predictor of injury, which can increase 3-4% with every 100 serves hit. Dr. Marc Kovacs provided a lineup of the most recent athletic technologic devices being used in the toolbox of tennis training. Sport scientists are able to incorporate the technology to assess movement

patters as well as monitor

training loads and track recovery and use the data to customize training plans and appropriately progress the athlete. USTA Sports Psychologist, Doug Eng discussed the mainstream practices of mental skills in youth sports as well as the role of periodization of mental skills in a tennis training program. Dr. Jayanthi then enlightened us on the most recent data highlighting sport specialization and multi-sport play in young athletes. A take home point concluded that specialization has the ability to marginalize kids not to play sports... A unique session, modeled to openly discuss the challenges and successes experienced by elite junior player, Meg Kowalski and her mother Mattie Kowalski, shed light on the highs and lows of competitive junior training and the road to collegiate play.

In the breakout sessions, Dr. Marc Kovacs presented on an arm of a recently published study by outlining the "Stroke Efficiency Rating (SER): Reliability of Stroke Efficiency Assessment-Forehand, Backhand, Serve", and demonstrating the biomechanical evaluation and rating of each stroke, which is used to identify injury risk. Dr. Natalie Myers concluded



that evidence to show significant differences in stroke mechanics between the female and male tennis player is still lacking. Dr. Robyn Rice presented on the relationship between side to side asymmetries in the core and hips and their association with back injuries in elite and professional tennis players.

The other breakout session covered topics related to the female athlete and medical issues in the tennis player. Dr Chappell is one of 250 board certified lifestyle medicine physicians who reviewed evidence-based strategies to help adopt and sustain healthy behaviors in our tennis athletes. She underscored the need for nutritional education to coaches and trainers all the way up to physicians and health care providers. Lyndsy Pyc reminded us that lumbopelvic stability is the key in keeping tennis athletes on the court at all ages and levels. With Meg Kowalski as her model, she reviewed key exercises that focus on pelvic stability. WTA Registered Dietician, Page Love, reminded us that poor nutrition leading to low energy intake can lead to a wide variety of issues from fatigue/low energy to heat illness. Dr Mary Jane Desouza reviewed that chronic energy deficiency sets the stage for metabolic and reproductive issues leading to poor bone health in the female athlete. Focusing therapy on nutrition and ovulatory menstrual cycles combined have the best effect on improving bone mineral density. Dr

Cassidy Foley reviewed the differences in the female tennis player and how early intervention and prevention addressing lumbo-pelvic instability and poor control of the hip and knee is the key.

The on-court movement session allowed for attendees to experience how tennis strength and conditioning specialist, Ted Borgerding, does movement evaluations as well as basic progressive drills to optimize the on-court training of the tennis athlete. The day concluded with open clay court play.

The final day of the conference opened with surgeon, Dr. Robert Gallo, sharing the prognosis of the tennis player after undergoing surgery. In professional players who have had shoulder surgery, 88% of them return to play with only 25% to previous rank at an average of 7 months. Dr. Bert Fields then discussed "Strategies for Extending the Life of the Aging Tennis Player" providing evidence of common injuries in the adult tennis player and how to ensure they get back to the court. The moderator, Dr. Paul Caldwell reviewed the overall health and long-term benefits of playing tennis and the importance of overall health in longevity of active individuals, especially in an effort to slow down the process of degeneration. Surgeon, Dr. Alan Curtis, shared the role of the shoulder joint in the sport, commonly diagnosed should-

der injuries, their etiology, and conservative and surgical treatment options. In the final breakout sessions, the Practical Applications in Tennis Medicine sessions ranged from "Considerations in Tennis Medicine Event Coverage: An ATP Perspective" from Dr. Gary Windler and Dr. Neeru Jayanthi providing personal experiences on "Setting Up a Tennis Medicine Program in Your Area." Lyndsey Pyc reviewed pre and post-match concepts to treatment of specific injuries, focusing on all aspects of the kinetic chain, not just the specific injury site. Ted Borgerding went through a hands on review of the STAY (specialized training assessments of youth) in tennis project. This project focuses on assessment of potential on going injuries instead of screening for future injury risk.

The case-based approaches and original research room included talks from chiropractor, Erin Saltzman describing factors contributing to lumbar injuries, especially in the serve, and used a case study to highlight how it can affect players. Other topics covered included research on "Stroke Efficiency Rating in Junior/Elite Players with Six Month Follow-Up", "Stroke Volume During Practice and Match Play in Junior Tennis Players", "Knee Pain in the Tennis Player (Junior Versus Adult)", and a demonstration by Randy Gootzeit on her experiences utilizing the Graston Technique to treat lateral elbow pain. •

