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Press Release

Sport Sciences International's President and physiotherapist Kevin Honsberger announces encouraging clinical findings dealing with tennis strokes and injury prevention.

Kevin Honsberger and head tennis teaching professional Stephen Warboys of the Toronto Cricket, Skating and Curling Club teamed up to re-establish a more efficient tennis strokes to help reduce potentially harmful loads to the shoulder and arm in a promising junior player.

Utilizing a biomechanical evaluation process highlighted by determining the player's kinematic profile, Kevin was able to identify that the legs and trunk were under utilized in the development of rotational velocity and ultimately racquet head speed. This shifted the responsibility to the shoulder/arm placing a greater / detrimental demand on this part of the body.

Significant gains in performance parameters were achieved through a comprehensive physiotherapy program, a tennis specific exercise program with a specific emphasis on

improving the utilization of the lower legs and core stabilizing musculature and Stephen's drills and teaching to develop more efficient stroke mechanics

By improving the player's kinematic sequence, we were able to increase shoulder/trunk rotational velocity contribution by 208 deg/sec - a 43% increase. We were also successful in increasing arm rotational velocity contribution by 388 deg/sec or a 52% increase.

This is the key. By utilizing the concept of segmental transfer the player was able to transfer her trunk velocity to her arm segment and enhance that velocity with less work. In doing so we can reduce the net work done by the arm and thus protect it from overload and injury.

This work not only provides insight on how effective physiotherapy, exercise and motor learning play a part in sports performance but also how we can effectively balancing the load throughout the body and make it more efficient not only to prevent injuries but also to enhance performance.

For more information on Kevin's continuing research around tennis and other sports please contact him a honsphysio@rogers.com and visit our websites at www.sportsciencesinternational.com or www.honsbergerphysio.com