Golf Injury Prevention Strategies

On Tuesday, April 5th ONS Orthopedic surgeon James Cunningham, MD and physiatrist Halina Snowball, MD presented an injury prevention program for golfers of all levels. They discussed common golf injuries and training strategies to help players not only enjoy their sport but also remain pain and injury free. In the event an injury is sustained, they also discussed surgical as well as non-surgical treatment options. ONS Director of Physical Therapy Laura Liebesman discussed proper strength and conditioning exercises for on and off the course. To complete the program, PGA Golf Professional Mike Summa from The Stanwich Club in Greenwich, CT offered some tips on proper swing mechanics.

Try these 10 helpful tips!

1. Train by repetitive motor learning specific to the sport. Example: long distance runners are not trained by sprinting.

2. Never separate the torso from the hips while swinging.

3. For a more beneficial aerobic workout, walk outside, NOT on a treadmill.

4. Improving flexibility will result in fewer injuries, swing consistency, improved distance through less compensation and greater power.

5. Always remember to stretch AFTER you warm-up your muscles.

6. To achieve a more powerful swing, strengthen your core through resistance training, yoga and Pilates (see exercise examples below).

7. Avoid surgery by taking care of your body on and off the course through exercise, healthy diet habits and minimizing stress.

8. Wrist weakness and radiating forearm pain could be “golfers elbow.” To avoid this common injury, maintain proper form and resist the temptation to play too much. REST is the best treatment for this injury.

9. Swimming, biking and using the elliptical machine are three of the most effective cross-training exercises.

10. When picking up your ball, always remember to bend with your knees!

David Peabody, ONS Physical Therapy
Welcome to our spring edition of the ONS Foundation Newsletter. Despite a long winter, we continued to make progress and improvements in our mission to educate both doctors and patients and produce highly respected results in clinical research. With so much happening at the Foundation, I will point out a few highlights.

Our community education program has met continued success and has included programs for people of all ages. Frequent, well-attended symposia have brought information to student athletes, weekend warriors, aging athletes, coaches, and physical therapists. Please take a look at the calendar in this Newsletter— we would love to see you at one of these upcoming events.

Concussion management and treatment remains on the top of our list of conditions to better understand. The Neurosurgical team has partnered with CCCC. The expertise of Patricia McDonough Ryan, Ph.D., will help us to obtain a more comprehensive and neuropsychological understanding of concussion and the options for treatment. Drs. Mark Camel and Gloria Cohen are also making considerable headway studying stress fractures in adolescent athletes. They are tracking a cohort of over 50 injuries.

ONS Foundation efforts are having a major impact and are recognized by large audiences. The American Academy of Orthopedic Surgeons has asked us to develop a teaching module for surgeons based on our triceps tendon study.

It seems that these days we have a research intern more often than not. Two of our interns will enter medical school in the fall and another three the following year. Their youth and enthusiasm inspire us all and remind us of why we originally pursued a life in medicine.

On April 7th, we had a wonderful Golf Outing “Tee Off” party at Miller Motor Cars Ferrari showroom. Cyndi and Richard Koppelman generously sponsored the event. Rich Granoff’s architectural drawings for the arthroscopy and biomechanics lab were unveiled with great excitement. Sadly, I did not get to leave with a new Ferrari.

The 2011 Golf Outing at The Stanwich Club will prove to be the best one yet. To gear up for the season, we held a very well-attended golf injury prevention seminar. I hope to see you at the ONSF outing for a great day of golf, dinner, and auction. Sandy Hart is putting the final touches on a great auction that is sure to be a hit.

Thanks to all of you who support our Foundation, participate in research, and who have become our extended family.

ONS Foundation’s Sports Concussion Management Consultant

Trisha McDonough Ryan, PhD

Dr. Tricia McDonough Ryan has recently joined the ONS Foundation as a Traumatic Brain Injury and Sports Related Concussion Management Consultant. Dr. Ryan is a Pediatric Neuropsychologist, specializing in the diagnosis and treatment of traumatic brain injury (TBI) in children and adolescents. She recently moved to Connecticut from Cincinnati, Ohio, where she was an Assistant Professor of Pediatrics at Cincinnati Children’s Hospital Medical Center and the University of Cincinnati College of Medicine. During her tenure at Cincinnati Children’s, she led the Outpatient Rehabilitation Program, focused on providing comprehensive treatment to children recovering from TBI, brain tumor, stroke, or other neurological disease (e.g. epilepsy, meningitis). Dr. Ryan has been actively involved in research studies of neurodevelopmental toxins, serving as co-investigator on NIH funded grants measuring the Neurodevelopmental Late Effects of Radiation Therapy in Pediatric Brain Tumors and the Neurobehavioral Effects of Lead Exposure. She works with the NFL Cincinnati Bengals Football Team providing neuropsychological assessment and concussion consultation. Dr. Ryan completed her undergraduate education at Cornell University and Doctorate at University of Cincinnati. She completed her residency at the Atlanta VA, working with veterans who sustained a TBI. Her post-doctoral fellowship was completed at Cincinnati Children’s Hospital Medical Center, where she specialized in pediatric neuropsychology.

In her capacity with ONS Foundation, Dr. Ryan will be conducting concussion management education workshops and consultation to coaches, athletes, parents, and school personnel in the community in an effort to raise awareness on the signs, symptoms, and treatment of sports-related concussions. Concussion management seminars with the coaches and parents of the Everton America Soccer Club and with teachers and parents at the Convent of Sacred Heart were recently completed with very positive feedback. Dr. Ryan hopes to implement a research protocol on outcomes in children who sustain two or more concussions.
Understanding the cognitive and psychological sequelae of a concussion is critical for managing the recovery from this mild traumatic brain injury. Educating parents and teachers on the impact of a concussion on academic performance can help reduce recovery complications of prolonged symptoms and psychological distress.

Though cognitive and psychological changes following a concussion vary in intensity and duration, they are most often temporary, lasting a few days to weeks. Cognitive changes after a concussion may include: slow processing of information, poor sustained attention and concentration, difficulty remembering new information, trouble planning and organizing materials, difficulties with visual-spatial information, slow reaction time, poor impulse control and feeling cognitively "foggy." Psychological changes may include: emotional sensitivity and fluctuation, irritability and anxiety. Variability in symptoms depends on the severity of the injury and the athlete's cognitive, psychological and medical history. Athlete's with a history of previous concussions or neurological disorders tend to take longer to recover and their cognitive symptoms can be more severe. Cognitive weaknesses associated with a history of a learning disability or ADHD tend to be exacerbated following a mild head injury, as do mood and anxiety symptoms in children and teens with a history of these symptoms. In teens, the psychological symptoms can be difficult to tease apart, given that this is a time when it is developmentally normal to be emotionally sensitive or irritable.

Just as returning to aerobic exercise too soon will prolong the recovery of a concussion, returning to mental exercise too soon will interfere with recovery and may lead to more serious outcomes. Allowing your child to sleep and rest, along with reducing environmental stimulation as much as possible will help with his/her recovery. This includes initially eliminating electronic use (video games, texting, computer, tv), reducing noise and light stimulation, limiting socializing and avoiding homework until their physical symptoms of concussion (headache, dizziness, blurred vision, sensitivity to noise or light, fatigue or nausea) have improved. As a general rule, a child should not return to school unless they can sustain their attention for approximately 45 minutes without demonstrating any of the physical symptoms of concussion. To assess if your child is ready for school work, give them a task, such as reading, for 10 minutes and see if they have any physical symptoms afterwards. If yes, back off and have them rest. If not, increase it to 20 minutes and assess symptoms. Continue to increase by 10 minutes, backing off when they reach a point of developing a headache, dizziness or other physical symptom. Try this for reading, math, computer assignments etc.. When ready, they should return to school following a gradual process. This may mean that they attend partial days or take frequent breaks during the day to rest at the nurse’s office, away from light or noises.

In terms of what the cognitive changes from a concussion "look like" at home or school, it usually means: trouble following directions, paying attention, taking notes and not enough time to read, write or finish an assignment or test during class. Subjects such as math, science and foreign language tend to be more difficult following a concussion because these are considered more "emerging" and less well encoded/rehearsed materials that the child is learning. It's always helpful to re-introduce the material a child was learning PRIOR to his/her concussion, before advancing to new material. Once they have mastered the prior material, they can proceed to new material. In the classroom, they may need accommodations such as: seating in the front of the room, access to teacher's notes/outlines/study guides, individual teaching sessions, extended time for tests or projects, help with prioritizing their work, reduction in homework and excused from or modification in exams. It's important for teachers to recognize that even if a child is able to attend school, they may not have the energy to complete the homework or study for an exam. Therefore, parents and teachers/guidance counselors need to be in daily communication. If a child feels stressed about his/her school work, it not only increases their risk for psychological sequelae, but also prolongs the recovery from concussion. For children attending public school, the parent or school may determine it is necessary to implement a temporary 504 Plan, which legally documents a child's needs for accommodations in the classroom.

In summary, following a concussion, reducing cognitive stimulation and mental exercise is equally as important as reducing aerobic/sporting activities. Parents should contact their child's school to develop a plan and seek professional help from a qualified neuropsychologist if you have concerns about your child's psychological symptoms or school performance, if your child has a history of multiple concussions or neurological disorder or child's symptoms are prolonged for several weeks.

If you have questions for Dr. Ryan or would like to set up a workshop or need assistance in developing a concussion management program for a sports team or school, please feel free to contact her at her clinical office in Darien, CT at 203-636-0080, ext 584 or via email Tmcdonoughryan@gmail.com. She sees patients referred by Dr. Mark Camel, ONS, who have complications following a sports-related concussion.
RESEARCH UPDATE

Research provides a great deal of excitement for the Foundation. As perpetual students, we are all eager to learn. It is even more rewarding when we are able to help others learn or contribute to the fields in which we practice.

Neurosurgery Update

ONS Neurosurgeon Scott Simon, MD

In the past year, the ONS neurosurgeons have continued to promote the ONS Foundation’s mission of education. Based on the considerable feedback we have received from Dr. Mark Camel’s presentation at the Convent of the Sacred Heart and Dr. Scott Simon’s talk to the students at Stamford’s AITE school on recognizing and managing concussions in our youth, we have changed the way many students, teachers, and coaches approach mild head injuries. In addition, the Foundation’s efforts towards injury prevention through our ThinkFirst program continues to be a tremendous success. Through presentations in the local schools, camps, and youth organizations such as the Greenwich Boys and Girls Club, our ThinkFirst program teaches children about the nervous system and how to protect themselves from brain and spinal cord injuries. These age appropriate presentations impart lessons that last a lifetime. Through continuous post-instruction evaluations we ensure these lessons are learned.

Furthermore, our ThinkFirst chapter is currently developing a program aimed at preventing brain and spinal cord injury in the elderly population. According to the CDC latest information, falls are the leading cause of injury related deaths in Americans 65 and older. As neurosurgeons in the community, we see the reality of this statistic over and over again. We look forward to evaluating how our efforts through this new ThinkFirst initiative impact upon the incidence of brain and spinal cord injury in the elderly.

ONS Neurosurgeons have also been active in fulfilling the Foundation’s mission of clinical research with the recent acceptance of three separate case reports that are to be published in the peer reviewed journals of *Spine*, *The Spine Journal*, and *The American Journal of Orthopedics*. We have accrued over fifty patients in our study on lumbar stress injuries in young athletes and will be publishing our results in the coming year. The conclusions from this study will provide important information on how these stress injuries should be managed and when these athletes can safely return to play. In addition, we are currently studying the effectiveness of low dose rh-bone morphogenic protein in posterolateral minimally invasive fusions. Our neurosurgeons at ONS have been leaders in the field of minimally invasive spine surgery for several years and this study will be the first of several that will serve to educate the greater surgical community on these techniques. We are grateful for the support received from the ONS Foundation making these education and research endeavors possible.

Orthopedic Surgery Update

ONS Orthopedic Surgeon and ONS Foundation President Paul Sethi, MD

The majority of the ONS Foundation research efforts are designed to improve patient outcome and patient care. Some of these projects result in big leaps and advancements but most come as baby steps, inching along, to the point that we realize how far we have come.

The torn rotator cuff continues to be an area of great interest to us. We have helped to elucidate techniques that improve the healing rates seen in patients and are now well underway on a study that examines the microscopic features of the torn rotator cuff. Studying torn rotator cuffs will give a better understanding of what has gone wrong on a cellular level. We hope to use this data to develop cellular or pharmacologic mechanisms to enhance healing.

In addition, we are preparing a manuscript on our repair suggestions of partial rotator cuff tears. These are the tears that haven’t torn all the way through the tissue and can be disabling to both young and old patients. Our technique appears to restore the tissue strain back to normal, in contrast to the abnormal strain that we observed with currently published techniques. We are also studying the proximal biceps tendon (where it enters the shoulder). We have developed a grading system and are trying to improve surgeons’ understanding of normal versus abnormal anatomical variants. This will help surgeons from all over the world to make thoughtful and accurate decisions regarding the treatment of the biceps. If the biceps study yields useful information, we will start a similar rotator cuff grading system.

Numerous projects are in “the hopper”, and we regularly meet to discuss new ideas and update project status. This component is so exciting and really does make a difference in current and future medical care.
Meet our Board!

The ONS Foundation Board of Directors represents a broad spectrum of individuals that includes orthopedic surgeons, neurosurgeons, community leaders, philanthropists, business leaders and volunteers. This past fall we began featuring two distinguished members of the Board, volunteers who participate wholeheartedly in all Foundation programs. Below are two additional notable members, whose involvement continues to be very beneficial.

Amory J. Fiore, MD

Dr. Fiore is an ONS neurosurgeon specializing in minimally invasive spine surgery and reconstructive spine surgery. He is recognized with many awards including: Castle Connolly New York Metro Area Top Doctor and Top Doctor in Connecticut, Greenwich, New Canaan, Stamford, and Westport Magazines. Board Certified by the American Board of Neurological Surgery, Dr. Fiore is a member of the American Academy of Neurological Surgeons, the Congress of Neurological Surgeons and Joint Section on Disorders of the Spine and Peripheral Nerves. Amory and his wife, Annette, live in Greenwich with their children Nicholas, Christopher and Charlie.

David Hirsch, Foundation Treasurer

David is currently an Investor and Entrepreneur in real estate development and private equity investments. Prior to this, he was the Managing Director of Chancellor Livingston, LLC in Pound Ridge New York and was the Chief Executive Officer of Gaspra Technologies, LLC in New York City from 1996 to 2000. From 1984 through 1996, he was the Executive Vice-President of Security Metal Products Corp in Culver City, California. David is affiliated with AIPAC, New Leadership Network and Burning Tree CC. He currently lives in Greenwich with his wife, Claudia, and their two children, Grant and Kate.

Interns

Storm Horine

Storm recently graduated as a Psychology Major at Johns Hopkins University. He was the President and Founder of the JHU Wrestling Club; Judicial Board Chairman of the Interfraternal Council and a member of the Sigma Alpha Epsilon fraternity. He states, "I am attracted to the fact that the field of medicine is constantly evolving and striving to improve. Ultimately, I want to be a doctor because medicine provides the opportunity to always be learning a new technique or procedure while helping people.” He also included, “Shadowing the physicians at ONS was a great opportunity and a blast. It was fascinating and informative to observe the interactions between the doctors and patients. I enjoyed the camaraderie, atmosphere and procedures of the OR. This internship gave me an in-depth look at what a surgeon does. From research to presentations on sport-related injuries, I learned that the role of a surgeon goes beyond surgery.”

Kathryn Stascavage

Kathryn recently graduated Stevens Institute of Technology with a major in Biomedical Engineering. There she played Varsity soccer and enjoyed snowboarding and ice skating. This fall she will attend Mount Sinai School of Medicine hoping to continue research in orthopedics. She wishes to pursue a residency in Orthopedic Surgery and a fellowship in Sports Medicine. She states, “since I began my internship at ONS in March, I have learned a great deal about orthopedics, patient care, and surgery. Shadowing Dr. Sethi in the office and in surgery is the highlight of my week and I am extremely grateful that he shares his knowledge and expertise. I feel prepared for medical school and am quite confident in my career choice. He is an incredible mentor, teacher, and physician.”

Chris Vandivort

Chris recently graduated as a Psychology Major at Cornell University. In his down time, he played squash and tennis, rock climbed and is a member of the Alpha Delta Phi Fraternity. He states, “the first time I ever thought about being a doctor was when I was coping with a spinal injury (that was actually diagnosed at ONS). I thought about the wonderful thing that the doctors had done for me and how incredible it would be to be able to do that for other people. Since then, I wanted to be a doctor.” He also states “I’m incredibly grateful to Dr. Sethi and the other doctors at ONS for offering me this internship. I have had a great experience and learned a lot. Not only did I learn some of the rudiments of orthopedics by watching and asking questions, but I also learned a lot about what it is like to be a doctor and work with patients, which I think is the most valuable take away from the internship.”
Since 2009, the ONS Foundation sponsored over twenty free seminars in the Greenwich-Stamford area. Fellowship-trained orthopedic surgeons, sports medicine physicians and neurosurgeons spoke to community groups on topics including youth and adult sports injury prevention, concussion injury awareness and minimally invasive spine surgery.

**Ski Injury Prevention Seminars**

**December 1st - Snowcats Ski Club, Rye, NY**

**December 7th - ONS, Greenwich, CT**

Dr. Steven Hindman and Dr. Tim Greene focused these seminars on the causes of common skiing injuries and offered tips on how these causes may be avoided, as well as suggestions for safe skiing and information on the latest treatments for common injuries, such as a ruptured ACL. ONS physical therapist Chalon Lefebvre explained and demonstrated ski conditioning and strengthening exercises. A representative from Hickory and Tweed Ski Shop in Armonk, NY was also present to discuss proper equipment sizing and the importance of having equipment properly checked and maintained.

**January 13th— Junior United Way Sponsored Injury Prevention Seminar**

The Jr. United Way, in partnership with the ONS Foundation and Greenwich Library, hosted an injury prevention presentation for local student athletes. Co-Presidents Courtney Griffin (Greenwich Academy), Heather Miller (Greenwich Academy), and Melody Pabon (Greenwich High School) met with their student committee and selected the theme: ACL injuries, stress fractures, concussions and prevention. Dr. Paul Sethi, Dr. Tim Greene, and Dr. Scott Simon were the featured presenters.

**January 20th— Platform Tennis Injury Prevention Seminar**

Dr. Paul Sethi and Doctor of Physical Therapy Alicia Hirscht presented an injury prevention seminar at the Darien Library for players and coaches, in advance of the 46th Annual American Platform Tennis Association (APTA) Junior National Championship. Topics included common injuries, strategies for avoiding these injuries and surgical and non-surgical treatment options. Dr. Hirscht provided the audience with important and very useful strength and conditioning tips, as well.

**March 29th – Preventing Throwing Injuries**

Sports medicine specialist Tim Greene, MD discussed arm injuries most often associated with “throwing sports”, and what can be done to help keep young athletes safely in the game. Clinical Specialist in PT Alicia Hirscht, DPT spoke about safe conditioning and strengthening techniques for kids. Sam Colon, Director of Operations at Pro Swing in Port Chester, discussed the importance of proper training techniques, and Mike Porzio, 15-year professional pitcher, spoke about his experience playing professional baseball.

**March 29th— Concussion Talk at Convent of the Sacred Heart**

Neurosurgeon Mark Camel, MD, Orthopedic surgeon Katie Vadasdi, MD, and sports medicine specialist Gloria Cohen, MD, met with Convent of the Sacred Heart high school students in Greenwich, CT to discuss concussion prevention, diagnosis, and treatment.

**April 5th – Golf Injury Prevention Seminar**

Orthopedic surgeon James Cunningham, MD and physiatrist Halina Snowball, MD presented an injury prevention program for golfers of all levels. The doctors discussed the common golf injuries and training strategies to help players enjoy their sport to the fullest. The Stanwich Club golf professional Mike Summa spoke about golf equipment and Laura Liebesman, PT, Director of ONS Physical Therapy, discussed conditioning and strengthening exercises to prepare for golf.

**May 31st – Triathlon and Cycling Injury Prevention Seminar**

Participants learned about the common causes of injuries in cyclists and triathletes, the biomechanical issues of combined training, proper stretching and strengthening techniques, training methods for returning to racing post injury and treatments for injuries. Presented by orthopedic surgeon and sports medicine specialist Dr. Katie Vadasdi, primary-care sports medicine specialist Dr. Gloria Cohen, and ONS physical therapist Abigail Ramsey, the seminar helped athletes prepare for the summer and fall race season.
**Community Outreach (continued)**

**FUTURE EVENTS:**

**September 20th— Dance Injury Prevention**

Board certified sports medicine specialist Dr. Gloria Cohen, Dance Physical Therapist Samara DiMattia and Sports Psychologist Rebecca Gaines will deliver an injury prevention program for athletes involved in dance, figure skating and gymnastics. They will discuss proper training and stretching techniques, strength and conditioning exercises, and the importance of physical therapy for injuries. Admission is free; however, registration is requested.

**September 27th— Running Right!**

Dr. Gloria Cohen, board certified sports medicine specialist and avid runner, is back for another seminar to provide information about the biomechanics of running, common running injuries and injury prevention tips. ONS Physical therapist Abigail Ramsey will discuss proper strength and conditioning exercises, safe training methods, physical therapy treatments for injuries and when it is safe to return to running after being injured. Admission is free; however, registration is requested.

**FUND DEVELOPMENT**

**ONS FOUNDATION 3rd ANNUAL GOLF OUTING**

**THE STANWICH CLUB**

Greenwich, Connecticut  
June 13th, 2011

The ONS Foundation for Clinical Research and Education in conjunction with Greenwich Hospital proudly announces that the 3rd Annual Golf Outing is scheduled to take place at The Stanwich Club in Greenwich on Monday, June 13th. This partnership provides a most exciting golf experience and at the same time, benefits the ONS Foundation and strengthens its alliance with Greenwich Hospital. Orthopedic Surgeon, Dr. Michael Clain, and Foundation Vice President, Vicki Leeds Tananbaum, will co-chair the event.

As the population ages, the incidence of rotator cuff tears requiring surgery is on the rise. Proceeds from the 2011 Golf Outing will fund clinical research to identify factors that may enhance or inhibit healing and utilize the information to customize patient care. The Greenwich Hospital Institutional Review Board has approved this study. Patient outcomes will be evaluated, validated and shared with the medical community. The goal of the research is to improve patient treatment by improving the healing rates.

After registration and practice, golfers will enjoy a buffet lunch before playing golf on the magnificent championship course of The Stanwich Club. Cocktails, auction and dinner will follow golf and non-playing guests will join us. Auction Chair, Sandra Hart, has organized an exciting list of items that include a six day, five night stay at the magnificent Curtain Bluff Resort Antigua, Yankees, Jets, and Giants tickets, rounds of golf at some of the most prestigious clubs, a visit to the Today Show set featuring Kathie Lee Gifford and Hoda Kotb, a TAG Heuer Aquaracer water from Betteridge Jewelers, a weekend at the Three Stallions Inn, unique golf items and state of the art golf equipment, a Judith Ripka earring and ring set and much more.

For information or to register on line visit [www.ons-foundation.org](http://www.ons-foundation.org).

**Updates**

The ONS Foundation continues to receive contributions in the form of grants and gifts from generous donors and sponsors who understand the importance of our mission and want to make a difference in the care, treatment and prevention of musculoskeletal disorders. These contributions enable us to enhance our Education and Community Outreach programs and to disseminate vital information to physicians, medical professionals, educators, athletes, students, parents and coaches. In addition, the plans for establishing the ONS Foundation Biomechanics Laboratory continue to move forward and it is our goal to complete this project by year’s end. You may donate at [www.ons-foundation.org](http://www.ons-foundation.org) or complete the attached form.

**Your support, interest and generosity are greatly appreciated.**
WE SAW THE NEED, PLEASE HELP US MEET IT...

To donate online, visit www.ons-foundation.org or complete the attached form. We look forward to keeping you informed about our progress, successes and exciting future events.

Enclosed is my tax deductible donation in the amount of:

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Thank you for your generous support!