ONS Foundation Launches Mini-Med Program for High School Students

Education is a major part of the ONS Foundation Mission and the 1st Annual Mini Med School exemplified this commitment by providing 15 high school students the opportunity to participate in a one week workshop in orthopedics. The students attend Greenwich High School, Brunswick School and Greenwich Academy and exhibited an interest in careers in medicine.

ONS physicians welcomed the students to the ONS Foundation Arthroscopy, Surgical Skills and Biomechanical Research Lab and not only introduced them to the field of medicine and orthopedic surgery but also enabled them to have the ultimate “hands-on” experience. Drs. Cohen and Greene discussed orthopedic problems, physical examination and diagnosis. Broken wrist? No problem for these students who spent two sessions in a casting workshop. From putting on surgical scrubs to learning surgical procedures, students were introduced to the operating room environment by Ray Delacruz and Dr. Hindman. Sutures were tied on oranges under the watchful eye of Dr. Vitale.

In the Lab, Dr. Heftler covered the fine points of fluoroscopy and then the moment arrived for these students to actually perform knee and shoulder arthroscopy on “Alex” models. Orthopedic surgeons, Drs. Vadasdi and Vitale

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Message from the President . . .

Season’s Greetings and Happy New Year

Although I can barely believe that it is behind us, 2013 was the ONSF’s best year yet. New additions to our Board of Directors have increased our ability to reach out and help communicate with our community. Led by Casey McKee and Katie Vadasdi, we had our first annual ONSF 5K Run/Walk, an amazing day for runners and families to maintain a healthy lifestyle. We partnered with the NFL CT Alumni Association for a hugely successful concussion recognition and prevention seminar. The ONSF blog on our website highlights community support and also highlights the tremendous success of the last year.

Our research has been particularly exciting. The process of having a study published in a peer reviewed journal is often arduous and very time consuming. Once we decide what area to study, we present the proposal to the IRB (Institutional Review Board) at Greenwich Hospital for review. The project then starts, data is collected over the next year, and we revisit the patients one to two years after their surgery. After two to three years of study, we make the submission and await publication. I am proud to say that currently three articles are in the final stages of review.

The New Year will bring further excitement and loftier goals to the ONSF. We will develop a new and even more informative website. Interns are submitting their 2014 applications and we anticipate a very productive summer. I expect that our new research will be accepted and presented on a national level. The care of patients, improvement of surgical skills, and advancements in education will remain at the center of our efforts.

I hope that 2014 starts off well for all of you and I look forward to welcoming you to the 6th Annual Golf Outing scheduled for Monday, June 9th, 2014 at the Stanwich Club.

Thank you for your enthusiastic support!

Paul M. Sethi, MD

ONS Foundation and NFL Alumni CT Chapter Team-Up...

On November 19th, 2013, the ONS Foundation and the NFL Alumni Connecticut Chapter partnered in presenting a comprehensive program to raise awareness about the signs and symptoms of concussion in youth athletes. The program reassured parents and coaches that local programs are mindful of the safety issues and are developing ways to protect our youth.

The seminar, *Youth Sports Concussion Awareness and Prevention*, was held in the Cole Auditorium at Greenwich Library. Over 110 parents, youth coaches and athletic trainers in all sports attended and had the opportunity to interact with the panel of experts. The medical panel included Paul Sethi, M.D. – Orthopaedic Surgeon and President of the ONS Foundation; Mark Camel, M.D. – Neurosurgeon and Patricia McDonough-Ryan, Ph.D. – Pediatric Neuropsychologist.

Other presenters were Steve Thurlow, President, NFL Alumni CT Chapter and retired Running Back for the Redskins and Giants and Tim Hasselbeck, ESPN Analyst, retired NFL Quarterback and Greenwich Youth Football Coach. Jim Loughran, Commissioner of the Greenwich Youth Football League, also contributed to the discussion making reference to the NFL’s Heads-Up Program.
On Sunday, September 22nd, the sun was bright as the ONS Foundation for Clinical Research and Education held its first annual PLAY Strong, PLAY Safe 5K Run/Walk to benefit the Foundation’s orthopedic and neurosurgery education initiatives that concentrate on the treatment and prevention of musculoskeletal disorders and injuries.

The race, a USATF certified 5K course, started in front of the Old Greenwich Riverside Community Center (OGRCC) and traveled through scenic residential areas of Old Greenwich. “The course was designed for all athletic abilities whether you are a serious runner or a power walker,” said Dr. Vadasdi, event co-chair and an accomplished triathlete.

Elite runners, corporate challenge teams, joggers, student athletes, weekend warriors, power walkers and families participated.

In addition to the race, the event featured a Health Expo where participants and their families learned about nutrition, training, injury prevention and running equipment. “Exhibitors included ONS Physical Therapy, EHS PT, Greenwich Running Company and Green and Tonic,” said event co-chair Joseph “Casey” McKee. Major sponsors included Greenwich Hospital, Fairway Markets, City JEEP, Fairfield County Look, Jr. United Way and other generous ONS Foundation supporters.
Joseph “Casey” McKee is a long time resident of Greenwich, a co-founder of Ultimate Boat Clubs, Inc. and an active community leader. After graduating from Denver University, Casey spent most of his business career in the healthcare and consumer products industries launching new products and repositioning established brands. His primary focus was on global pharmaceutical (prescription and non-prescription drug), medical device and medical education companies. He attributes his career in the healthcare industry to the experience gained while working at an early age at Greenwich Hospital as a Surgical Technician. Casey is a member of the North Greenwich Community and Police Partnership (CAPP) Association. He was President of the Greenwich Girls Soccer League and coached boys ice hockey and lacrosse teams. He is also a former VP and board member with the Round Hill Association and former board member of the Field Club of Greenwich, Round Hill Club, and Greenwich Skating Club. Personal interests include squash, cycling, tennis, boating, golf, and his grandchildren. Casey and his wife, Barb, have three adult children.

Another ONS Foundation strategic plan element is the internship program that includes local students who have completed undergraduate studies and are in the process of applying to or have already been accepted into medical school. Since the completion of the Arthroscopy, Surgical Skills and Biomechanical Research Lab, we have been welcoming interns into the research program and have provided experiences that have been worthwhile for them and invaluable to our research studies. Current intern, Vishal Rana said, “Working with the ONS Foundation has been an incredible experience like none other…has undeniably peaked my interest in orthopedics and fueled my desire for a career in medicine.”

In this issue’s letter, Dr. Paul Sethi describes the arduous process of selecting a research study, securing its approval from the IRV at Greenwich Hospital, gathering the information, studying surgical techniques and evaluating patient treatment. After several years of study, the ultimate goal is having the study published in peer reviewed journals. Our research interns play an important role in this process. Samantha Stuek noted that her experience was educational. She learned the method for writing “…a project proposal for an IRB approved study and to finalize a manuscript for submission… Working as a research assistant to Dr. Sethi was a career influencing experience.”

Intern, Caileigh Dougherty, described her first research project working closely with Dr. Sethi and Dr. Demetris Delos to create VuMedi videos used as educational surgical skills tools. She describes her time interning at ONSF as “…an incredibly rewarding experience and unique exposure to the medical field before I enter medical school.” Vishal developed VuMedi videos for Dr. Mark Vitale that demonstrated the treatment of Dupuytren’s Contracture utilizing non-surgical techniques.

In addition to assisting on research projects, interns observe first-hand the relationships between doctors and patients. Interaction and communication are key to discerning physical problems and designing appropriate treatments. Samantha wrote that the “…the collaborative environment that the ONS Foundation creates…ultimately has a positive impact on the patient.”
The Nature of Cartilage Injuries

Within joints motion between two or more bones takes place. Cartilage is the lining of the ends of bones at the site of joints and allows for smooth, pain-free joint motion. When the cartilage on both sides of a joint is damaged, the surface changes from smooth to irregular and motion can be painful. Arthritis is the diffuse loss of cartilage within a joint. In the worst case scenario, arthritis causes unremitting pain, stiffness and dysfunction, ultimately leading to joint replacement. In some cases, however, a specific region of the joint may have sustained cartilage injury but the rest of the joint is still relatively well-preserved. This can occur in conjunction with certain traumatic injuries such as anterior cruciate ligament (ACL) rupture.

In these cases, it is important to identify the discrete cartilage injury early so that action may be taken to prevent it from worsening and devolving into frank arthritis. An orthopaedist can sometimes identify these cartilage injuries with X-ray but typically an MRI (magnetic resonance imaging) scan is needed.

Usually, initial treatment involves nonoperative measures including RICE (rest, ice, compression, elevation), anti-inflammatories (to decrease inflammation and pain), physical therapy and possibly braces and injections.

If nonoperative methods do not improve a patient’s symptoms, they may be a candidate for surgery.

Surgery for the Patient with Discrete Cartilage Injuries

There are a number of surgical treatments available to patients with discrete cartilage injuries. The type of surgery chosen will depend on factors related to the patient (i.e. age, activity level, expectations), the cartilage injury itself (i.e. size of injury, chronicity, bone involvement) and the surgeon (i.e. preference, experience, technical ability).

Cartilage Transplantation Surgery

One of the more recent innovations in cartilage surgery is cartilage transplantation, known as osteochondral transplantation because it involves the transplantation of cartilage and the bone attached to it. This surgical technique attempts to resurface or replace damaged cartilage and bone with healthy cartilage and bone taken from another part of the body (usually the knee). The diseased cartilage site is prepared and a cylinder (dowel) of healthy cartilage and bone (graft) is taken from another part of the knee to replace the diseased/injured area. This procedure can be done either arthroscopically or with a small incision, depending on the size of the cartilage injury. Another advantage of this technique is that it is done in a single stage.

For cartilage injuries that are relatively large, allograft cartilage and bone can be used. This graft is obtained from cadavers - it is tested multiple times to ensure it is safe prior to implantation. The upside of using allograft tissue is that it does not require harvesting healthy tissue from an individual and that it can provide for size-matched specimens. This procedure is virtually always done with an open incision.

Rehabilitation after Cartilage Transplantation

Patients that undergo cartilage (osteochondral) transplantation surgery are placed on crutches after the procedure and gradually allowed to increase the amount of weight they can place on the leg over the course of 2-3 months. Motion is begun immediately after the surgery, to allow for nourishment of the cartilage and to maintain mobility in the knee. It usually takes at least 6 months or more for the graft to mature and integrate enough to allow return to competitive sport.

Outcomes

Studies have shown that in the right patient, this procedure can be very successful, with the majority of patients able to return to previous levels of competition within 1 year of surgery.

Conclusions

Cartilage transplantation surgery is an exciting surgical treatment that may be used to treat focal, isolated cartilage injuries in patients without frank arthritis (cartilage wear on both sides of the joint). The ideal candidates are typically young to middle-aged adults who are active and wish to return to high levels of play and activity. This procedure has been shown to have excellent outcomes in patients who are appropriately indicated for the procedure.
Golf Outing, Stanwich Club, June 10th, 2013

The ONS Foundation for Clinical Research and Education, in conjunction with Greenwich Hospital, held its 5th Annual Golf Outing on Monday, June 10th at The Stanwich Club. The event was co-chaired by Michael Clain, MD, Rich Granoff and Vicki Leeds Tananbaum. Despite some rain, 27 foursomes played the beautiful championship course after enjoying a wonderful buffet lunch.

Following the tournament, golfers, non-golfing friends and other supporters attended a cocktail reception, auction and dinner. Silent and live auctions were co-chaired by Rebecca Karson, Lauren Mazzullo and Amy Sethi. Charity auctioneer, Philae Knight of Phillips auction house, encouraged lively bidding on Live Auction lots. We recognize the generosity of Golf Outing sponsors, participants and donors whose support was responsible for the overwhelming success of this event.

Proceeds from the 2013 event will benefit ONS Foundation research, education, and surgical fellowship programs that offer students and practicing physicians the most up-to-date information and techniques for managing musculoskeletal disorders and injuries.

To strengthen the alliance already shared with Greenwich Hospital, the ONS Foundation, in partnership with the Yale University fellowship program, will grant training to an orthopaedic surgeon who seeks expertise in shoulder and elbow surgery.

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Mini-Med Program continued from page 1

made it possible for the students to look inside the distal radius models, observe the injury and tissues and make the necessary repairs. Student Mathew Wysocki said, “I especially liked the Lab where we completed an arthroscopic shoulder surgery...”

The week included ultra-sound lectures by Dr. Cohen and Dr. Kessel, an introduction to physical therapy with Laura Liebesman and some one on one time with ONSF research interns. Antony Manokhin considered his time at ONSF “... an outstanding opportunity ...an experience I will certainly never forget.” The participating physicians were impressed by the level of curiosity, interest and scientific knowledge of these students.

Mini-Med School at the ONS Foundation Lab created an amazing mentor/student event that had the capability of changing a young person’s life. As certificates of participation were presented by Susan Plant, Foundation Director, and Dr. Gloria Cohen, Mathew said, “I would like to thank you for this incredible opportunity as it profoundly increased my already strong desire to be a doctor.”
5th Annual Medical Education Conference
Receives Top Marks!

The ONS Foundation’s 5th Annual Medical Education Conference – Emerging Technologies in Musculoskeletal Care – held on Saturday, November 9, 2013, was a huge success! Approximately 115 participants consisting of physicians, nurses, physical therapists, physician assistants and others filled Noble Auditorium at Greenwich Hospital.

The conference was co-chaired by Dr. Gloria Cohen and Dr. Mark Vitale. Informative, compelling presentations were delivered by twelve physicians -- ten from ONS, one from Greenwich Anesthesiology Association and another from Greenwich Hospital Department of Radiology.

The course focused on non-operative and operative treatment options available to the patient with musculoskeletal injury and methods for tailoring treatment to each patient’s general health and functional requirements. Talks illustrated how understanding the anatomy and procedures available can assist the medical provider in helping the patient regain pain free function.

We were honored to have Fran Weissler, Broadway Producer, as our Keynote Speaker. Fran held the audience captive sharing stories of her early difficulties in the field to her ultimate road to success.

The day began with a continental breakfast and ended with a working lunch. This accredited course for doctors, nurses, physician assistants and physical therapists would not have been possible without the generous support of an anonymous donor. Plans are already underway for our 6th Annual Medical Education Conference scheduled for November 8, 2014.

Save the Dates. . .

6th Annual Golf Outing at the Stanwich Club, Monday, June 9th, 2014
2nd Annual 5K RUN/WALK EXPO at the OGRCC, Sunday, September 21st, 2014
6th Annual Medical Education Conference, Greenwich Hospital, November 8th, 2014
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.

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Thank you for your generous support!