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OPEDIK

Helping Kids Defy the Odds

First Orthopaedic Nurse Practitioner in a Pediatric Hospital in Quebec

SHC-Canada strives to continually improve access to quality health care. Last January, the Hospital followed the lead of its American counterparts by adding a Primary Health Care Nurse Practitioner (PHCNP) to its medical team. This is a great accomplishment for the Canadian hospital, as this is the first and only Nurse Practitioner practicing in a pediatric orthopaedic setting in the province of Quebec.

"Adding a nurse practitioner to the team is an important step in facilitating timely access to care for children with minor orthopaedic issues," states Sharon Brissette, Director of Nursing and Patient Care Services. She goes on to explain: "Kelly Thorstad, PHCNP, began working with patients and families concerned about in-toeing and flat feet which are common variations in typical child development."

Prior to joining SHC-Canada, Ms. Thorstad had obtained a Master's in Nursing. While working as a clinical nurse specialist at SHC-Canada, she completed specialized medical training in Primary Health Care. The professional duties of a PHCNP include overall care of the child throughout their development, family assessments, evaluation of illnesses (such as ear infections) and evaluation of normal pediatric growth and development and deviations. The nurse practitioner's scope of practice includes ordering certain diagnostic tests and making treatment decisions, which includes the act of prescribing specific medications.

In order to enhance her orthopaedic skill set, Ms. Thorstad further trained with Dr. François Fassier, Chief of Staff, to evaluate and treat minor orthopaedic problems. Her education is ongoing, as the orthopaedic surgeons are available for consultation when necessary. "I feel very supported and appreciated in my role as a nurse practitioner," stated Ms. Thorstad, "it is wonderful



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[continued from page 1] to be able to help patients and contribute to the excellent care that the Shriners Hospitals provide."

This project was launched after consultation with different professional organizations that govern health care delivery in Quebec (the Fédération des médecins spécialistes du Québec, the Collège des médecins du Québec, and the Ordre des infirmières et infirmiers du Québec), as it is unique in several ways.

The Nurse Practitioner role provides additional benefits in the context of the current shortage of Pediatric Orthopaedic surgeons across the health care system. "Including a nurse practitioner to assist with non-urgent orthopaedic visits allows the Orthopaedic surgeons to focus on complex and urgent cases where their expertise is required. In turn, this prevents a long wait for new patients with non-urgent diagnoses to be assessed," explains Dr. Fassier. He goes on to say: "Thus far, Ms. Thorstad has been able to see an average of 60 patients per month, working on a part-time basis."

This new initiative has proven to be a success not only for patient care but also for enhancement of the health care team. There has been great support of the PHCNP role from the Board, Administration, all of the orthopaedic physician partners, and the allied health professional team.

A Word from the Administrator

Dear readers.

Patient safety is a top priority at SHC-Canada. The recent world wide pandemic scare with the swine flu brought the need for careful planning of prevention measures to the forefront. At SHC-Canada, such an emergency plan is in place, ready to be activated whenever required. During the recent scare, we diligently enforced both Shrine system measures and Provincial measures in order to protect the health and well being of our patients and their families, our staff and volunteers.

During the swine flu scare, health agencies around the world and the media told us almost on a daily basis that hand washing is the best preventative measure. Make sure that you and your family become champions in hand washing and whenever you come to the hospital, ask our staff if they washed their hands before caring for your child.

In this issue of the Orthopedik, we followup on the article that discussed cerebral palsy treatments in the spring issue with a touching testimonial from patient Alyssa and a report outlining current research projects aimed at further improving treatments for children with cerebral palsy. We introduce you to nurse practitioner Kelly Thorstad and give you some background on her role as a new member of our health care team. As summer is at our doors, we also have put together some safety and prevention tips for children and families at the Hospital, at home and in the great outdoors..

Have a safe and healthy summer.

Céline Doray

The Orthopedik is a quarterly publication of the Shriners Hospitals for Children – Canada 1529 Cedar Avenue, Montreal, QC, Canada, H3G 1A6

We want to hear from you! If you would like to ask us a question or suggest a topic for an article in an upcoming edition of the Orthopedik, please contact us at **gfouellet@shrinenet.org** or **514-282-6990**.

The Orthopedik can also be downloaded from www.shrinershospitals.org/Hospitals/Canada.

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Conquering Cerebral Palsy

[Alyssa MacLeod] My name is Alyssa MacLeod, I'm from Cape Breton (Nova Scotia). I have been a patient at the Shriners Hospital in Montreal since I was diagnosed with cerebral palsy at age two. Following the article published in the spring issue of the newsletter, I wanted to add my voice to all the other patients and families to say "Thank You" to the team who still cares for me.

Through my sixteen years of being a patient, I have had many surgeries. I was one of the youngest at the Shriners Hospital in Canada and I believe one of Dr. Jean-Pierre Farmer's first patients to have a dorsal rhizotomy (that's where they helped my legs by fixing my spine). This required a six-week hospital stay and a long period of rehabilitation. Joanne Ruck and her team in physiotherapy gave me a great start at learning to walk again after the surgery. I also had several heel cord surgeries which allowed me to walk better, reducing the amount of times I fell and boosting my confidence. I have also had numerous Botox treatments and castings which helped stretch my muscles before surgery.

There are a lot of people to whom I have grown very close over the years.



All the staff at the Shriners is excellent. Drs. Marie-Andrée Cantin and Jean-Pierre Farmer have been my physicians since the beginning. Dr. Cantin has always been honest with me regarding the procedures she performed. The outcome of all of my surgeries has been fantastic. Nurses and cast technicians Pierre Ouellet and Hélène Gauthier always did a great job of casting me just like Dr. Cantin wanted, and even though I was scared of the saw they always made me laugh. Nurse Christina Oesterreich, with

a little help from Child Life Specialist Angie Gugliotti always took the "bad" out of getting needles in my legs. Before my first Botox treatment I remember how Angie showed me a doll and explained what Dr. Cantin was going to be doing, and eased my fears. In the playroom Angie always made my stays at the hospital fun, and took my mind off of the pain with movies, games and arts and crafts. There were some days I forgot I was in a hospital. As you can see, a large team is necessary to guide and diminish the fears of patients.

Audra Smith and I have a very special connection. Audra is the transport coordinator in Social Services who makes sure, with our local Shriners (Philae Shrine in Nova Scotia) that I get to the hospital when I need to. I look forward to seeing her each time we go to the Shriners. She greets me with open arms. She never ceases to bring a smile to my face or make me laugh; even when we say our tearful goodbyes I have and will always have a very special bond with her and the Shriners hospital.

Some people can't understand why I would look forward to spending time in a hospital, but I don't see it as a hospital. It is my home away from home.



An Ounce of Prevention is Worth a Pound of Cure

Dos and Don'ts of Injury Prevention in Everyday Life

Fall Prevention

For families, SHC is a safe place. It is where their children go to get better. As part of our focus on safety, staff has put in place safety guidelines for young patients and their families to prevent falls both during their hospital stay and when they return home. Below are some of the tips that are included in the hospital's Fall prevention program, which were be posted in patient care areas in June 2009.

[Kathryn Fournier & Kelly Thorstad]

At the Hospital

- Always use the seat belt while sitting in a wheelchair
- Have the brakes on wheelchairs and stretchers when not in motion
- Patients and families are encouraged to ask for assistance when needed
- Pay attention to the environment (i.e. wet floor signs, special areas for bike riding)
- Ensure the call bell is located on the bedside rail for your child

And at Home

- Remove scatter rugs
- Wear non-slip footwear
- Hold the railing when going up or down stairs
- Make sure assistive equipment is not wet from rain, snow, or ice to prevent slipping on floors (i.e. tips of crutches or walker) when coming in from outdoors
- Use night lights when appropriate
- Keep rooms and hallways free of clutter, especially on the floor

Safety in Sports

No matter where they are, the prevention of injuries is a priority for all family members and its reach extends far beyond hospital walls to our homes, playgrounds and the great outdoors. SHC-Canada has come up with some helpful hints for injury prevention during the summer months.

[Corinne Mercier & Gloria Thevasagayam, Physiotherapists] Playing sports is a good way to have fun and stay active. However, sport is the principal cause of injury in this population. Here are some tips to avoid getting hurt when you play.

Stay Fit!

- Having good flexibility is important: stretch the muscles that are going to be used during the sport
- Strengthening the appropriate muscle groups will help improve performance
- Build up your endurance because a tired body is more prone to injuries
- Develop good sport techniques while playing - align your knee cap to the tip of your running shoe while jumping or crosscutting can help protect your knees from injury





Safety in Sports continued

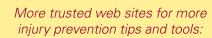
Play well!

- Warm up before you play! Warming up your body will bring precious oxygen to your muscles which will help you perform better
- Always have the appropriate equipment for the sport that you are playing
- Make sure that you are wearing all your protective gear
- For all wheeled sports, wear a helmet! Make sure your helmet fits well. It should not move when you shake your head
- Make sure that the surface that you are playing on is safe. Clean up any obstacles on the terrain
- Cool down! After playing a sport, take the time to cool down your body
- Finally, rest as hard as you train! Resting your body will give it time to recuperate from all that hard work

Know your limits!

- Respect your limits. Always listen to your body because it will tell you when you have trained too hard. If you are excessively fatigued or have persistent muscle soreness, you are overusing your body!
- Avoid heat stroke by drinking a lot of water and by wearing light-colored clothes and especially don't play sports on extremely hot days

Be safe and have fun!



- www.burnawarenessweek.com
- www.thechildren.com/trauma/en/
 - www.shrinershospitals.org

Burn Prevention

Burn prevention is a key endeavor of Shriners Hospitals for Children, which is why the health care system began its Burn Awareness campaigns more than 20 years ago.

[Dr.Tina Palmieri, Assistant Chief of Burn Surgery SHC-Northern California]

2009 Burn Awareness Campaign

Reckless use and improper storage of gasoline leads to thousands of young children being burned every year. These dangerous behaviors are addressed in Shriners Hospitals 2009 Burn Awareness Week campaign. Shriners Hospitals specializing in burns have treated more than 800 children since 2002 for acute burns due to ignition of highly flammable materials such as gasoline. Children ages 13 and older are in the highest at-risk group for these types of burns.

Gasoline use prevention tips:

- Remember that gasoline should only be used to fill the gasoline tank of a car, motorcycle, lawn mower, etc. Gasoline's only use is to fuel an engine!
- Keep in mind that a spark, flame or other source of heat can ignite gasoline vapors, even from many feet away
- Don't use gasoline to light a barbecue grill or use it anywhere near a barbecue grill

- **Don't** use gasoline to start or accelerate any kind of fire
- Don't use gasoline as a solvent or cleaner
- Don't experiment with gasoline in any way. A few minutes of experimentation could result in a lifetime of painful surgeries, disfiguring scars, or even death
- Don't sniff or huff gasoline; it can cause brain damage or death

Campfire burn prevention:

when they fall or step into a campfire. SHCs suggest creating a Circle of Safety: a four-foot protected area can prevent many of these burn injuries.

- Use a stick to draw a circle around your campfire leaving four feet in each direction.
- Talk to your children about the purpose of the circle.
- Don't allow your children in the area protected by the Circle of Safety.





Clinical Research

New Treatment Approaches for Cerebral Palsy

[Kathleen Montpetit, Occupational therapist] Shortly There are three ongoing research projects aimed at improving care for children living with cerebral palsy (CP).

Selective Dorsal Rhizotomy (SDR) - 10-year follow-up

Dr. Jean-Pierre Farmer, neurosurgeon, and the team at The Montreal Children's Hospital and SHC-Canada have been performing the selective dorsal rhizotomy surgery (the neurologist and surgeon identify and section the spastic nerve fibers that come from the spinal cord and weaken the leg muscles) followed by extensive rehabilitation at SHC-Canada since the early 1990s. Currently, a review and follow-up of children 10 years after their initial surgery is helping to identify which patients most benefit from this treatment. Preliminary results show that 5 years after the surgery, children with a moderately severe form of CP showed significant gains in mobility and self care skills. Between 5 and 10 years following surgery these children continued to improve in the ability to care for themselves and were able to maintain their gains in mobility. The study will be presented this fall at the America Academy of Cerebral Palsy and Developmental Medicine.

Study on Vibration Treatment

Whole-body vibration training is a method for muscle strengthening. It is new in pediatrics but has been used in the rehabilitation of adults for a number of years. The treatment is based on a vibration platform that moves quickly up and down (about 20 times per second).

The movement of the platform causes reflexes in the muscles and makes them work. "In a small pilot trial in children with cerebral palsy we observed improvements in standing function and bone mineral density. We are now performing a randomized controlled trial in children with cerebral palsy", explains



platform.

Dr. Frank Rauch. This is a school-based study. Children in the treatment group have 9 minutes of vibration treatment every school day over a period of six months. This study is still ongoing and feedback from the patients and their families has been positive. The final results of the study are expected to be ready for the fall of 2009.

Computer Adaptive Testing (CAT) Platform for Evaluating Physical Functioning

This multi-phased research project is coordinated by SHC-Philadelphia and includes SHC Canada, Springfield, Houston, Los Angeles, Chicago and the Boston University's Health and Disability Research Institute. Interventions offered to children with CP aim to increase their mobility and independence. It is critical to measure if and how well this goal is met. The objective of the current phase of the CAT study is to evaluate 300 children before and after surgery to see if this new outcome measurement system detects functional changes not recorded with traditional testing methods. The CAT questionnaire uses artificial intelligence to select questions tailored to test taker. It shortens or lengthens the test for precision and is adapted to the unique ability level of the child being evaluated and focuses on upper extremity, lower extremity, overall activity and global health. Earlier phases of the study included the development and testing the reliability and validity of the questionnaire. SHC is among the first health care system to use this state of the art technology for evaluating physical function.

Donors in Action

A Gift from the Heart!

[Guylaine Ouellet] Montreal AHEPA (American Hellenic Educational Progressive Association) Family has again shown its heart in raising \$30,000 for the Shriners Hospitals for Children during its 10th Annual Valentine's Fundraising Ball on February 14, 2009.

To date, AHEPA has donated \$177,000 to SHC-Canada as part of its \$250,000 pledge to support the school facilities in the new Canadian Shriners Hospital in Montreal.

"We are thrilled to be making such a significant donation this year on our 10th



anniversary," said Peter Scoufaras, cochair of the 10th Annual Valentine's Ball. "Over the years, we've had one simple goal: to try and help as many children as possible through the love and support of our sponsors and members. This year was no exception."

"We share a compassion for the children and families we serve and a mutual

passion for improving their lives with AHEPA. As part of our family-centred environment, we focus on a multitude of factors beyond their medical needs, including their ongoing education, another vision we share with AHEPA," said Gary Morrison, Chairman of the Board of Governors of SHC-Canada.



In Harmony for the Shriners Hospitals for Children - Canada

Iguylaine Ouellet On May 23, 2009, Montreal City Voices and The Greater Montreal Chorus joined voices to celebrate a capella music in a concert offered at the Oscar Peterson Concert Hall to benefit Shriners Hospitals for Children-Canada.

In an unprecedented event, they also welcomed two other Montreal a capella choirs, West-Island Chorus of the Sweet Adelines and the South Shore Saints, of the men's Barbershop Harmony Society.

The Sound Celebration evening was emceed by Natalie Cinman, the first patient to receive the hospital's pioneering treatment for osteogenesis imperfecta (brittle bone disease). She is a vibrant spokesperson for the Shriners Hospitals for Children. A short performance of a Beatles medley by members of the Hospital Board of Governors, Gary D.D. Morrison, Chairman, Dr. Robert Drummond, Vice-Chair, Laurent Arsenault, Member and headed by the Chief of Staff, Dr. François Fassier, surprised the audience, who donated \$2370 to the Hospital.

The Power of Good

[Margaret Horvath] Sharamazda Club of the Ladies Oriental Shrine of North America (LOSNA), located in Barrie, Ontario, celebrated its 36th anniversary in March 2009. The Persian translation of Sharamazda is "the power of good", which is certainly fits with the aim of this group. The Club holds many fundraisers and last year donated approximately

\$17,000 as well as numerous items for the children to use. This year's special contribution to the Hospital consists of two Vibroflex Home Edition mattresses with a total value of \$13,800 along with over \$6,000 worth of articles. This means the children can stay in their homes and familiar surroundings while receiving treatment.



Shriners Corner



A Memorable Seminar

[Guylaine Ouellet] On Friday May 22nd 2009, more than 50 of the up and coming members of the Shrine Temple Divans from across Canada and the northern United States attended SHC-Canada's annual Hospital Seminar. For the first time, the Hospital was equally honored to host a delegation from the Daughters of the Nile.

This annual event is a unique opportunity for the Shriners and members of the Ladies organizations to get first hand knowledge of the expertise, technology and research that allows the Hospital to offer world class care to young patients.

After the seminar, Shriners return to their Temples with a wealth of information

and personal knowledge and experience of the Shriners Hospital in Montreal. The seminar allows them to become better ambassadors for the Hospital in their awareness-raising and fund-raising campaigns because they have met the people who do the work.

The event was the perfect opportunity for some Temples to honor the hospital with donations:



III Sir Raymond Causton from Rameses Shriners (Toronto, Ontario) and Noble Bryan Lawson presenting a \$100,000 donation to the Hospital Chairman, Gary D.D. Morrison and the Hospital Administrator, Céline Doray.



A delegation from Mazol Shriners (St-John's, Newfoundland and Labrador) added a \$25,000 to the hospital coffers.



Nobles from left to right in front row: Roger Tinkham, Gary D.D. Morrison, Chairman Hospital Board of Governors and Lester Bowering, Board of Governors. Back row: Doug Beattie, George Andrews, Sidney Dyke, Cyril Bessey, Charlie Noel and Robert Wellon.

Shriners Hospitals for Children - Canada www.shrinershospitals.org 1-800-361-7256

