Cheznous

MCH EMPLOYEE NEWSLETTER

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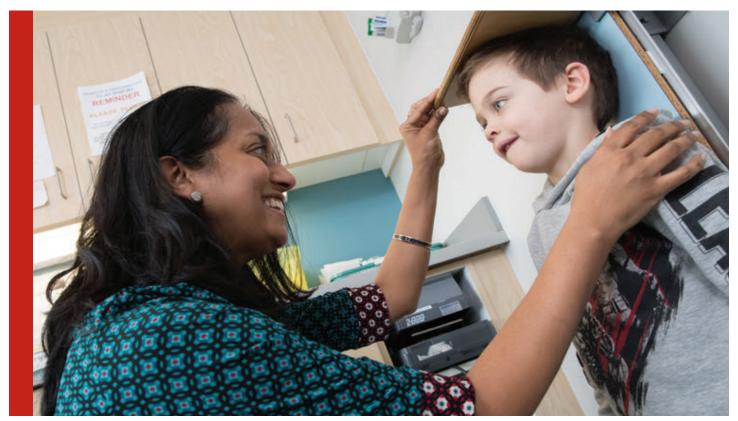


Living without hormones

Four-year-old Léo's rare disease means he can't produce

hormones on his own

By Stephanie Tsirgiotis



Léo is currently being prescribed a standard dose of growth hormones. Dr. Preetha Krishnamoorthy measures his height every three months to see if any adjustments need to be made to his prescription.

Every night, before Mélissa Dupras and her husband, Hans Doyon, go to sleep, they double-check to make sure they gave their son Léo all his medications.

"Did you give Léo his injection today?" asks Mélissa.
"Yup," says Hans. "How about his Pediapred and Synthroid?"
"Yes."

This late-night ritual has now become part of their daily routine, but it wasn't always the case. Their four-year-old son Léo was born with a rare congenital disease, called panhypopituitarism. The condition is defined by a deficient production of hormones from the pituitary gland.

PRODUCING HORMONES: A FINELY-TUNED PROCESS

The pituitary gland is the size of a pea. It sits behind the bridge of the nose and is attached to the base of the brain. It's an important part of the body because it produces many hormones and also stimulates other glands to produce hormones of their own. There are many different variations of panhypopituitarism, but in Léo's case, he suffers from the "classic triad". The front part of the gland is small in size and the back section is not in the right place. The stalk that attaches the pituitary gland to the brain is also missing.

"Because of this anomaly, Léo's body doesn't produce cortisol, as well as growth hormones and thyroid hormones," explains

Dr. Preetha Krishnamoorthy, one of the pediatric endocrinologists who follows Léo at the Montreal Children's Hospital. "We therefore have to give his body what it's missing in order to maintain good health." Every day, Léo is injected with a synthetic growth hormone. "To date he's probably had over 1,400 injections," says his mother, Mélissa.

GROWING BIG AND TALL

The growth hormone not only helps him grow, but also helps regulate his glucose levels. When he was born, his sugar levels were at 0.2. "Anything below three is considered low," says Dr. Krishnamoorthy. "It's important to investigate low blood sugar in newborns, also known as hypoglycemia, because it's often linked to something more serious." The brain needs sugar and since it's an energy-demanding organ, many of its functions, like memory and learning, are closely linked to glucose levels. "This is why recurrent hypoglycemic episodes can affect neurological development," says Dr. Krishnamoorthy.

Léo is currently being prescribed a standard dose of growth hormones, but he's re-evaluated every three months by the Children's Endocrinology department. "We look at his weight and height and see if any adjustments to his prescription need



Léo and his father, Hans, read a book while waiting to see his doctor during continued >> a recent appointment.



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On the cover: Léo Doyon with his father, Hans, and mother, Mélissa.

Cover photo: Owen Egan

Living without hormones... (cont'd)



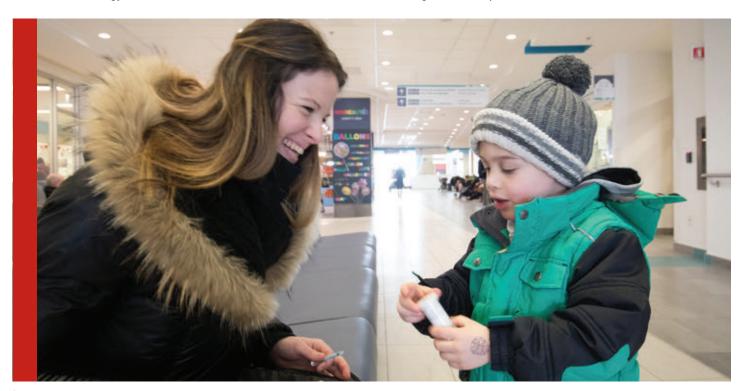
Léo Doyon

to be made," says Dr. Krishnamoorthy. "Synthetic growth hormones act like normal growth hormones. This means that Léo could very well reach his full growth potential." Even after reaching his final adult height, Léo may continue to take synthetic growth hormones because it helps stabilize the metabolism and energy levels.

The production of cortisol is also essential because it requlates the body's metabolism, blood pressure and immune response. It also helps the body respond to stress. When a child gets sick or seriously injured, the body automatically produces extra cortisol, but that's not the case for Léo. "When Léo gets sick we have to double his cortisol medication so that his body can fight off the infection or virus," says Mélissa. "He was once hospitalized for four days because he caught a gastro and his body wasn't strong enough to fight it off. Now as a preventative measure, we take him out of daycare every time a virus is going around."

A NEW NORMAL

Having lived with this condition as long as he can remember, Léo is able to name all his medications, knows that it's important to check his sugar levels regularly and has no problem saying the word 'panhypopituitarism.' "Even I still have a hard time saying it," laughs his mom. Through Facebook, Mélissa has also managed to find other mothers whose children suffer from the same condition. "Coincidentally, they all happen to be boys and under five years old," says Mélissa. "Even though we've never met in person, we communicate regularly and we've developed a strong relationship. It's nice to know we're not alone."



Léo is able to name all his medications and knows that it's important to check his sugar levels regularly.

A day in the life of ...two medical technologists!



Often referred to as blood technicians, Chez nous learns what it's like to be a medical technologist on the wards and in the Test Centre By Stephanie Tsirgiotis



(l. to r.) Dimitra Sklavenitis and Nadine Boudreau

Dimitra Sklavenitis and Nadine Boudreau make a great team. They've only been working together for less than a year, but it feels like decades. They make each other laugh. They make their patients laugh. Sometimes they even coordinate their outfits. "Today we decided to go with a superhero theme," laughs Dimitra. "The patients love it, and so do their parents!"

Nadine and Dimitra are medical technologists, but hospital staff often refer to them as blood technicians. They spend their mornings drawing blood on the wards, and finish their days in the Test Centre on B2. There are six medical technologists who rotate on the inpatient units and four who are stationed in the Test Centre. On the wards, they are solely responsible for drawing blood, also known as procurement. In the Test Centre, while they do continue to draw blood for outpatients, they also collect urine or stool specimens, perform throat and nasal swabs, and carry out sweat tests.

WORKING IN PAIRS

In pediatrics, medical technologists work in pairs. "If a child is under seven years old we definitely go in together," explains Nadine. "One of us has to hold down the patient's arm and sometimes the parents even have to get involved." On an average day, they will see 18 to 24 inpatients before 10:00 a.m. "We receive the requests from the physicians the night before or continued >> sometimes the morning of," says Dimitra.

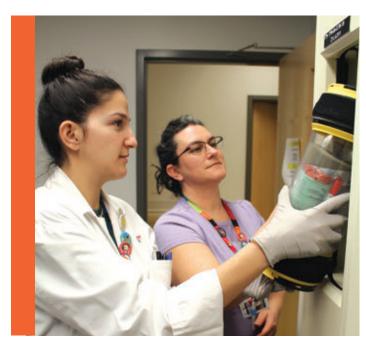
A day in the life... (cont'd)

"We start drawing blood around 6:30 a.m. because the doctors would like the results before seeing the patients."

Depending on the test, they will be asked to draw a specific amount of blood. "It's amazing how much information can be gathered from a tiny test tube of blood," says Dimitra. Most of the tests being conducted are either routine, or prescribed in order to rule out certain diseases, genetic conditions, or for research purposes.

HOW TO COLLECT BLOOD

Medical technologists can perform two types of procurement: capillary puncture or venipuncture. Capillary blood collection is simple, relatively painless and is often prescribed when a small amount of blood is needed in newborns or younger children. It's performed by poking a child's finger or heel. However, it's not ideal for every test, because it can lead to hemolysis in difficult cases. Hemolysis is defined as the rupture of red blood cells and can affect certain test values. "We put a lot of pressure on the finger or heel in order to force the blood out, so hemolysis can happen if the patient doesn't bleed well," explains Dimitra. "This can lead to inaccurate results for certain diagnostic tests."



After each ward, the blood samples are placed in the pneumatic tube and sent directly to the Central Lab.



On an average day, Dimitra and Nadine will see 18 to 24 inpatients before 10:00 a.m.

A venipuncture is when blood is drawn directly from the vein. Nadine says it's not easy finding a vein in a child who is stressed, dehydrated or tired. "It's like the veins hide in these situations," she says. "Luckily, we're good at what we do and we usually find the vein in the first shot, but we've had some tough cases where we've been with a patient for over an hour. The longer this process drags on, the less likely we are to succeed at it."

After each ward, the blood samples are placed in the pneumatic tube and sent directly to the Central Lab in the Research Institute. "In some cases, if a test is not available at the MUHC or in Quebec, we send the samples to other labs in or outside of Canada," says Nadine.

SWEATING IT OUT

Besides procurement, medical technologists also perform sweat tests on Thursdays to rule out cystic fibrosis. A small amount of gel made up of an odorless chemical, called pilocarpine, is applied to the child's arm. Once the gel is applied, two electrodes are strapped to the arm and held down for five to seven minutes. "Pilocarpine in conjunction with the electrical stimulation helps the sweat glands to produce sweat," explains Nadine.

A plastic coil, or as Dimitra likes to call it, "a superhero watch" is then strapped to the child's arm and wrapped in plastic wrap and warm clothing. "We then tell the patient to go out and be

active for 30 minutes. The goal is to collect as much sweat as possible," says Nadine. The sweat is then tested by the medical technologists in the Test Centre. They measure the amount of chloride in the sweat by placing the collected sweat in a chloridometer. Normally, sweat contains very little of this substance, but a child with cystic fibrosis will have two to five times the normal amount of chloride in their sweat.

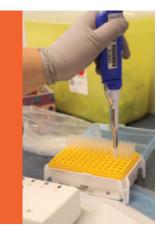
A DIFFERENT APPROACH

Nadine and Dimitra love their jobs, especially when they get a high-five from a patient after a venipuncture. "We have a different approach in pediatrics. We take our time with each patient because we want to make an unpleasant situation somewhat pleasant," says Dimitra. "Our contact with patients is limited, but it's invasive for the child. That's why we wear superhero t-shirts and try to make patients laugh. We want to seem less aggressive, less scary."

"Singing to patients helps too," laughs Nadine. "And we sing a lot!"







▶ Besides blood procurement, medical technologists also perform sweat tests to rule out cystic fibrosis.

Goodbye Lotus Notes... Hello Microsoft Outlook!



Between early March and mid-April, the entire McGill University Health Centre will begin using Microsoft Outlook as its new email software.

Each department will be notified at least one month before the start of their transition. All emails (current and archives) received up to the day of migration will remain accessible in Lotus Notes. No email will be lost.

The current email address format (name.surname@muhc. mcgill.ca) will not change.

The decision to transition to Microsoft Outlook was made by the Ministère de la Santé et des Services Sociaux.



udy Edes, PFCC Star of the Month

By Maureen McCarthy



Six-year-old Freddie has cystic fibrosis, and during his recent stay at the Children's, Child Life Specialist Judy Edes helped him build a two-foot-high, multifunctional "Super Hero Hospital" out of cardboard, complete with figurines and a special section for pets. Freddie's mom Kim, who nominated Judy for this month's PFCC Award, says it was just what he needed. "Judy knew that Freddie had been cooped up in his room and that getting out and having some fun would be good for him," says Kim. "So she brought him to the playroom where the two of them built the hospital."

Kim has known Judy for several years. "Freddie has been admitted to the Children's a couple of times for infections or complications, and what Judy does for him is always incredible," says Kim. "She's overflowing with kindness and cares so much. I see it with other families too, that she always has a smile, and always tries to do whatever she can to make their stay feel like home."

For Judy, the idea of patient and family-centered care is an essential part of her work. "I don't see being able to work with a child without connecting with their parents as well," she says. "I think it's a big part of what we do, and not just between staff and families, but amongst the staff too in the way we communicate and collaborate with each other."

Early on, Judy knew she wanted to work with children, and after studying therapeutic recreation as an undergrad, followed by a Masters in Educational Psychology, she started working part-time at the Children's Hospital of Eastern Ontario (CHEO) as a Child Life specialist. "I actually interned at CHEO, so I knew I'd found my calling even before graduating," she says. While at CHEO, she also worked part-time at the Children's, in the hospital's Emergency room. "The Children's eventually offered me a full-time position, so I didn't hesitate a minute. My work is a big part of who I am and I feel privileged to work with such incredible families and colleagues here."



Judy has always been guided by two key factors in her work. "I always try to follow the child's lead, and I look to the parents as experts about their child," she says. "It's important to first make a connection with the parents to introduce our Child Life services, and learn about their experience, what they're thinking and feeling, and how they feel their child is coping." She also finds out what their child's strengths and interests are. "It's really about establishing trust so we can better accompany both the child and the parents in their time at the hospital. If they're both well supported, then we know we'll make some sort of difference in their healthcare experience, and hopefully it's a bit more positive."

THE MANY BENEFITS OF PLAY

Judy also points out that play is one way that children experience the world. Play promotes learning, growth and development, relaxation, fun and socialization. In the hospital setting, play fosters opportunities for self-expression, control, exploration and healing. "Play allows us to connect easily with kids, and when parents see their child responding

through play, they seem to find hope and comfort that their child might be doing a little bit better."

For the past few years, Judy has worked on the medical inpatient floor at the Children's. "Our focus is always on how the child is coping and adapting to their healthcare experience," she says. "While play, education and support are key elements in our work, our programs and collaboration with other services allow us to support the child globally." She further explains that when children like Freddie are at the hospital for a couple of weeks, they're missing out on school, so the Child Life specialists are in touch with the hospital teachers, and whenever possible, try to bring them to activities like pet therapy, or special events in the hospital to try and normalize their stay.

Kim feels that all of this goes a long way to making a child feel better. "With Judy's support, Freddie's time here seemed to go by much faster," she says. "On his last day, he was having his PICC line taken out and Judy asked him if he wanted her to be there. He said yes right away. I think from his perspective, she's a super hero!"





Our PFCC Stars are featured on the Children's Facebook page and Instagram. Here's what people had to say about January's PFCC Star, Harini Sinnakili.

k_e_nza

Thank you and congratulations Harini for your exceptional work... all patients, especially young children need more nurses like you... you're a superstar!

Sharon Taylor

Congratulations Harini – the NICU is so proud to have you on our team.

Alexandra

We loved Harini days. Harini, thank you for your gentleness, your kindness and your professionalism. We appreciated your care and the detailed explanations you gave us so much!!

Amani Labassi

MCH Procedure Room:

Improved care and access for patients



By Maureen McCarthy



One of the many benefits of the Procedure Room is that parents can be by their child's side when sedation begins. Dr. Pablo Ingelmo (seated) and Dr. Victor Hugo Gonzalez (standing) from the hospital's Chronic Pain Service are seen here with six-year-old Emmanuelle and her parents Geneviève and Joel.

The Procedure Room, located on B3 near the OR, was opened in October 2016 to perform procedures that require sedation but do not require the sterile environment of an operating room. According to Nadia Eldaoud, Manager of Ambulatory Services and Surgical Day Centre, the service was set up to provide pain management and reduce anxiety for children needing procedures, and to improve accessibility for a range of patients. "The children benefit from quicker service, and increased comfort and safety by having the proper team within a safe environment and with adequate sedation," says Nadia.

IMPROVED ACCESS

The number of procedures done annually in the procedure room is currently approaching 350, and the team estimates at least 80 per cent of these patients would have previously gone to the OR. Both inpatients and outpatients have benefited from the Procedure Room.

Dr. Jessica Stewart, the ED physician lead for the sedation service, explains that the Procedure Room has meant faster, more accessible care for patients. "Recently, for example, we were able to provide sedation for a young child needing an abscess



(l. to r.) Nathalie Comtois, Nurse Clinician, Procedure Room, Lara Marzolian, Respiratory Therapist, Dr. Jessica Stewart, Emergency, Dr. Jade Seguin, Emergency, Dr. Ayesha Khan, Ophthalmology, Francisco Guerra, PCA, and Dr. Majd Mustafa, Ophthalmology resident.

drained. Another patient, only two years old, required a biopsy very close to his eye. The sedation we provided allowed him to sleep through the process." She adds that before the Procedure Room was opened, these children would have likely needed to be seen in the OR. The benefits to seeing these children in the Procedure Room also extend to the OR itself since it helps reduce the number of children waiting for an OR procedure.



Nathalie Comtois, Nurse Clinician, and Dr. Victor Hugo Gonzalez.

BENEFITS TO THE FAMILY

Nathalie explains that the service is very flexible. "I'm here five days a week, so when I find out that we have an extra ED physician lined up or extra time from Anesthesia, I can contact families and try to book them right away." She also says that the procedures can be a positive experience for families. "The parents can come into the room and be with their child while we're sedating them," she says, "so they often have less anxiety because they're here for much of the procedure." An added benefit is that postprocedure recovery is usually shorter and easier than when a child undergoes general anesthesia so families spend less time at the hospital.

EXPANDING SERVICES TO MORE SPECIALTIES

The Procedure Room is open to every service at the hospital, for patients who need sedation for short, relatively uncomplicated procedures. Nadia says that plans to expand services will be enhanced by the introduction of nitrous oxide sedation, which will increase the number and type of procedures they can perform. "For example, there can be challenges in inserting an IV into a child with autism, but nitrous oxide sedation will make this process easier for the patient and for the team."

Nathalie emphasizes that teamwork is essential to the process. "From the sedation team to the physician performing the procedure, to the PACU nurses, everyone has a role in making the procedure go as smoothly as possible for the patient," she says. "We work very closely together and depend on each other to make it happen. It's a true team effort."

For more information: nathalieeva.comtois@muhc.mcgill.ca or ext. 25678.

Lots of love in the NICU



We celebrated Valentine's Day this year with NICU patients Victor (top), Helena (bottom right) and twins Edouard and Gustave. Victor, sporting the "Little Guy. Big Heart." top, was actually supposed to be born on February 14!





