Heart History: The Invention of the Stethoscope: Rene Laennec and his “Le Cylindre”

No two symbols have come to represent the medical profession more than the caduceus and the stethoscope. Apollo, the Greek god of medicine and music, gave the caduceus to Mercury in exchange for the lyre which Mercury had invented. Laennec, perhaps as skilled in music as he was in medicine, gave us the stethoscope and, in exchange, achieved “immortal” fame.

Before Rene Laennec, medical diagnoses were made on the basis of information obtained from a patient’s history, observation and limited examination, including palpation, percussion of the body and “immediate” auscultation, or the direct application of the ear to the patient’s chest. Laennec, chief of the Hôpital Necker in Paris which specialized in the care of patients with chest afflictions, found this last method of diagnosis inadequate in certain situations and “as uncomfortable for the doctor as it was for the patient” and sought a better means of examination. And so he did:

“I was consulted, in 1816, for a young person who presented with generalized symptoms of heart disease and in whom palpation and percussion gave few results because of plumpness. The age and sex of the patient prevented me from conducting the type of examination I have just described (immediate auscultation); I recalled a well-known acoustic phenomenon: if the ear is placed at one end of a log, the tap of a pin can be heard very distinctly at the other end. I imagined that this property of bodies could be applied to the case at hand. I took a paper notebook, made it into a tight roll, one end of which I applied to the region of the heart, and putting my ear on the other

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Nurses’ Notes

Cold and Flu Season Tips by Elena Cobleigh, RN

- The CDC recommends a yearly flu vaccine as the most important step in protecting against flu viruses.
- If there’s a child in the home with cyanotic heart disease (blue at birth), all family members should get the flu vaccine.
- The flu shot cannot cause you to get the flu. Any side effects are mild and last about 24-48 hours.
- Children under the age of 2 years with certain heart diseases should also receive monthly Synagis injections (Oct. to April) to minimize the effects of the RSV virus. See your pediatrician for more information.
- During cold and flu season, wash your hands often with soap and water. Handwashing is the single most effective way to prevent the spread of infection.
- Please keep your child home if sick with a cold or the flu. If you have a cardiology appointment, speak with one of the nurses to see if you should reschedule the appointment.

Why did you want to be a pediatric cardiologist?

My father suffered his first heart attack when I was in the 2nd grade. He went on to have a second heart attack and cardiac bypass surgery when I was a freshman in high school. The imprint that these events left on my life is clear in my choice of careers. It influenced not only my decision to pursue a career in medicine, but also initially sparked my interest in cardiology.

While completing my pediatric residency and fellowship in cardiology at the Children’s Hospital of New York Columbia Presbyterian Hospital, I was trained by pioneers in the field of pediatric cardiology. I was inspired by the idea of offering meaningful therapeutic interventions to children with cardiac disease. The field has evolved to change the way we view conditions that were once, at best, chronic illnesses into treatable problems. I’m fortunate to be in a position to guide my patients through treatments that will significantly improve their quality of life.

Pediatric cardiologists have a unique opportunity to care for patients in a broad range of clinical settings and from a wide range of age groups. When I establish a relationship with a family it’s often one that will span many years and clinical scenarios. I consider it a privilege to get to know a patient and his or her family on this intimate level. The opportunity to begin to form this bond even before birth is but one of the many reasons I’m interested in fetal echocardiography.

Another one of the reasons I chose to become a physician was to have the opportunity to make a community-based impact. After college graduation, I spent several months in Costa Rica where I worked in a rural public health clinic. During my time there, I developed an understanding of the dramatic contribution that a grass-roots initiative can make to the welfare of a population. This experience motivated me to obtain a Master’s Degree in Public Health at Columbia University’s Mailman School of Public Health and it continues to shape the way in which I practice medicine.

When my father was acutely ill I used to hope that he would live to see me graduate from high school. He lived not only to witness that moment, but he also shared many of my other important milestones. He ultimately saw me graduate from medical school, walked me down the aisle at my wedding and got to hold both of his grandchildren. So, finally, as a pediatric cardiologist, I hope to have the chance to help give families the priceless time with a loved one that my father’s physicians gave to my family and me.

Healthy Heart Suzanne Mone, MD

Importance of Exercise

We all know exercise is good for us. Exercise controls weight, combats health conditions and diseases, promotes better sleep, improves mood, boosts energy and is fun! All of us should strive for at least 30 minutes of physical activity each day.

Here are ways to incorporate more exercise into your daily life. It’s good for you and it sets a great example for your children of “heart healthy” living.

- Seek out the parking spot that’s furthest away and get in a few extra steps between your car and the store.
- Take a “walk break” whenever you can find time during the day. Taking short 10 minute walks a few times a day will do wonders for your metabolism!
- Use your lunch break as time for exercise. Spend half the time eating and half the time walking.
- Play with your children! This is great attention for them and a great activity for everyone.
- A way to spend time as a family is to take a walk together around the neighborhood after dinner.

Take the stairs whenever you can instead of the elevator or escalator.
- Choose a restroom that is the furthest way, if you have an option.
- Grab a friend and go for a 30 minute brisk walk on the weekends. You can catch up on everything and exercise while doing so.
- Go for a walk while talking on your cell phone, but be careful of traffic.
- If you find yourself in front of the TV, jump rope or do calisthenics during the commercial breaks.
- Exercise first thing in the morning. Get up 20-30 (Continued on page 3)
end, I was just as surprised as I was satisfied to hear the beating of the heart in a manner that was clearer and more distinct than I had heard it by the direct application of the ear.”

Although Laennec preferred to call his invention “le cylindre” and indeed the first instruments were wooden cylinders, he eventually gave into peer pressure and named it the stethoscope from the Greek “stethos”—chest and “scope”—to see. Incredible as it may seem today, the stethoscope was not universally accepted and as late as 1834, a commentary in the London Times stated:

“That it will ever come into general use...is extremely doubtful because its beneficial application requires much time and gives a good bit of trouble...There is something even ludicrous in the picture of a gray physician proudly listening through a long tube applied to the patient’s thorax.”

Minutes earlier and get in your workout first thing.

Try to choose a physical activity immediately following work. A walk, gardening or even housework is better than sitting on the couch.

If you are torn between reading at home and jogging in the park, get an audio version of the book of your choice from the library. You can listen to the book while you walk or jog.

Walk, jog, or stretch while you’re waiting for dinner to cook, the laundry to finish up, or for your child to be finished with an activity.

Turn your house chores into exercise. When vacuuming, try to use your arm, back and abdominal muscles to push the vacuum. When loading the dishwasher, maintain good posture as you are bending and straightening while keeping your abdominal muscles tight. Washing the car, weeding, and mowing the lawn are great ways to burn extra calories.

It is perfectly fine to break up your intense workouts. If you split your 30 minutes of aerobic activity each day into three 10 minute sessions, you may find this more manageable...JUST DO IT!

These smiling boys have something very special in common. Their parents met at our pediatric cardiology family events and found out they share many similar experiences. Now these boys are buddies and the families have become friends.

In addition to the monthly parent group, we hold two large family events every year. This past fall was our 2nd annual family picnic at Lewis Morris Park. Families enjoyed the petting zoo, live music, a climbing wall, a martial arts demonstration, face painting and crafts.

Our 3rd annual Valentine’s Day family event in honor of National Congenital Cardiac Defect Awareness Day is on Sunday, 2/12/12 from 1pm to 3 pm in the hospital auditorium. The whole family is invited to an afternoon of fun and sharing. Please mark your calendar because we hope to see you there!
Social Work Corner  Margaret Micchelli, LCSW

Living With Pediatric Chronic Illness: Empowering Families to Help and Heal

The dept. of pediatrics presents a panel of Goryeb experts to address the impact of any chronic illness on families.

- Christopher Lynch, PhD  Impact of chronic illness on the family
- Tara Gleason, MSN, CPNP  Practical tips for parents when dealing with school issues
- Ann Stocknoff, LCSW  Caring for the caregiver: strategies to reduce stress

When:  Sunday, March 25, 2012 from 1 pm to 3 pm
Where:  Malcolm Forbes Amphitheatre

Registration is requested. Please call (800) 247-9580.

For more information please contact (973) 971-8689.

Parent Support Group:
Get Acquainted After the Holidays!!

Congenital heart problems are the most common birth defect in the country and throughout the world. Do you know anyone else who shares your experience? This is a monthly group for mothers and fathers whose children are under age 5. It’s an opportunity to share information and support as different developmental issues arise in the course of family life. The group meets on the first Monday evening of the month at 7 pm on the second floor of Goryeb. Upcoming meeting dates are: January 9, February 6, March 5, April 2, May 7, June 4, 2012. Please drop in whenever it’s convenient for you.

Pediatric EP Now On Board

We are very pleased to announce that Dr. Leonardo Liberman, a pediatric electrophysiologist, has joined our team. First, an answer to the question: What exactly is an electrophysiologist? Within the specialty of pediatric cardiology, an electrophysiologist focuses on problems with the heart’s rhythm and electrical impulses. In other words, he’s an electrician for the heart!

Dr. Liberman graduated from the medical school at the University of Buenos Aires and completed fellowships in pediatric cardiology and pediatric electrophysiology at CHONY-Columbia University where he is an Associate Clinical Professor of Pediatrics. He also publishes and lectures extensively in the field.

Dr. Liberman now sees patients here at Goryeb every 3rd Monday of the month, so families no longer have to travel to NY for an appointment. They can receive this expert specialized care much closer to home.

Nurse About Town

Wanda Kaminski, RN, was at Hillcrest School in Morristown on May 27, 2011 to speak with the Morristown and Morris Township school nurses who cover grades K through 12. Wanda is committed to community outreach to educate others about pediatric congenital and acquired heart problems. Also, such a meeting serves to improve communication among pediatric cardiologists, schools and families.

The nurses discussed various congenital heart defects and conditions, such as syncope and postural orthostatic tachycardia. Also, Wanda was able to respond to specific student scenarios that the school nurses presented. Issues related to exercise tolerance and sports activity are especially important in a school setting. Overall, this was a wonderful opportunity to answer questions and address concerns about the daily school life of children with cardiac conditions.

Employee of the Month

Congratulations to Bhavisha Pandya, cardiovascular technologist, who was designated employee of the month (March/April) in the department of pediatrics. She has been with the Children’s Heart Center for seven years, after coming from Florida where she obtained her CVT education. In addition to her regular work in pediatric cardiology, she also does studies in both the NICU and PICU, when needed. Bhavisha’s calm manner is a real help in doing echocardiograms on the youngest of patients. She also was commended for her awareness of cost effective measures in her role of ordering clinical supplies for the division. Bhavisha is a team player and we are very fortunate to have her as part of our team.