

## **February - March**

*February 5<sup>th</sup> Meeting  
2:00 pm at Children's Hospital*

Our speaker will be Dr. Courtney Goodman, Pharmacist. Courtney will answer our questions about prescription drugs, supplements, over-the-counter medications, etc. She has proven to be extremely informative about how and when to take medications. We are pleased to have her speak again.

*March 5<sup>th</sup> Meeting (date was incorrect in the newsletter)  
2:00 pm at Children's Hospital*

Our speaker will be Sharon Baldacci, author of the novel "A Sundog Moment". Sharon is an award-winning journalist and sister of best-selling author David Baldacci. Sharon was diagnosed with MS twenty-one years ago.

*"A Sundog Moment could have been written only by one who knows first hand what it's like to suffer from a catastrophic illness."*

We welcome her insight into living with a disability. Many of our members have read her novel and you may want to read it also before she speaks.

### *Mid-Month Lunches*

February 16<sup>th</sup> - 11:30 am at Bookbinder's Grill, on Alverser Drive which is off Huguenot Rd. Near Circuit City and Chesterfield Town Center. The restaurant is in the group of buildings with Schwarzschild Jewelers, MOTO Photo and Coldstone Creamery ice cream. Call Carol Ranelli by Feb. 14<sup>th</sup> with your reservation. 794-7359

March 16<sup>th</sup> - 11:30 am at Riverbound Café, 8005 Creighton Parkway. Phone: 559-3663. Take 295 South to Exit 37A "Tappahanock" onto Mechanicsville Turnpike. Go 2.5 miles, turn right at the new Kroger Supermarket. Call Carol Ranelli by March 14<sup>th</sup> with your reservation.

## **AGING GRACEFULLY**

"Aging Gracefully May be Life Extending," ran a Reuters headline in July 2002, referring to results of a research study. But can the concepts of "aging" and "grace" really be combined? They can be indeed!

With age comes the benefits of wisdom and clear perspective. These gifts, if appreciated, can contribute much to family and community. Yet, aging "gracefully" is not always easy. Even while acknowledging that they have arrived at a stage in life when

chronic disorders may multiply and health is more fragile, older adults must learn to discard the negative stereotypes of old age and relearn what it means to age in America. No one doubts that this may require deep resources of courage and patience.

However, many of America's mature citizens already have discovered strategies for graceful aging. Foremost is the old favorite: "positive thinking."

Researchers have noticed that individuals with strong spirituality tend to live longer as well as have healthier habits and better overall health. The particular study that inspired the Reuters headline quoted above was led by Dr. Becca R. Levy of Yale University. It focused on 660 adults ages 50 and older from an Ohio town. In 1975, participants were asked to respond to various statements such as, "As you get older, you are less useful" and "Things keep getting worse as I get older." Then, 23 years later, their attitudes (based on those same questions) were compared with their longevity. Dr. Levy and her team found that the adults who showed positive self-perceptions toward aging had a distinct survival advantage, living an average of 7.5 years longer than others. Their longer survival did not seem to depend on any other factor (age, sex, socioeconomic status, loneliness, or health).

This study seems to confirm the link between health and attitude, body and mind – a link that today has become accepted in many medical school curricula.

One of the most inspiring examples of positive mind/body self-healing is that of Norman Cousins, editor of the *Saturday Review of Literature*, who showed that taking charge and using humor as medicine could actually conquer disease. He was way ahead of the medical schools, which were at a loss in finding the connection between the body and mind in the healing process. But in 1964, he was diagnosed with ankylosing spondylitis, a highly painful, crippling condition that causes disintegration of spinal connective tissue. He wrote in his book, *Anatomy of an Illness*, that he became aware that hospital life was depressing him. So he checked himself out, moved into a hotel where the food was decent and watched funny movies. He hired a nurse who read him humorous stories. He discovered that laughter has the power to conquer pain; 15 minutes of laughter could guarantee him 2 hours of pain-free sleep. He also followed a regimen of high-dose vitamin C. Finally to the amazement of his doctors, Cousins reversed a supposedly irreversible disease. "I have learned," he wrote, "never to underestimate the capacity of the human mind and body to regenerate – even when the prospects seem most wretched."

Despite the changes that growing older entails, staying as active and involved as possible are key to staying positive and maintaining your health. The end result is a rewarding life in harmony with others, in short, aging gracefully.

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*This is worth repeating!!*

## **Keeping Polio Bodies Warm**

### **COLD INTOLERANCE**

It is well known that cold intolerance is a common feature of surviving polio. It is also well documented that this can become an increasing problem as we get older. This appears to happen in at least 41% of polio people. Why does this occur and what can we do about it?

First, if we go to some basic physiology, looking at the action of muscles, we can see that muscular action is necessary to return venous blood up the leg to the heart. This is called the skeletal muscle pump. When the muscle contracts blood is squeezed up the vein and one-way valves stop it flowing backwards. Where there is muscle wastage from polio this caution is less effective. If we stand or sit still without moving, blood collects in our feet and lower legs causing swelling and a drop in blood pressure (even fainting).

Climatic temperature also influences size of blood vessels. Heat opens them up allowing more blood to reach the skin surface areas giving a redder hot look, also sweating and evaporation that helps to cool the body. Cold closes the vessels restricting the flow to capillaries to conserve heat giving a pale appearance to the skin. This function is controlled by the sympathetic nervous system. In polios the nerves that control this sympathetic function may have been damaged by polio thus not allowing them to shut off the blood supply when it is cold. So precious heat is lost, the cold decreases what muscle activity there is and the “purple cold foot/leg syndrome” appears. In fact cold constricts all nerves and muscles. 75% of your muscle strength is lost when the temperature drops to below 20 degrees C.

### **WHAT CAN WE DO ABOUT IT**

Obviously the first requirement is to get some warmth back. Creating a warm environment achieves this. Warm yourself up by external heat, i.e. warm bath/shower/foot bath; electric blanket or just getting into bed. Most polios limbs are warm once they have been in bed long enough. The secret is to keep them warm when you get up. Polypropylene is a silk-like plastic material that holds heat in but allows sweating out. Wrap up well to keep heat in. Socks, leggings, long johns, track pants made of this and similar materials help. Be warned – you must be warm first, when you put them on.

Cold sensitivity can also be increased if your thyroid gland is not working well. Poor thyroid function will make you sluggish, tired and result in a tendency to put on weight. If our magnesium is low we get cold extremities too.

## The Iron Lung

This January there was an article in the Richmond Times Dispatch that reported the finding of an old iron lung in a musty garage in Roanoke, VA. The all African American Roanoke Hunton Life Saving and First Aid Crew had purchased this iron lung and used it to transport African American polio victims to African American hospitals during the polio years. In Virginia and other southern states racial segregation was the law and even rescue squads were segregated. When the Hunton Life Saving Rescue Squad ceased operating in 1987, the building containing the iron lung was sold to Leo Bazil Trenor. Trenor used the building for storage. He was a collector of old cars and old machinery. Trenor died last year and his survivors discovered the old iron lung when preparing the storage building's contents for auction. This iron lung is apparently in good condition and the Trenor family is planning to donate it to a Roanoke Museum.

The iron lung was the icon of polio. Before the iron lung was developed, six thousand polio victims died in the epidemic of 1916 that involved cases in twenty-six states. There were 27,000 reported cases of polio that year. In New York city in 1916 there were 8900 cases of polio and 2400 deaths or a death rate of about one in four. In 1928 at the Harvard Medical School Philip Drinker and Louis Shaw introduced the iron lung for the treatment of patients with respiratory failure from acute poliomyelitis. The iron lung consisted of a sealed cylindrical chamber in which the air pressure could be alternately increased and reduced. The polio patient was placed in the chamber with his/her head emerging from a port at one end. When the pressure inside the chamber was reduced air would fill the lungs and when the pressure inside the chamber increased, air was forced out of the lungs. The key was creating a tight seal where the head emerged and the rate of respiration could be set by controls. The bellows at the other end could be operated manually in case of a power outage. The iron lungs were manufactured beginning in the early 1930s and John Emerson's company became the leading producer of iron lungs. John Emerson's father had been the Commissioner of Health in New York during the epidemic of 1916 and he vividly recalled the suffering caused by polio. In 1931 Emerson produced the "tank" respirator which simplified the heavy machine and is the one so familiar to most of us in our memory.

My first introduction to an iron lung was on September 23, 1950. I entered the polio isolation ward at the Medical College of Virginia Hospital. I had a flaccid paralysis with varying degrees of weakness from the neck down. I was not in respiratory failure and did not need an iron lung. I was in a six bed room and there were two iron lungs across the room from me. Two teenage boys were in these iron lungs. I was haunted and mesmerized by the sounds of those two iron lungs for five days until I was moved out of isolation. Thirty years later I had a neighbor who spent nights and part of each day in an iron lung in his house. John Miller was his name and he relied on an iron lung for over thirty years. He was a valiant, bright and courageous man until his death from natural causes in the late 1980s. I last saw an iron lung in the museum in Wytheville, Virginia on June 30, 2004.

My life has been saved and extended thirty-eight years because of positive pressure ventilators. The positive pressure ventilator is a descendent of the negative pressure iron lung. The positive

pressure ventilator moves air into a person's lungs via a tracheostomy tube, an endotracheal tube or a mouth piece. The body does not have to be enclosed in a tank. The positive pressure ventilator is a more invasive method of respiratory support, but the entire body is approachable for any necessary medical tests or procedures. I started with a large MA-1 Bennett positive pressure volume ventilator. In 1970 I had a permanent tracheostomy performed. This hole in my neck made it possible to connect the ventilator to the trach tube in my neck and provide ventilator driven respiratory support at night. I would plug the trach tube during the day and my respiratory muscles were rested and functioned well during the day. This routine went on for almost thirty years. In 1996 Post-Polio Syndrome became more severe and I used the ventilator during the day as needed with a mouth piece. In June 2002, my oxygen saturation started dropping during the day and my physician ordered me to use my vent 24 hours a day seven days a week.

The size of ventilators have been reduced over the years. Today I use a Newport ventilator which weighs only sixteen pounds and can do everything and more than the iron lung did a half century ago. I am quite mobile with my vent and power wheelchair. I feel blessed that the technology has advanced in such a way that I am still able to practice in a limited capacity in my home office.

With this little article I am offering a word of tribute to the icon of polio, the iron lung. There is no way to really know how many lives the iron lung saved during the epidemic years of polio in the twentieth century. If the death rate for polio before the iron lung was around 20% as reported in 1916, then it is clear that the death rate after the introduction of the iron lung dropped to below 5%. Hopefully, the iron lung will gain a historically positive status for the lives it saved when it was so effective.

Without the iron lung a child's respiratory death from acute polio in New York in 1916 could not be prevented. Dr. Francis Peabody wrote the following description in 1916.

“One little child of four, so helplessly paralyzed that she was unable to move, but with a mind that seemed to take in the whole situation, said to the nurse clearly but rather abruptly between her hard taken breaths, 'My arm hurts'; 'Turn me over'; 'Scratch my nostril'; and then when the doctor approached, 'Let me alone, doctor!' 'Don't touch my chest.....'The child is nervous, fearful, and dreads being left alone. The mouth becomes filled with frothy saliva which the child is unable to swallow, so she collects it between her lips and waits for the nurse to wipe it away. She likes to have her lips wet with cold water, but rarely attempts to take it into her mouth for she knows she cannot swallow it. During the whole course it is remarkable that cyanosis is absent. There is a little bluish tingeing of the lips and tongue, but much more distinctive is the pallor, which is sometimes striking. Sweating is profuse. Then, as respiration gets weaker, the mind becomes dull, and with the occasional return of a lucid interval, she gradually drifts into unconsciousness. An hour or more later respiration ceases. This peculiarly alert, keen mental state has been much less noticeable in small babies. They tend to be dull and drowsy most of the time; but in the older children this alertness has been such a characteristic feature of the fatal cases, that it is preferable to find a child in a stuporous condition, rather than with a mind whose nervous acuity seems due to a preception of impending danger.”

Let us not forget that the iron lung offered polio patients a chance for survival and usually the

opportunity to lead a productive life.

:References:

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[http://www.canoe.ca/CNEWSFeatures9908/22\\_lung.html](http://www.canoe.ca/CNEWSFeatures9908/22_lung.html)

<http://reference.allrefer.com/encyclopedia/I/ironlung.html>

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