The First Steps in Treating Pain: Finding the Source

Amy Clunn, M.D., Southeastern Rehabilitation Medicine, Ocala, Florida

Polio survivors have been found to have multiple potential sources of pain as they age. The pain can interfere with function and add further physical decline, lead to depression, poor sleep and fatigue, which are already problems in most post-polio patients. Therefore it is important to be aggressive in treating pain in order to optimize physical and mental function.

The primary findings on physical exam in polio patients are muscle weakness and atrophy (shrinkage) in the affected limbs. Part of the post-polio syndrome includes progressive weakness with or without atrophy in the limbs that were affected originally, and occasionally in limbs that were not affected originally. The atrophy and weakness occurs because the virus affected the anterior horn cell of the peripheral nervous system in a patchy pattern. This then causes the nerve supply to be poor to the receiving muscle, and it can no longer work fully (the nerve supply is the hard wire that gives the muscle its power and its signal to move). Without actively contracting, the muscle atrophies (shrinks) rapidly. What is left is a muscular system that must struggle to maintain posture, activate joints and work with possibly only 10-80% of its usual power. With this understanding of the disease mechanism, it is easy to see the first reason polio patients often have pain: chronic muscle strain. The muscles in the affected limbs are often overused or strained even in everyday activities, such as walking or using arms.

(Continued on page 3)
In My Opinion . . .

Recently I reconnected with an acquaintance that I knew when I was in high school. Like me, she had moved to the Denver area from our hometown in Montana. And, like me, she had polio as a child. I really don’t recall if I was aware, at the time, that she had polio or not. I do know that we never talked about it then. This time, over lunch we shared our common experiences, that we both knew our polio doctor, Marny Eulberg, and our physical therapist, Maggie Hanlon; that we both have to deal with the fatigue that comes with aging with polio.

I also learned that she has a long-term friend that also had polio and she expressed an interest in the three of us getting together. That communication left me with an insight regarding post-polio support groups. In Colorado through Easter Seals and other organizations, there are formal support groups for polio survivors, some of which meet monthly and some less often. However, I believe that, like my old high school friend, there are many informal “support groups,” small groups of two or three persons who are friends and who talk about their experiences with polio and aging with polio. So, I hope that all of you who do not have access to formal support groups have someone with whom you can share your polio experiences, and that you have found a “support group” of one or two friends, wherever you are. I also hope that you see this newsletter as a long distance “support group” when you have no one nearby to share your experiences and concerns.

The feature article in this issue focuses on pain. I heard Dr. Clunn speak at the 10th International Post-Polio Conference last April and she gave me insights into the whole gamut of pain in our bodies. I also learned what a physiatrist is. This is an entire area of medical specialty that treats the whole body’s physical structure. Their specialties include sports medicine and rehab medicine. Finding a physiatrist that knows about or is willing to learn about aging with polio is a good alternative to seeing an orthopedic surgeon or a neurologist.

Jim Oxley took me seriously when I asked him to contact Ron Burchfield to hear his polio story. Thinking that both men had a farming background, I hoped they would be able to speak the same language and be able to share similar experiences. Little did I realize that The Connections would get two stories intertwined into one. I hope that their stories will ring true for other farmers, both men and women, still on the farm or not.

Blue and Comfort, are two fictional accounts of a polio survivor by Joyce Moyer Hostetter. Mrs. Hostetter is youth author. Grandma Barb Lundstrom gives us her view on the books. Barbara appreciated the books so much that she has passed them on to her teen-aged grandchildren to read, hoping that they can thus have some better insight into her own history of having polio. Her granddaughter, Catherine Lundstrom, after having read Blue, was willing to give us her point of view on that book, so we have two generations of thoughts about it. I hope you enjoy both reviews.

Lastly, our Post-Polio lending library is open. Check out our partial list of its contents.

Margaret Hinman, editor
The First Steps . . . (From page 1)

Muscle strain pain presents with aching soreness and soreness in muscles that become tender to touch. The tenderness can be in the belly of the muscle or at its distal, tendinous insertion near the bone (enthesopathy).

Bones and joints are another source of pain in polio. If a bone is not subjected to regular weigh-bearing activity, it becomes osteoporotic (loses its mineral content). This can cause pain and lead to the compression or stress fractures that can occur even with normal activity (walking or bending for example). Stress or compression fractures present with acute, focal intense pain often with swelling, made worse with weight-bearing. It is even more important that post-polio patients undergo bone density studies than the normal population in order to treat osteoporosis if it exists, as it predisposes bones to fracture with falls or even atraumatic activities. Joints can become painful due to arthritis or due to contracture from tightness. Capsulitis (inflammation of the joint capsule) can also occur and presents with very painful and restricted range of motion of a joint. This is particularly common when weakness has made it difficult to move a joint, and the capsule shrinks or tightens because it is not ranged. Subluxation (slippage of a joint position) can be commonly found in feet, sacroiliac (pelvic) joints and shoulders when the surrounding musculature is weak. This presents as pain in range of motion or with weight-bearing, deformity, or crepitation with range of motion.

Nerve pain can present as part of an “overuse” syndrome when certain activities are overdone, often in response to substituting one function for another where weakness exists. An entrapment of the nerve can occur with the repetitive motion. An example of this is carpal tunnel syndrome, particularly common in manual wheelchair or walker users (repetitive gripping with or without direct compression), or gluteal nerve injury in response to hip weakness and pelvic instability and strain with walking.

Spine pain is also common in polio patients. Spine pain has potential sources such as discs, joints, muscles, ligaments, tendon, bone and nerve roots. Wheelchair users are susceptible to degenerative disc disease (seated position increases intradiscal pressure, atrophy of the paraspinal muscles and scoliosis (curvature). Sitting also creates tightness in tendons or flexor muscles and can lead to pain when in extension, such as lying down. Joints in spines where weakness is present in a lower limb or in the spine itself are subject to premature and more severe arthritic change than usual. Discs are also subject to more strain injuries such as tears and herniations when gait is unbalanced. They present with intense focal back pain and, if pressure on the nerve root ensues, radiating pain to the abdomen, groin or leg & foot (if lumbar). Osteoporosis also affects the spine commonly with compression fractures.

The circulatory system can also be affected by polio, particularly in limbs that are paretic (weak or paralyzed), in wheelchair users due to sitting. Venous return of the blood is usually impaired in this instance, and blood can pool in the extremity causing swelling, aching and even ulceration. Patients can get angina (chest pain due to cardiac ischemia [decreased blood flow]) due to cardiac disease hastened by lack of cardiovascular exercise. (See p. 4)
The First Steps . . . (From P. 3)

If polio survivors are facing any pains that are severe or that last more than a few weeks, they should have an evaluation by a musculoskeletal physician, primarily orthopedists and physiatrists. A careful history should be taken, including information regarding the patient’s polio history, other past medical history, functional history and how the pain problem is affecting mobility. The patient should be clear and give an example, such as “I used to be able to lift a gallon of milk with my right arm and now it is difficult to hold a coffee cup.” This tells the examiner the time frame of the problem as well as the severity. After that, a thorough physical examination should follow including gait evaluation, if the patient is able. Strength, range of motion, sensory testing and inspection/palpation of the affected areas should be evaluated. Subsequent diagnostic testing may be necessary, including x-rays, MRIs, bone scans, EMGs and lab work. With this information an appropriate diagnosis can be rendered with treatment to follow.

Beware: one of the worst things a polio survivor can do is feel that all his or her symptoms are part of a post-polio syndrome and think that nothing can be done to help. Hopefully this talk has given polio patients the knowledge to understand some of their unique potential pain generators and what can be done to evaluate them (and formulate a treatment plan).

Dr. Clunn is the Physician Consultant for the North Central Florida Post-Polio Support Group. She practices medicine with the Southeastern Integrated Medical. Pl., a multidisciplinary integrated health system in North Central Florida, full time.

This paper was presented at Post-Polio Health International’s 10th International Conference: Living with Polio in the 21st Century (April 2009).

And By the Way . . .

Some polio survivors have shared how they deal with pain that is related to having had polio:

- Use a hot water bottle
- Wear braces to protect the affected limb(s) and prevent the pain
- Pace themselves to prevent pain
- Use Ibuprofen or Acetamiphen or other pain medications
- Take a pain reliever
- Change activity so as not to use the area that hurts
- Apply hot packs to the affected area
- Use a heating pad
- Use physical therapy
- Have massage therapy
- Soak in a warm water pool or bathtub
- Have a glass of wine with dinner
- Complain, call the children and ask for pity!!!!

Book Review: Blue (2006) and Comfort by Joyce Moyer Hostetter
Reviewed by Barbara Lundstrom

Mrs. Hostetter is a young reader’s novelist. In 2002 she was enrolled in a history/writing workshop. Her assignment was to write an interesting story based on local history. Delving into her topic, she discovered the amazing stories of the 1944 polio epidemic in and around her hometown of Hickory, North Carolina. She read newspaper articles and non-fiction books about the epidemic, World War II events, and social segregation. She spoke with war veterans, polio survivors, (See page 5)
Blue  *(Continued from page 4)*

doctors, physical therapists, families living at the time of the epidemic, and read books about President Roosevelt and the history of Warm Springs, GA.

After Mrs. Hostetter had carefully researched her topic, she wove her first novel, Blue, around a young girl, Ann Fay Honeycutt, and her father who goes to serve in World War II. During this time, her three-year-old brother is stricken with a severe case of polio, paralyzed, in an iron lung, and later dies. Within a few months, Ann Fay is diagnosed with the disease.

Although the story is fictional, many of the facts and locations contained in the books are true to the actual epidemic in Hickory. Over 400 people from the surrounding areas were treated at the hospital in Hickory. There were quarantines, fears of the townspeople, cancellations of all public events, and closures of schools, libraries and swimming pools. Doctors, nurses and medical supplies were flown in. Hospital staffs were taxed in acquiring the specific equipment needed for polio patients . . . wheel chairs, crutches, iron lungs, etc. On top of it all, in Hickory, separate treatment areas had to be set up to maintain racial segregation.

Ann Fay had to deal with separation from family, friends, neighbors and most tragically, Imogene, another young polio patient who had to leave the quarantine area for the “tent” where all the patients of color were sent for treatment after the quarantine was lifted. Ann was unable to meet the responsibilities her father had given her when he left for the war. Blue describes Ann’s courageous fight to recover enough to again participate in life at home despite being limited because of leg braces and crutches. Any adult polio survivor could be the “Ann Fay” in this novel.

Joyce Hostetter was so captivated by her research for Blue that only three years later, in 2009, she published the sequel, Comfort. In this story, Ann Fay’s father has returned from World War II, suffering from the neurosis we now call Post-Traumatic Stress Disorder. Ann, with the aid of braces and crutches, has returned to her normal life and soon realizes that her family was being torn apart. Her brother had died in Blue; and despite her physical limitations she needed to help her father. But first, she herself needs help. With the encouragement from family and hometown friends, their little polio girl went to Warm Springs, GA for rehabilitation. Here, the novelist introduces us to many factual people who worked or were treated in Warm Springs. Warm Springs alums will recognize the names of Suzanne (club feet), Martha, Lou (the Navy man), Ed Frogger, Dr. Pat (Raper), Dr. Bennett, Ma Harding, Leon Trotter and the infamous Magic Hill!

Both Blue and Comfort are emotional, heartwarming and sometimes humorous. They are stories of courage, love of family, friends, determination and a willingness to strive for what matters in life. I recommend the book to educate our younger generation about the disabling effects of polio. Since the discovery of the polio vaccine by Jonas Salk and Albert Sabin, polio has been nearly eradicated in most parts of the world. I also recommend the books to older readers as many will recall, with interest, their own experiences (or those of family or friends) at either Warm Springs or any other part of the country where there are “polios.”
The Colorado Post-Polio Library

The Colorado Post-Polio Library is located at Easter Seals Colorado. It is being maintained for the use of the subscribers of the Colorado Post-Polio Connections. It contains a small collection of books, audio and videotapes that may be checked out for a limited period of time and they will be mailed with a return mailer enclosed. Below is a list of the books that are currently available. Save these pages for further reference. In the future, as books are reviewed in the Connections they will become available for loan. Books marked with * have been reviewed in issues of the Connections listed.

For further information about the library and/or to request a book, contact Nancy Hanson at Easter Seals Colorado, 303-233-1666, ext. 237, email-- nhanson@eastersealscolorado.org.

Books

Bachman, Margaret E. Ph.D. The Post-Polio Experience: Psychological Insights and Coping Strategies for Polio Survivors and Their Families. 2006. Dr. Bachman, a Clinical Psychologist, examines polio survivors’ psychological reactions to their earlier experiences and to their current struggles with the late effects of polio. *Spring 2007


Hostetter, Joyce Moyer, Comfort. 2009. In this sequel to Blue (2006), Hostetter continues her WWII-era factional story about Ann Fay Honeycutt and the North Carolina teen’s efforts to recover from polio, which has left her physically challenged and emotionally vulnerable. It also tells the story of her stay at Warm Springs. Grades 6-10. *Winter 2010


Oshinsky, David M. **Polio: An American Story.** The Crusade that Mobilized the Nation Against the 20th Century’s Most Feared Disease. 2005. Pulitzer Prize winner in History, 2006. Oshinsky tells the story of the race to create the polio vaccine by Jonas Salk and Albert Sabin, as well as the impact of the March of Dimes. *Summer 2006


Silver, Julia K., M.D. and Anne C. Gawne, M.D. **Post-Polio Syndrome: A Guide for Polio Survivors and Their Families.** 2002. Silver describes Post-Polio Syndrome, talks about how it is diagnosed and various treatments for it. She also stresses that choosing an experienced and open-minded physician is vital to good treatment.

Wilson, Daniel J. **Living with Polio.** 2007. More than 150 first-person accounts of persons with polio which remind us that more than half a million Americans are still living with its consequences. *Summer 2008

**Post-Polio Health 10th International Conference, Living with Polio in the 21st Century, April 23-25, 2009 Program Notes**

*The library also contains a copy of the program notes from the Post-Polio Health 10th International Conference. The manuscript cannot be checked out, however, persons who are interested in reading an article from them can contact Nancy Hanson at Easter Seals Colorado, 303-233-1666, ext. 237, nhanson@eastersealscolorado.org, to find out how to access them.*

Here is a partial list of the topics of the Conference:

**Thursday, April 23, 2009**
- *Tools to Use in Evaluating Treatment Choices*
- A Black Oasis: Tuskegee Institute’s Fight Against Infantile Paralysis, 1941-1965.
- The Polio Crusaders: Disability Activism at Warm Springs in the 1930’s
- Polio: The Legacy of Warm Springs
- Post-Polio Patient Assessment
- How does one assess an individual for the post-polio syndrome?
- Use the Internet to Expand your Knowledge, Meet Friends, Join PPS Groups, Play Your Favorite Games, Read Articles, Shop, Take Classes and More.
- Developing Special Projects
- Advocating for Yourself and Others
- Newsletters
- Post Polio Water Work Management & Techniques (water exercise)
- Polio Narratives: Readings and Discussion of the Writing Process
- Yes, You Can Practice Yoga
Friday, April 24, 2009

- Post-Polio Patient Assessment
- Respiratory Evaluation
- How does one assess an individual for the post-polio syndrome?
- Friends and Partners: The Legacy of Franklin Roosevelt and Basil O’Conner in the History of Polio
- Bracing Evaluation (A Thorough Preparation)
- Assessment for Polio Bracing is part of an Individualized Walking Solution
- Bracing Evaluation
- Regulatory T-cells as a Biomarker of Post-Polio Syndrome
- Summary of Post-Polio Research at University of Amsterdam
- Aging with a Disability: Policy Lessons Learned from Polio
- Finding Causes of and Managing Fatigue
- Palliative Care and End-of-life Decision-making
- *Anesthesia Update: Separating Fact from Fear
- Benefits and Techniques of Aquatic Therapy
- Using Assistive Technology for Personal Independence
- Exercise: The Kinds, the Methods and the Benefits
- Communicating with Your Physician: Techniques that Work
- Effective Family Communications. Do We? How Can We Improve?
- Exercise and Activity: How Much and What?
- Complementary and Alternative Medicine (CAM): What You Don’t Know Can Hurt You

Saturday, April 25, 2009

- *First step in Treating Pain: Finding the Source
- Summary of Recent Post-Polio Research at the Montreal Neurological Institute and Hospital
- Post Polio Research at Karolinska Institutet
- Bladder Inconveniences
- Learning from Wise Elders
- Polypharmacy: Making it all Work
- Too Hot and Too Cold: Causes and Solutions
- When Are Trachs an Option?
- Trach? Or Not?
- Comparison of Manual Muscle Testing and Function pre and post triplanar control dynamic response AFOs in polio survivors
- What’s New in Orthotics?
- Is Older Better? (Orthotics)
- Exercise and Activity: How Much and What? Let’s get Practical

* Reprinted in the Colorado Post-Polio Connections

Reviewed By: Catherine Lundstrom, age 14.

The children’s novel, *Blue*, by Joyce Moyer Hostetter is a very heartfelt and moving novel. The plot centers around thirteen-year old Ann Fay Honeycutt, who feels like her family is falling apart after her dad is sent off to war. As the oldest of four children she assumes the “man of the house” role and later, when her brother is struck with polio, she is faced with stepping into her mother’s shoes. Eventually, she is struck with polio herself. She befriends a fellow patient, Imogene—a “colored” girl, who knows Ann Fay’s many struggles like no one else possibly could. While recovering, Ann Fay and her friend find a deep connection that transcends race. Joyce Moyer Hostetter creates a fast paced story explaining the hardships of 1944 in Hickory, North Carolina, World War II, the Polio Epidemic, and glimmers of racial understanding and compassion.

My grandmother recommended this novel to me, and being an avid reader, interested in her childhood, I started it right away. My grandmother contracted polio at age 16, in June of 1944, and experienced recovery in many of the same ways as Ann Fay. Reading this book was meaningful to me because it allowed me to imagine more vividly the pain and struggle that my grandmother endured as a victim of polio.

As the oldest child in a family of four, I can relate to the main character. After Ann Fay’s brother was ominously struck with polio, I found myself in Ann Fay’s place -- home alone for weeks watching over her younger sisters. If I were Ann Fay, I would feel overcome with the fear that one of my siblings would come down with polio. The responsibility of keeping up the house and family garden seems daunting to say the least. As I read, I imagined myself enduring the hot steamy Kenny Packs and having the image of my future changed without my consent. Joyce Moyer Hostetter touched many of my emotions throughout this book—the fear of being faced with managing a household, the sadness of burning my little brother’s toys, the grief of having life changed without being able to control any of it. The book also includes a few characters and events that add humor and joy amidst the tragedy. Joyce Moyer Hostetter pulls you into the book and you will experience the story as you read it.

*Blue* is touching, fast paced and packed with interesting information and I would highly recommend this book to anybody, young or old, who may be fascinated by the polio epidemic; or to anybody who is just plain looking for a good book. The information presented in this kid-friendly story will help my generation appreciate the development of technology and medicine. There are many surprises and interesting facts scattered throughout the novel. It is a quick read that you will find hard to set down. *Blue*, by Joyce Moyer Hostetter is an amazingly written historical fiction novel, jam packed with information, and filled to the brim with goodness.

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The Colorado Post-Polio Clinic is now located at the St. Anthony’s North Family Medicine Center at 8510 Bryant St., Suite 200, on the northwest side of St. Anthony’s North Hospital in Westminster. To make an appointment, call 303-899-5369. The purpose of the clinic is to evaluate and make recommendations for polio survivors.
Two Post-Polios Reminisce  
By Jim Oxley

At the suggestion of Margaret Hinman, two post-polios of similar backgrounds met to share their lifelong experiences. Ron Burchfield and Jim Oxley found that they had much in common. Both of them had grown up on farms and had farmed for some years; both had polio as children; both attended Colorado A & M College; and both had caring spouses and supporting parents. Each also had reared three children.

Ron was stricken with polio in October 1945, at the age of six. Jim was 33 months old in 1929 when he came down with polio. Ron’s parents farmed in southwest Kansas, and Jim’s in the San Luis Valley of Colorado. Ron’s parents moved to Denver to be near specialists at Children’s Hospital. There he was isolated from his parents for six months and jammed in a room or hallway with cots and Iron Lungs. He remembers well the overworked doctors and nurses, the sick children everywhere and the extreme isolation. The virus seemed to have invaded his whole body except his lungs. He gradually improved but was left with a short, weakened and atrophied left leg. With the help of a chiropractor and orthotist and baths in various hot springs in New Mexico and Colorado, Ron was eventually able to walk, using a KAFO and two Canadian crutches. His first brace lasted for 25 years and finally wore out. (He admits his newer one doesn’t have the feel of that old one.)

Jim partially recuperated from his crippled condition by bathing in hot springs in northern New Mexico and undergoing leg stretching by his father during his early years in school. He wore a brace fastened to the outside of a work shoe during grade school and now is in his fifth year of wearing a DSB AFO brace. Bracing is a necessity for Ron. Jim knows his balance is better with a brace and that he is less likely to fall.

Ron became a banker in the town of Strasburg, where his father later moved and bought wheat and grazing land. After his father’s death, Ron, his wife, Ruby, and one son continued the farm business, expanding it to several hundred acres. After attending an Agribility Conference sponsored by Easter Seals and CSU, Ron learned of ways to modify his tractor. Using a local welder, he had better access to the seat and the controls were made easier.

One of his sons farmed with his dad for several years and later moved to a northern Nebraska farm, where he continues in the cattle business. Their other son is a life-long employee of the Adams County Road Department. Their daughter lives in Oregon and is a statistician for the USDA. The Burchfields have seven grandchildren. Ron retired recently and leases his farm to a neighbor.

Jim quit farming partly because of his polio-related problems and the hard physical work of managing the family livestock and crop farm. He decided to go to graduate school and ultimately became professor of Animal Science at both the University of Wyoming and Colorado State University, from which he retired in 1991. Jim and his wife, Helen, have three children, two of whom have their own businesses in Colorado; and their other child is an infection control specialist in Oklahoma. They enjoy their six grandchildren. (See page 11)
Two Post-Polios Reminisce  \textit{(From page 10)}

Ron was fortunate to overcome a hip replacement and surgery for a benign brain tumor. Jim has overcome prostate cancer with appropriate radiation and hormone treatments.

Another common element that characterized their lives was the interest and support of their parents throughout their early lives. Their parents tried several avenues of therapy and bits of advice from the medical specialists of the day. Most of all they have had outstanding support and understanding from their spouses and families, all of whom helped them cope with their disabilities.

Ron has enjoyed his interaction with the Aurora Post Polio Support Group and Jim has facilitated the Ft. Collins/Loveland Support Group for the past ten years. Both appreciate very much the advice and counsel of Dr. Marney Eulberg.

The Colorado Post-Polio Connections would like to thank the following volunteers who help with the writing, proofreading and mailing and have made this newsletter possible:


Marny Eulberg, M.D., Medical Advisor  
Nancy Hanson, Easter Seals Colorado  
Marlene Harmon, President, Advisory Council  
Margaret Hinman, Editor

News of Note--

The Warm Water Therapy Pool at Easter Seals—The pool has been remodeled with a new deck and windows to give it a “spa” feeling. The pool temperature is between 93-94 degrees, and the depth goes from one to four feet. It is handicapped accessible, having both stairs with a handrail and a lift.

With enough people (5 or more) Easter Seals could create a once or twice a week post-polio class for therapy and for socializing. There are individual/family memberships available or pay as you come fees. Persons interested in following up on this service and for more information can call Tracie Wickham, aquatic instructor, at 303-233-1666 ext. 1.

Persons who are in need of financial assistance to use the pool can let Tracie know when they call for further information. If there is enough of a need expressed, then the establishment of a grant or scholarship program can be considered.

Thank you!

The Colorado Post-Polio Advisory Council would like to publicly acknowledge those volunteers who facilitate the support groups that meet throughout the state of Colorado. Without their efforts, polio survivors would not have available an opportunity to share their experiences and information related to polio in a caring and sharing environment. Hats off to all of you! See this issue’s insert for times and locations of those support groups.
This Is Your Newsletter-----

Colorado Post-Polio Connections is a newsletter by and for polio survivors, their friends and others who are interested in being part of our network. The editors and staff invite your contributions to the newsletter. If you have comments, articles, or suggestions for topics for future issues, please email us at post-poliocolo@comcast.net or write to us:

**Colorado Post-Polio Connections**
Easter Seals Colorado
5755 West Alameda Avenue
Lakewood, Colorado 80226

Please include your name, address, phone number and email address in any correspondence. To change mailing information, contact Nancy Hanson at 303-233-1666, ext. 237 or email her at nhanson@eastersealscolorado.org.

**Our next issue will discuss travelling with a disability, including an example of at least one accessible destination.**

**Disclaimer**

The opinions expressed in this newsletter are those of the individual writers and do not necessarily constitute an endorsement or approval by Easter Seals Colorado or the Post-Polio Advisory Council. If you have personal medical problems, consult your own physician.