



Neurology Care Line

PADRECC Pathways

Houston Parkinson's Disease Research, Education and Clinical Center
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Posture – Yesterday, Today, and Tomorrow

“Stand up straight!” “Don’t slouch!” “Hold your head up!” Sound familiar? I suspect that most people reading this article have memories from their childhood when their parents reminded them of the importance of having good posture both in sitting and standing. What few of us expected, however, was to continue to hear these words into our golden years, especially when they come from partners, children, or other caregivers. And yet the reality associated with Parkinson Disease (PD) is that one of the first (and last) things to suffer is our good posture and trunk control.

Why does it happen? Like all of our muscular functions, the control of posture starts in our brains in a region known as the Basal Ganglia. Most of the time those postural control functions occur automatically, which means that we don’t have to actively think about what to do in order for them to happen spontaneously. But as we get older and perhaps a little weaker and the joints in our spines become more rigid, then the brain has less control over posture. Add to that the changes in the brain caused by PD, and we are even more likely to develop the postural characteristics known as kyphosis (rounding of the upper back and shoulders) and/or scoliosis (a side bending of the spine in one direction causing the shoulders to be uneven).

What can be done about it? There is no magic bullet associated with correcting the postural changes that occur with PD, but by 1) increasing our awareness of what good posture represents, 2) stretching out tightness in our muscles and joints, and 3) increasing the strength of the muscles that help hold the

trunk and head upright we can execute a 3 – Step Program designed to keep our trunk control and posture as good as it can possibly be. For starters, let’s better understand what good *sitting* posture feels like. It all starts with our base of support, which refers to the area of the body that is being supported on a surface, in this case the pelvis and back of the thighs. At the base of everyone’s pelvis are two projections that are technically known as the Ischial Tuberosities or the IT bones. If you add an “S” in front of that abbreviation, then you have your “SIT” bones, which describes one of their functions, i.e., to support the lower half of your body in sitting.

How you sit on your SIT bones is very important, however, because too often we let the pelvis rotate backwards, which puts more pressure on your buttocks area and keeps the lower back into a rounded



The PADRECC Allied Health Education Committee planned, organized, and sponsored a 1-day continuing education conference on caring for patients with PD for VA and Houston area nurses on September 29, 2006 at MEDVAMC.

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position. If the low back area remains rounded, then the upper spine finds it easier to remain rounded as well (e.g., kyphosis). To correct and improve your pelvic alignment, which is the first step to correcting your posture, you need to rotate the pelvis downward by bringing your waist area up and forward. This movement should shift the weight to your SIT bones and the back of your thighs, thus creating a better base of support for bringing your shoulders up tall.

The next step to aligning your spine to feel what good upright posture is all about is to take a deep breath while lifting your shoulder blades up and back. This action open your ribcage to allow you to take in more air and will straighten out the rounded appearance of your spine. Finally, once your upper back is straighter, then you need to actively pull your head back to bring your ears up and over your shoulder blades. Keep your chin tucked without tilting your

head so that you are able to look straight ahead. All of these movements to correct poor sitting posture are best done on a firm surface, like a dining room chair, as opposed to being done in a softer lounge chair.

So there you have it: Sitting with good posture requires a good base of support and the proper mechanics for aligning your pelvis, shoulders, and head. Perform the above routine with 3 repetitions every hour during the day and you will begin to get the feel of what proper and tall posture feels like once again. The other 2 steps in the program are exercise related, so look for that information in our next issue.

Betty MacNeill, PT, MEd
Associate Professor, School of Physical Therapy
Texas Woman’s University, Houston

[Editor’s note: Professor MacNeill will have an ongoing physical therapy column in PADRECC Pathways.]



Above: participants in the MEDVAMC September 29 Nursing Conference: L to R: E. Lai, B. Baer, J. Whitehead, N. Nelson, L. Fincher, M. Trail, K. Crist (Houston Area Parkinson Society), M.York, V. Magee, B. MacNeill (TWU). *Below far left:* R. Zabransky, C. Ward



Pictured below: Physical Therapy and Occupational Therapy volunteers from Quentin Meese Community Hospital and Manor Care trained nurses in transfer techniques at the September 29th PADRECC Conference.

Houston PADRECC Happenings

Congratulations to **Aliya Sarwar**, MD, who was certified by the American Board of Sleep Medicine and was invited to join the Parkinson Foundation of Harris County's Medical Advisory Board in September. She is planning several PD studies on sleep disorders and weight loss. **Drs. Sarwar and Lai** are listed among the authors on a recently published paper on the use of Botox to treat spasticity in adults.

The **National VA Parkinson's Disease Consortium Conference** was held in Philadelphia on Sept. 21-22, 2006. Over 40 Consortium Centers were established to ensure accessibility and continuity of specialized care for veterans with PD who live too far to travel to the 6 PADRECCs. These Consortium Centers offer movement disorder clinics staffed by professionals with expertise in PD. **Drs. Lai and Nelson** and **Brenda Wade** represented the Houston PADRECC.

The **PADRECC Allied Health Education Committee** (Marilyn **Trail**, Naomi **Nelson**, Eugene **Lai**, Jeanne **Whitehead**, Betty **MacNeill**, Kathleen **Crist**, Ruth **Zabransky** and Elizabeth **Protas**,) published an article entitled "Locating an Appropriate Continuing Education Seminar Can Be Difficult. The Answer May be to Hold Your Own," in the December 1, 2006 issue of *Advance for Directors in Rehabilitation*. **Marilyn Trail's** article on the use of mental imagery as a treatment technique appeared in the July 2006 issue of *Advance for Occupational Therapy Practitioners*.

The **PADRECC Allied Health Education Committee** held a continuing education conference, *Parkinson's Disease: What Nurses Should Know*, at the MEDVAMC on September 29, 2006. Over 75 nurses from the Houston VA and other area hospitals attended the 1-day course. PADRECC faculty and Committee members presented the lectures.

Eugene Lai, MD, PhD, lectured on new advances in Parkinson's disease at the Baylor College of Medicine annual teaching course, Current Neurology, and at the Houston Area Parkinson Society in November 2006.

Gabriel Hou, MD, PhD, spoke on PD and related movement disorders at the Parkinson Foundation of Harris County support group in August and to physicians at Ben Taub Hospital in October.

Michele York talked about cognitive changes and PD at both the Houston PADRECC and Beaumont Texas PD support groups in August.

Marilyn Trail and **Eugene Lai's** textbook entitled *Neurorehabilitation in Parkinson's Disease: An Evidence-based Treatment Model*, will be available June 07. (Read about it on www.Amazon.com)

PADRECC Patient and Family Forum

Friday, March 9th 10:00 - 11:45 AM
MEDVAMC 4th Floor Auditorium

"Parkinson's Disease: Hope for the Future"
A discussion by PADRECC neurologists and patients

Pictured right: Joseph and Patricia Perret attended the September PADRECC Patient Family Forum.



Houston PADRECC Director's Corner

The New Year brings new beginnings, new challenges, and new reasons for hope for those who have Parkinson's disease. Scientific gains result in the promise of new drugs and therapies that have implications for PADRECC and our patients. I want to tell you about some of the studies we are conducting at our Center. In collaboration with researchers at the University of Houston, we are performing gait analysis on patients with PD to improve balance. We are also studying the effects of different color spectrums of laser light as cues to improve 'freezing' during walking. We are participating in a multi-center study to develop an improved measuring scale for PD so that we can more accurately assess disease progression.

During the year, we will be initiating new research projects, such as a smell test to look for early detection of PD, a gait and step training study to prevent falls, a study of cognitive changes, and a study to improve sleep disturbances. Another study, a survey, will look at how patients with PD engage in activity. We will be asking many of you to participate in these studies. I hope you will also take the opportunity to become involved in our PADRECC support groups and other educational programs. We will continue to strive to provide the highest quality of clinical care. Finally, I want to express my best wishes to each of you, your friends, and families for a happy New Year.

Eugene C. Lai, MD, PhD
Houston PADRECC Director

PADRECC Veterans Share Their Experiences

PADRECC veterans Mr. **Clyde Jacks**, Mr. **Carol McGuire**, and Mr. **Maxwell Farber** along with **Mrs. McGuire** and **Mrs. Farber** presented their stories about living with Parkinson's disease (PD) to more than 100 high school students attending the National Youth Leadership Forum on Medicine held in Houston. **Naomi Nelson**, PhD, RN, PADRECC Co-Associate Director of Education, introduced the speakers.

Students interested in pursuing a career in the health professions learned about the impact of PD on mobility, independence, finances, and quality of life for patients and family members. Mr. Jacks, a former teacher, suggested helpful approaches for communicating with patients. Mr. McGuire spoke about living with PD for over 26 years and the need for professionals to discover the real person behind the illness. He and Mrs. McGuire discussed the long-term effects of chronic illness on the family. This was the 5th year the Farbers talked about living with PD and aging gracefully. Mr. Farber delighted the audience by quoting poetry while Mrs. Farber shared insights on caregiving. We thank the group for their time and expertise.



Do you have Parkinson's disease and want to see
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We are studying thinking skills in Parkinson's disease
while we take pictures of your brain.

**Parkinson's disease patients and healthy comparisons are
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It will take approximately 5 hours.

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If you would like more information, please contact
Michele York, PhD at 713-798-5365.

New Houston PACRECC Website Address

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Parkinson's Disease Research
Education and Clinical
Center (PADRECC)

Michael E. DeBakey VAMC
2002 Holcombe Blvd., 127 PD
Houston, TX, 77030
Phone 713-794-7841

[www.parkinsons.va.gov/
PARKINSONS/Houston](http://www.parkinsons.va.gov/PARKINSONS/Houston)

PADRECC Pathways Editors:
Marilyn Trail
Naomi Nelson

For information about our patient education programs contact Dr. **Naomi Nelson**, PADRECC Co-Associate Director of Education, at 713-794- 7841.