

# The Arizona Quarterly Spine Official Newsletter of SpineScottsdale Physical Therapy and the Center for SpineHealth

SpineScottsdale
Physical Therapy



Center for SpineHealth

#### A Note from Shane

We hope everyone had a wonderful holiday season! What's new at SpineScottsdale Physical Therapy for 2015?

We hired another licensed physical therapist who is also a licensed occupational therapist and 2 physical therapy assistants. We became certified in the physical therapy management of osteoporosis. Learn how you can access physical therapy directly without a physician's referral. And read about our physicians of the quarter.



I would like to share with you more information about these exciting developments in this edition of **The Arizona Quarterly Spine!** 

### SpineScottsdale hires a licensed physical therapist and occupational therapist

Adam Story, PT, DPT, OTR/L, OTD

Physical Therapist Doctor of Physical Therapy Registered Licensed Occupational Therapist Doctor of Occupational Therapy



#### **Education**

**Doctor of Physical Therapy**, University of St. Augustine For Health Sciences **Doctor of Occupational Therapy**, University of St. Augustine For Health Sciences

# What is Occupational Therapy?

The goal of Occupational Therapy is to enable an individual to carry out their activities of daily living, which include those performed at work, home, school and the community, as independently as possible. Following a thorough evaluation, which includes an assessment of physical function, as well as cognitive and daily living skills, if appropriate, an occupational therapist will tailor a treatment plan dedicated to restoring your maximum functional ability. Adam will work individually with you and will closely monitor your progress and modify your program as required.

# Who Can Benefit from Occupational Therapy?

The need for outpatient occupational therapy may arise from a traumatic or repetitive injury, an orthopedic or neurological disorder, or a chronic or congenital illness. Individuals with a new injury, or those with a progression of a recurring problem that causes limitations in function, can all benefit from therapy. In additional to spine physical therapy, Adam provides rehabilitation to individuals with a wide range of orthopedic occupational conditions, including:

# **Orthopedic Conditions**

- Upper extremity injury
- Post-surgical rehab of the upper extremities
- Shoulder pain
- Sports or work related injuries
- Fracture or sprain
- Arthritis
- Lymphedema
- Osteoporosis
- Total joint replacement

#### Katie Prudhomme, PTA

#### **Physical Therapy Assistant**

# Education

Associates of Applied Science, Physical Therapist Assistant, Carrington College Bachelor's of Science degree from Arizona State University graduated 2013. Associates of Applied Science, Health and Fitness Education, McHenry County College, graduated 2009.



#### **Professional Membership**

American Physical Therapy Association

# **Specialized Training**

Myofasical Release Gary Gray functional based exercise approach The Meeks Method

#### **Interest**

Katie gained experience in the physical therapy field by working in a outpatient orthopedic clinic assisting in daily patient care on a technician level and administrative assistant, this where she found her love and passion for physical therapy. Katie enjoys working with the varying patient population that Spine Scottsdale assists through rehabilitation. While Katie works to advance and further her career, she enjoys spending time outdoors hiking, snowboarding, boating, and allowing time for relaxation.

# Amy Guiette, PTA

Physical Therapy Assistant

#### Education

Associates Of Applied Science, Physical Therapist Assistant, Mott Community College, graduated 2012 Bachelor's Degree, Dietetics, Michigan State University, graduated 2012



# **Professional Membership**

American Physical Therapy Association American Dietetic Association

#### **Specialized Training**

Myofasical Release Clinical Instructor for PTA students Functional Biomechanics - Assessment & Treatment Gait Analysis Sports Performance

#### **Interest**

I have been involved within the physical therapy Industry for over 7 years and have had the chance to be a part of every aspect of running a physical therapy clinic from office assistant/biller to pt tech while I was pursuing my degree. Since graduating I have been actively involved in pursing continuing education to better improve my patient care skills. I also have had the opportunity to teach a few lab classes at my alumni college for the up and coming PTAs and have become a clinical instructor for PTA students.

#### Physical Therapy Management of Osteoporosis

I recently became certified in the physical therapy management of patients with osteoporosis utilizing **The Meeks** Method. The Meeks Method is a comprehensive 12-step movement and exercise program for the prevention and management of osteoporosis and the musculoskeletal changes commonly associated with the aging process. One modality used in our osteoporosis program is a low-intensity vibration plate called livMD.

To learn more about how physical therapy will help you manage your osteoporosis...

We are offering a complimentary osteoporosis screening: This is a direct and "free" opportunity to receive a risk assessment, a complete explanation of your bone mineral density test findings, and to learn exactly how the Meeks

Method will instruct you on how to move safely during everyday activities and during exercise routines to minimize the serious consequences of this condition such as fractures.

The complimentary osteoporosis screening is a 15- to 30-minute examination performed by the well-trained, professional staff at our SpineScottsdale Physical Therapy clinic.

This screen includes a risk assessment, a review of your bone mineral test findings, and a musculoskeletal screening including a postural examination, balance examination, and strength assessment.

To schedule a **Free Osteoporosis Screen**, simply call SpineScottsdale Physical Therapy at 480-584-3334.

# What is The Meeks Method of Osteoporosis Management

The Meeks Method is a comprehensive 12-step movement and exercise program for the prevention and management of osteoporosis and the musculoskeletal changes commonly associated with the aging process.



#### The Meeks Method: About Sara Meeks



# Sara M. Meeks, P.T., M.S., G.C.S., K.Y.T.

- Has been a licensed, practicing Physical Therapist since 1962,
- Has specialized in the unique management implications of persons with osteopenia and osteoporosis since 1984, and
- Has developed an evidenced-based, easy, effective, comprehensive, sitespecific, 12-part program for the conservative management of persons with osteopenia, osteoporosis, postural problems and back pain.
- In addition, she has been a certified Kripalu Yoga Teacher (K.Y.T.) since 1984 and has modified Yoga for safety in movement for people with bone health concerns.

#### **SPECIALTY EXPERIENCE:**

"Since 1984 I have been specializing in the management of persons with osteoporosis and osteopenia. Since seeing my first patient with known osteoporosis and an acute compression fracture in 1984 and developing a successful program for that patient with no clinical pathway or treatment protocol on which to rely, I have spent my entire career focusing on the physical therapy management of people with osteoporosis. In 1996-1997, I was the director of a physical therapy clinic in which every patient I saw was diagnosed with the conditions of osteopenia and/or osteoporosis. Osteopenia and osteoporosis were the PRIMARY diagnoses of my patient population. These patients also had many other conditions commonly seen in a physical therapy population; however, they were seeing me because of my program for osteoporosis. Focusing on the condition in this way allowed me to learn more about the condition than I would ever have had an opportunity otherwise. It was during this time that I further developed and refined my comprehensive management program (The Meeks Method.)"

### How is The Meeks Method different from other programs? Its essential aspects are five-fold.

### 1. Safety

For persons with osteoporosis, even in advanced stages, all of the exercises, if done according to the directions, are safe and will minimize your risk of fracture. Except where noted with certain exercises, they are safe for most other back problems as well. There is nothing that would put you at risk for spinal or rib fracture—no sit-ups, abdominal crunches, straight leg raises, toe touches or knee-to-chest movements. Research has shown that these forward-bending movements can result in a significant increase in fracture risk for persons with fragile bones.

Unfortunately, the prevailing thought seems to be that any exercise is "ok", and that doing something is better than doing nothing, as long as people are up and moving. For persons with osteoporosis, however, it is nearly better to do nothing than to do the wrong thing. When it comes to exercise, not all of it is safe and some of it can actually be dangerous.

# 2. Reversal of the Patterns of Postural Changes.

This entire program is based on preventing, arresting, and/or reversing these all-too-common changes in posture. When the body is better aligned, the effect of muscle contraction on the bone and weight-bearing forces going through the bones will optimized.

#### 3. Exercises are "site-specific."

They have been designed to target areas of the body where strengthening and flexibility are most needed...to help prevent both the fractures that can occur with osteoporosis and the postural changes that develop as people age. Of particular importance is strengthening of the back extensor muscles.

# 4. Focus on the bones, in movement and exercise.

The bones form the foundation for movement and are all too often taken for granted until a devastating injury occurs. Learning to move with consideration for the bones can change movement in profound ways.

#### 5. Starts at a low level.

This enables just about anyone to begin the program. Simple movements build on complexity and difficulty.

One modality used in our osteoporosis program is a low-intensity vibration plate called livMD. How does low intensity vibration (LivMD) benefit bone cells?

#### Mechanical signals effect growth and renewal of tissues

The human body is designed to withstand many forces in daily life, and can adapt to differing loads generated during normal activity. These loads can be large, such as those generated while running, or they can be quite small, such as the continual tiny and high frequency signals between bones and muscles that we never have to think about. These all have a direct effect upon the growth and renewal of musculoskeletal tissues. This is very complex and involves networks of cells that are sensitive to chemical, biological and mechanical signals. We believe tissue renewal is achieved in part, by stimulation of cells within the bone marrow. The bone marrow is a reservoir of adult stem cells, which then change into other types of cells such as bone, muscle or fat during their lifetime.

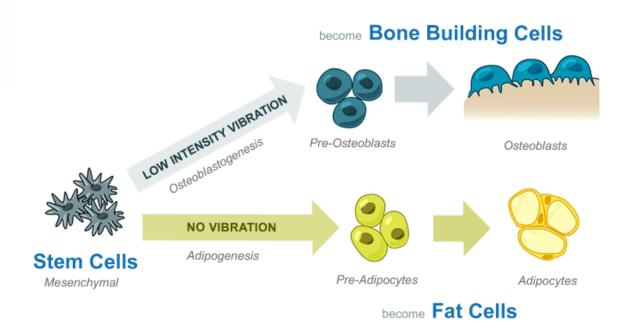
# Tissues decline with age

When functional loading is removed from a human, for example with increasing age and more sedentary lifestyle, the bone and muscle tissues start to decline. We believe part of the reason for the decline is the reduction of mechanical signaling across the full range of size and frequency. The LIV signal is similar to fast firing muscle contractions and we know that these fast muscle contractions decline with age. The LIV signal directly targets cells that would normally respond to high frequency signals, that have now been lost.



#### **Stimulation of Adult Stem Cells**

LIV signals stimulate cell behavior within the bone marrow and encourage growth in the surrounding musculoskeletal tissues. Recent scientific experiments have shown that LIV stimulation increases bone cells and leads to a reduction in fat cells. This is illustrated in drawing below which shows the increased activity of stem cells (Mesenchymal Stem Cells) in becoming bone building cells (Osteoblasts) and not fat cells (Adipocytes).



#### 25 Years of Research

Our understanding on the role of mechanical signals and their effect on tissues has been acquired over 25 years and through research funded by government and other agencies. Over 110 peer-reviewed publications describe the basic science and the clinical efficacy of low-intensity vibration. Visit the Science and Research section of the website which explains the science in more detail

# Do you need a physician's referral before seeing SpineScottsdale Physical Therapy?

No. Direct Access is your ability to obtain services from a licensed physical therapist where and when you choose without referral from a physician.

You may be surprised to learn that you can access physical therapy directly without a physician's referral, but under "direct access" in Arizona, you can.

Whether you've had a sports injury, recent surgery, neck or back pain, headaches, or repetitive overuse injury, you can contact SpineScottsdale Physical Therapy and begin working towards eliminating unnecessary pain and dysfunction.

Here is an example of how direct access can save you time, money, and unnecessary pain.

Let's say you were just getting back into a fitness routine using weights and walking when you twisted awkwardly and began feeling pain in lower back. You could wait a week or two to get in to see your doctor and pay for the visit, but with Direct Access, you can go straight to your physical therapist and eliminate delays in treatment and higher costs.

This of course is especially helpful if you are feeling discomfort and really would like to know what happened, how serious it is and what you'll need to do to get started on recovering.

You can contact SpineScottsdale Physical Therapy and schedule a time to come and for an evaluation by one of our licensed physical therapists. SpineScottsdale physical therapists have the training and education to recognize if your condition is not musculoskeletal and recommend you see a physician. In either case, you'll be getting answers and peace of mind right when you need it, and not several days or weeks after.

#### So How Does Direct Access Work?

The State of Arizona allows patients like you direct access to a physical therapist without a referral, and in most cases your insurance company will reimburse you for physical therapy services under direct access. However, your particular insurance carrier may have specific restrictions. In order to be reimbursed for your physical therapy services you may need to obtain a referral/prescription from your physician first.

We understand this can be a confusing process, we would be happy to assist you in determining your physical therapy benefits.

Give us a quick call at 480-584-3334 and we'll be able to tell you what your insurance company requires.

Please don't hesitate to contact us, our front office is here to help you, our goal to make the billing process is as easy as possible so you can focus on your treatment and getting back on the road to recovery as soon as possible.

# Physicians of the Quarter

SpineScottsdale Physical Therapy would like to recognize a local practice that has made significant contributions to the treatment of both spine and extremity orthopedic conditions. In this newsletter we would like to recognize the providers at Scottsdale Medical Center: Dr. Joseph Rotella, Dr. Kelly Barker, and Dr. Jason Richard. Scottsdale Medical Center is a comprehensive family medical facility completely dedicated to your health and wellness. Scottsdale Medical Center offers Family Medicine and Chiropractic services in Scottsdale, Arizona, with a strong emphasis on health prevention and a multidisciplinary approach to the treatment of disease.

Dr. Joseph A. Rotella M.D., D.C. is first and foremost a father who understands the importance of making sure his loved ones are happy and healthy. He knows listening and caring are just as vital to the healing process as diagnosis and treatment. As the founder and operator of Scottsdale Medical Center, he offers a wide range of professional medical services with a special interest in the integration of medical and chiropractic care for headache sufferers.

Dr. Joseph A. Rotella M.D., DC is the only dual licensed family physician and chiropractor in Scottsdale, AZ who integrates both philosophies to provide an integrative approach of wellness to all of his patients.

Dr. Rotella received his Doctorate of Chiropractic from Cleveland College of Chiropractic in Kansas City, MO and a Doctorate of Medicine from the American University of the Caribbean in St. Martin, Netherlands Antilles.

Dr. Kelly R. Barker, D.O., brings to Scottsdale Medical Center a family-centered approach to physical, emotional, and spiritual wellness. She blends traditional Osteopathic medical practice and complementary/alternative philosophy with state of the art Family Medicine. Her specializations include comprehensive Osteopathic Manipulative Therapy, women's health services, diabetes care, and adolescent medicine. After completing an undergraduate degree in Neuroscience with research in back pain at Brown University, she commenced a career in high school education. Her passion for integrated health and wellness inspired her to pursue a medical degree at the Arizona College of Osteopathic Medicine in Glendale. She then completed her residency in Family Medicine at the Heuser Family Medicine Center with Scottsdale Healthcare.



Dr. Jason Richard D.O. is a board certified Family Physician, received his master's from Louisiana State University and his doctorate from Midwestern University in Glendale, completing his residency at Scottsdale Healthcare.

Dr. Richard's approach to medicine is very holistic. He understands the importance of a healthy body to maintain peak performance. Yet, he also understands the balance between training and the aging body and has a special area of interest of the 'aging athlete'. He believes in treating the individual, not just the symptom and empowering his patients with knowledge. Good health is not only the goal, he knows it can be achieved by the simple outcome of successful decision-making.

To make an appointment at Scottsdale Medical Center, contact them at 480-614-5808 or visit them online at: www.scottsdalemedcenter.com

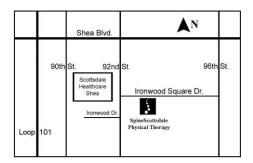






Moving in the Right Direction!

Bridging the Gap Between SpineRehabilitation and SpineHealth!



Shane Sullivan
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Board Certified Orthopedic Clinical Specialist
Certified Athletic Trainer
Certified Strength and Conditioning Specialist
Certified Ergonomics Assessment Specialist