

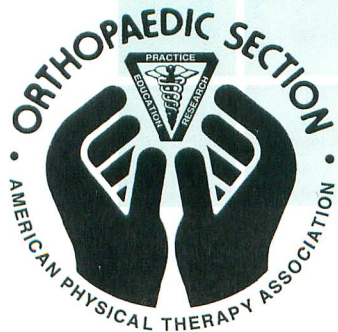
ORTHOPAEDIC

PHYSICAL THERAPY PRACTICE

THE MAGAZINE OF
THE ORTHOPAEDIC SECTION, APTA

VOL. 13, NO. 3

2001



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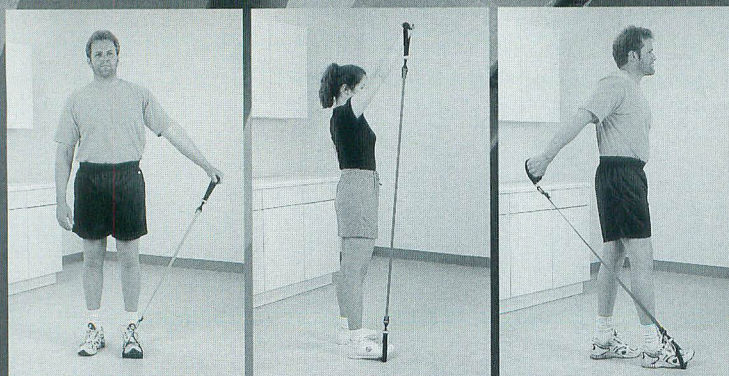
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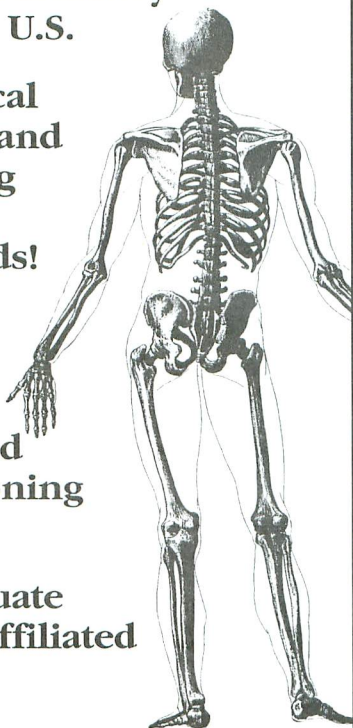
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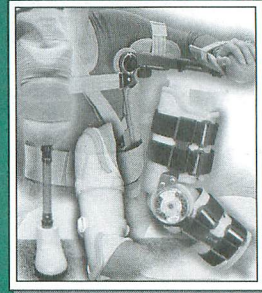
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ORTHOPAEDIC PHYSICAL THERAPY PRACTICE

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The mission of Orthopaedic Section of the American Physical Therapy Association is to be the leading advocate and resource for the practice of orthopaedic physical therapy. The Section will serve its members by fostering high quality patient care and promoting professional growth through:

- Advancement of education and clinical practice,
- Facilitation of quality research, and
- Professional development of members.

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Editor's Message



California Dreamin'

Although it sort of feels like a dream, I know I was in Southern California recently—I have the airline ticket to prove it. But, I spent most all of my time in “Hotels California”—the Anaheim Marriott or Hilton, or the Convention Center. The 2001 House of Delegates held its annual session June 18-20 in Anaheim, California, with Physical Therapy 2001: The Annual Conference and Exposition of the American Physical Therapy Association following. The weather outside was terrific, but delegates to the House enjoyed little of it. Instead, we were in the cold “comfort” of the Marriott. However, we covered quite a lot of business and heard all but 5 motions on the House agenda. This editorial will highlight the actions of the House of Delegates.

A number of motions stimulated quite a lot of discussion. RC 40-01 The Future Role of the Physical Therapist Assistant was hotly debated. After much discussion, the motion passed with amendments. In summary, the motion requires that the APTA and the National Assembly “...undertake a study to determine the preferred future role of the PTA including education level, scope of work within physical therapy, employment, and potential market factors.” The National Assembly was in support of this motion and withdrew their proposed changes to the vision sentence and statement as a result. An interim report will be made to the 2002 House.

Another motion that received much attention was RC 36A/C-01 Investigation of Alternative Models of Physical Therapist Professional Clinical Education. Passage of this motion directs the Association to “...implement a process to study operating models of physical therapist professional clinical education, one of which shall be the internship model.” A final report will be presented to the 2004 House of Delegates, with interim reports in 2002 and 2003. This motion was in response to the current crisis in clinical education, including reimbursement issues for services provided by physical therapist students and physical therapist assistant students.

Continuing education was also a topic of debate at the 2001 House. The Montana Chapter sponsored RC 31-01 Teaching Physical Therapist Patient/Client Management Elements Through Continuing Education to Individuals Other Than Physical Therapists and Physical Therapist Assistants.

This motion was cosponsored by the Orthopaedic Section. This motion was eventually passed after much amending. This position requires both PTs and PTAs to indicate in continuing education course materials that the content presented is not intended for use outside the license or regulation of the attendees. Also, use of those elements is considered physical therapy only when performed by or under the direction and supervision of the physical therapist. You may want to refer to the Practice Affairs Corner article “Selling Out Continuing Education” (*OPTP* 2001;13(1):15-19) for more details on this motion.

Although POPTS are much less of a problem than they were 15 years ago, corporate-owned PT practices are abundant. Ownership and ethical concerns were the primary topic of RC 27-01 Physical Therapist Ownership and Operation of Physical Therapy Services. This position states that “...APTA supports exclusive physical therapist ownership and operation of physical therapy services.” However, this position does not prohibit other types of ownership such as hospital, university, or family-owned practices. The primary concern was that the physical therapist remained independent of influence by nonphysical therapist owners.

Passage of RC 13A-01 Reimbursement for Physical Therapy Services resulted in a new title for our current position and added provisions for reimbursement for physical therapy services provided under the direction and supervision of the physical therapist, when performed by student physical therapist and student physical therapist assistants.

In response to APTA's Vision 2020, endorsed by the House of Delegates in 2000, the House approved RC 37-01 Strategic Plan for Transitioning to the Doctoring Profession. A task force will likely be formed, with an initial report given to the House in 2002. The purpose of this strategic plan will be to provide direction, guidance, and assistance to members as we make the transition to a doctoring profession.

Also in response to Vision 2020, the House adopted RC 41-01, that charges APTA to implement a nationwide public relations campaign that emphasizes physical therapists as the “practitioner of choice for treatment of conditions that affect movement, function, health, and wellness.” The APTA video “We Live for Moments Like These” that premiered at the House of Delegates cer-

tainly is a good start at promoting the physical therapist as the “practitioner of choice.” All delegates to the House and each component office have a copy of the video. If you haven't seen it yet, be sure to borrow a copy from your Component office or delegate. The theme for National Physical Therapy Month was also unveiled, “The Science of Healing. The Art of Caring.”

In addition to setting policy for the Association, we also elected new officers. Those officers include: Randy Roesch, PT, MBA, Secretary; Barney Poole, PT, Vice-Speaker; Pauline Flesch, PT, MPS, Jim Dunleavy, PT, MS, and Scott Ward, PT, PhD, Board of Directors; Carolyn Bloom, PT and Peter Kovacek, PT, MSA, Nominating Committee. Elections were also held for the Representative Body of the National Assembly (RBNA), Roy “Chris” Junkins, PTA, was elected Vice President; Cherie Metz, PTA, was elected Vice Presiding Officer; Juli Robine, PTA, was elected Region III—North Central Director; Russell Stowers, PTA, was elected Region IV—South Central Director; Deanna McCall, PTA, was elected to the Nominating Committee; and David W Emerick, Sr, PTA, was elected Delegate.

As far as the Orthopaedic Section goes, the *Section News* will give you an update of what is going on with various committees and the minutes of the Board Meeting held in Anaheim will fill you in on the actions of the Board. Topics of feature articles in this issue include: use of patient self-report disability scales in goal setting; preventing and managing allegations of provider sexual misconduct; use of the *Guide to Physical Therapist Practice* format in documentation, with a comparison of traditional SOAP notes to *Guide* notes; and treatment of thromboembolic disease. As usual, we have Book Reviews and Abstracts and the newsletters of the SIGs, as well as an announcement about a new education group of the Section. I hope you enjoy this issue of *OP* and find it full of useful information.



Susan A. Appling, PT, MS, OCS
Editor, OP

President's Message

"Vermeer's Camera"

Recently I returned from Anaheim after attending APTA's Annual Conference and Exposition. I came away with many new ideas and thoughts. Dr. Jules Rothstein in his Mary McMillan lecture, emphasized the importance of using scientific evidence to support physical therapy practice. Dr. Anthony Delitto, in the Maley Lecture, presented an amusing comparison between a baseball player's statistics (eg, batting average, runs batted in, and stolen bases) with that of a physical therapist's statistics when treating a patient with low back pain (eg, Visual Analogue Scale, modified Low Back Oswestry scale, SF-36). Dr. Delitto challenged the audience by asking the question, who will be the physical therapy superstars of tomorrow if we were to use these sorts of measurable outcomes as a method for determining professional achievement? I enjoyed both lectures but like any good lecture I was left dangling with my own questions, like who should be doing physical therapy research? And what important outcome measures should we collect on patients? Finally, Dr. Rothstein and Dr. Delitto shared with the audience those people who helped them, including family and professional colleagues, shape their perspective of physical therapy and gave them room for their roots to grow.

So why "Vermeer's Camera?" I used to go to New York City frequently as a member of the Committee on Licensure Examinations and later when the Federation of State Board's took over the National Physical Therapy Exam. The committee was later called the Examination, Construction, and Review Committee (ECRC). I usually had one afternoon before the meeting to explore New York City. One day I wandered into the Metropolitan Museum of Art and into a world I never knew existed. Call it curiosity or fortuity but I will never forget my first walk along the halls gazing at the myriad of paintings in the museum. My only other trip was to the St. Louis Art Museum when I was young and uneducated about art. Today, however, I somehow was overwhelmed by the enormous skill and talent of the artists. With time I developed a passion for art. Currently my two favorite artists in-

clude Renoir (the French Impressionist) and Vermeer (the Dutch Master). Vermeer, as art historians report, turned two-dimensional paintings into three dimensions. Moreover, Vermeer's paintings were so exact in perspective that his pictures have often been compared to actual photographs. In his book *Vermeer's Camera*, Philip Steadman suggested that Vermeer's brilliance came from the use of a camera obscura, one of the first cameras that started to appear around that time period. Steadman suggests that Vermeer used this new science of optics to gain a nearly perfect perspective in his artwork. Steadman's book is a reminder that Vermeer's art was a culture in which art and science vigorously helped each other. For without the science of the newly invented camera, many argue that Vermeer's works would have never gained such proper perspective and therefore such acclaim.

After reading this book I couldn't help but think of the relationship between art and science in physical therapy. The art of physical therapy may be compared to the practice of physical therapy. Many physical therapists use new avant garde interventions, often with good to excellent reported outcomes; however, many of these treatments lack the scientific rigor to consider them seriously. Steadman's book serves as an example, from another discipline, on how the synergy of art and science improved Vermeer's paintings. Applying this example to physical therapy where art (eg, successful physical therapy practice) is inextricably linked with science (eg, good research design and application). Perhaps, we can achieve the sublime yet relevant physical therapy research we so desperately need. Without science we have no compass and without art we have no direction.

Jules, in his Mary McMillan lecture, also discussed the question of who should do this physical therapy research? Physical therapy research has been performed primarily by physical therapists with an advanced doctoral degree like a PhD. Many physical therapists without doctoral degrees, however, continue to contribute to the literature. Where should we go tomor-

row? This is not an easy answer. I have some experience in clinical research; I was lucky to have some great teachers including Dr. Steve Rose, Dr. Jules Rothstein, and Eugene Michels—each with a different personality and talent. Dr. Michels, no Mr. Michels, Mike as he was called, never received a doctoral degree. But Mike was one of the strongest advocates for clinical physical therapy research. Mike published often and frequently promoted and preached research to all physical therapists, especially clinical phenomena that lead to clinical questions. Mike was never afraid to criticize someone's evidence, statistics, or data, although always in a thoughtful manner. I am not saying that we all could be like Mike. Mike promoted all research, even if it was just a better understanding of how to read the literature. I am not going to argue who should or who should not do research.

Knowing Mike, Steve Rose and Jules, I would strongly argue that everyone should be involved with research, either by doing it, consuming it, or critiquing it. Steve Rose was a doer of research—he could not sit still. I can still hear Steve Rose say to me "Mike your treatments sound interesting but where is the data" gently tapping the back of his hand into the palm of the other hand. Without proof I only have "fish" stories. If for whatever reason research is impractical or impossible, I believe we must learn to be connoisseurs of good research. Jules continues to believe in critiquing the literature, constantly imploring readers to look at the research from many different perspectives. The ubiquitous invited commentaries in *Physical Therapy* are examples of his resolve.

So what did I learn from these teachers? We must do, read, or question research, and from these we must use our voice to help guide in which direction clinical research should go with letters to the Editor, to the Section on Research, and to the Orthopaedic Section. Also, we must speak up at state meetings as to where we should be going with clinical research. Review the Clinical Research Agenda that was previously published in *Physical Therapy*. Voice your opinion as to what we need. You can Fax or e-mail

(Continued on page 12)

Pattern 4D, is that your Final Answer?

Judy Hawley, PT, Gail Smida, PT, Daniel J. Zahn, PT, ATC/R, MS, Robin Cedarleaf Nicholson, PT, Spencer David Blackie, PT, OTR, MTC, OCS, ND, Patrick Coomes, PT, Peter Garber, SPT

By now, almost everyone who has anything to do with Physical Therapy has heard about *The Guide to Physical Therapist Practice (Guide)*. The mere phrase, the *Guide*, may put some PTs on their heels and dig in to fight against it. Others see it as another challenge to their practice; a practice to which they have devoted their lives. Now, along with all the other challenges that PTs have faced over the past few years, the *Guide* comes along as yet another change. They feel it's just another big, thick set of rules put out by someone else which will force their

careers down a different path.

While these concerns are understandable, we submit adopting *Guide* principles and utilizing them is simply a different way of doing what we already do. In reality, switching to a *Guide* format would be similar to the format changes we make when switching to a different clinical setting.

The *Guide* is a reference document designed and written by us, PTs, to help in many aspects of our clinical practice. The *Guide* defines for us generally accepted Physical Therapist practice based

on expert consensus. As such, it can be used to support reimbursement of PT services when talking to providers, or as a reference when treating a patient with an impairment with which we aren't familiar. The purpose of this article is to try to make the *Guide* less intimidating. This article will present a case study to help you understand how a standard "SOAP" note and a "*Guide*" note resemble each other. Included is data a PT might normally find during an initial examination, and where it could be placed in a note utilizing *Guide* format.

Guide Format

I. Examination

History

General Demographics: 34 yo married, English speaking, white female.

History of Current Condition: Insidious onset of constant dull ache in central LB 2 weeks ago, with report of slight L L/E weakness involving the L hip, but denies numbness or tingling into LEs or perineal area. Denies bowel and bladder problems. Pain had increased this past week prompting her to see a MD, who prescribed PT and Relafen. Pt. also placed on work restrictions - maximum lift to 25 #s and occasional bending and sitting.

Past History of Current Condition: Work-related LB injury involving only low lumbar area 1 year ago, which resolved in 2 weeks. Did receive PT including lumbar stabilization ex., which she followed for 1 month after DC from PT. She then resumed unrestricted (certified nursing assistant) duties.

Past Medical/Surgical History: Unremarkable

Medications: Relafen (daily).

Other Tests and Measures: None, X-rays 1 year ago unremarkable (per pt.).

Social Habits (past and present): Smoker (1/2 pack per day) - has tried quitting several times, but always gains weight. Sedentary lifestyle.

Social History: Married, mother of 3 (ages 4, 12, and 13).

Family History: Both parents deceased - pt. guessed possibly heart related.

Growth and Development: Overweight as a child; right-handed.

Living Environment: Owns a rambler-type home - does not outside work. Uses no supports or pillows at home.

Occupational/Employment/School: Full time CNA at local community hospital on Med/Surg floor for 6 years.

Functional Status/Activity Level: Stiffness/soreness occurs first hour in morning, with coughing, again at end of day after working; with forward bending to do LE dressing of shoes and socks; and with sitting or standing more than 30 min. Pain interferes with sleep 2 times per night, especially with rolling in bed; and when driving to work which takes 30 min.

Health status (self-report): In general good health, and feels her condition is stabilized with the use of Relafen, but pain interferes with tasks at home and at work.

Systems Review

Physiologic and Anatomic Status:

Musculoskeletal: Grossly WNL UEs for ROM and strength.

Neuromuscular: UE movement pattern WNL.

Cardiopulmonary: BP 138/60, HR 80, RR 16 - all at rest. No ankle swelling, good pedal pulses.

Integumentary: Ashen facial skin color.

Communication Ability, Affect, Cognition, Language and Learning Style: Pt. is a visual learner, and prefers written home program with pictures.

Physical Therapy Tests and Measures

Aerobic Capacity and Endurance: Not tested.

Anthropometric Characteristics: 5'3", 210#s - 43% body fat.

Arousal, Attention, and Cognition: Alert and oriented X 3.

Community and Work Integration/ Reintegration: Pt. reports she does transfer and bed repositioning of patients at work. Her job also requires stooping during patient care activities.

Environmental, Home, and Work Barriers:

Ergonomics and Body Mechanics: Not tested.

Gait, Locomotion, and Balance: Gait shows a decrease in L leg stance phase, a decrease in R stride length, and slight positive L Trendelenburg.

Integumentary Integrity: Not tested.

Joint Integrity and Mobility: Passive intervertebral mobility testing shows L3 limited in R sidebending (2/6) and R rotation (2/6).

Motor Function - Control and Learning: Pt. shows L Lower Crossed Syndrome.

Muscle Performance - Strength, Power, Endurance: LE strength: L 1/2 Psoas, L 4/5 and R 5/5; L3 - S2 are all 5/5. L hip extension 4/5 and L hip abductors 4/5. Trunk flexors 3/5 with visual atrophy of lumbar paraspinals bilaterally L3 - S1.

Neuromotor Development and Sensory Integration: Not applicable.

Orthotic, Protective, Supportive Devices: Pt. has never used any device.

Pain: Pain scale not assessed - may do Oswestry Test next visit.

Posture: Forward head position, kyphotic dorsal spine and protracting shoulders. In static stance, note decreased weightbearing on L.

Range of Motion (including muscle length): Active lumbar ROM (standing) shows forward bending 0° - 30° (limited by pain), back bending 0° - 10° (limited by pain), R sidebending 0° - 25°, L sidebending 0° - 38°, R rotation 0° - 32°, and L rotation 0° - 47°. SLR 45° L and 60° R, and limited by hamstring tightness.

Reflex Integrity: Normal and symmetrical Achilles and Patellar reflexes bilaterally.

Self Care and Home Management: Pt. observed to bend at waist to pick up purse on floor. Also transfers self out of chair by pushing hands on thighs.

Sensory Integrity: Intact to light touch L2 - S1 bilaterally.

Ventilation, Respiration, and Circulation: Not applicable.

II. Evaluation (Clinical Judgment)

Pt. is a deconditioned, obese woman with joint and soft tissue mobility restrictions, and impaired lumbar muscle performance which results in functional limitations during her duties as CNA and with her role as a mother of 3.

III. Diagnosis by Physical Therapist

Pattern # 4D: Impaired joint mobility, motor function, muscle performance, and range of motion associated with capsular restriction of the lumbar spine.

IV. Prognosis

Predicted Optimal Level of Improvement in Function: Over the course of 2 months pt. will demonstrate a return to normal home activities and to full work duty without restrictions.

Predicted Interval Levels of Improvement in Function:

Pt. will be able to:

- * Improve trunk flexion to 60° (fingers to reach ankles) allowing easy donning/doffing of shoes and socks in 3 weeks.
- * Sustain seated position while driving 30 min. without pain in 3 weeks to allow the commute to work.
- * Lift 60#s from chair height to bed height demonstrating proper body mechanics and controlled speed in 4 weeks so she can meet CNA job requirements.

Plan of Care

Frequency and Duration: 2 times per week for 4 weeks.

Re-examination: Perform selected tests and measures to evaluate pt.'s progress toward goals in order to modify or redirect intervention if pt. fails to show progress.

Criteria for Discharge: Pt. reaches established functional goals, pt. declines further treatment, is unable to progress towards goals because of complications, or PT determines that pt. will no longer benefit from PT services.

V. Intervention

Coordination, Communication, and Documentation:

Possible referral to smoking cessation, nutrition and weight loss programs. Communicate with MD, pt., work manager, and work comp case management regarding pt.'s status (direct or indirect). Documentation will include all elements of patient/client management. Discharge planning will be provided.

Patient Related Instruction: Periodic re-examination and re-assessment of the home program, utilizing written instruction and illustrations. Educate pt. in proper body mechanics and postures, and in positions and motions to avoid during home and work. Educate pt. in the benefits of an ongoing conditioning program to prevent functional decline, and to prevent re-occurrence of impairments. Modeling/demonstration or use of audiovisual aids will be used for teaching.

Direct Intervention:

1. Therapeutic Exercise: Stretching exercises for tight lumbopelvic tissues. Strengthening and stability exercises for trunk and pelvic musculature. Body mechanics and ergonomic training. Posture awareness program. Instruction in walking program.

2. Functional Training in Community and Work Integration: Job simulation training. IADL training in home and caregiver chores.

3. Manual Therapy Techniques: Joint mobilization, connective tissue massage, soft tissue mobilization.

4. Physical Agents and Mechanical Modalities: Ultrasound to low lumbar area.

Outcomes

*Pt.'s outcome depends on adherence to the recommended home ex. program and treatment plan, as well as other recommended lifestyle changes. It is anticipated pt. will return to preinjury work level in 2 months, without recurrence of LBP in the following year. Pt. understands the strategies to prevent further functional limitations and to self manage any minor recurrences. Pt. is satisfied with the services provided by this PT. Secondary prevention will include awareness of factors indicating need for re-examination or new episode of care, and information on walking and smoking cessation programs.

SOAP Format

Subjective: Pt. is a 34 YO married, white English speaking female, mother of 3, who developed weakness in L LE and constant dull ache in LB. Ache intermittently radiates into L hip and posterior thigh. Pt. works as a CNA in a small community hospital on the Med/Surg floor. Past medical history includes a work-related LB injury 1 year ago which resolved in 2 weeks. She did receive PT including lumbar stabilization ex. which she followed for 1 month after discharge, and then resumed unrestricted CNA duties. Pt. also smokes and states that she has tried to quit several times, but always gains too much weight. PMH is otherwise negative. Pt. reports she has had increased pain the past week and was referred to PT, placed on work restrictions, and medicated with Relafen. Medical diagnosis on PT referral form indicates lumbar strain. Aggravating factors include stiffness/soreness first thing in the morning, coughing, end of the day, forward bending, sitting or prolonged standing. Pain also interferes with sleep at times and seems to vary with activities performed throughout the day. Pt. denies numbness/tingling in the LEs or in the S4 region and denies bowel/bladder problems. Pt. feels her condition at the present time has stabilized with the use of Relafen which she takes daily.

Objective: Pt. is an endomorphic, moderately obese female with current body fat composition of 43%. Posture evaluation shows forward head position, kyphotic dorsal spine, and protracted shoulders. Gait and balance evaluation shows a decrease in L leg stance phase, a decrease in R stride length, and slight positive L Trendelenburg. Active lumbar ROM shows forward bending 0° - 30° (limited by pain), back bending is 0° - 10° (limited by pain), R sidebending 0° - 25°, L sidebending 0° - 38°, R rotation 0° - 32°, and L rotation 0° - 47°. Muscle strength shows L 1/2 Psoas: L 4/5 and R 5/5; L3 Quads: both 5/5 S1; FHL: both 5/5, and S2 Hamstrings: both 5/5. In addition, pt. shows weakness on L glut max (hip extension) as exhibited by concurrent firing of this muscle with lumbar paraspinals. L hip abductors are 4/5, trunk flexors are 3/5 with poor transverse abdominal contraction, and trunk extensors are 3/5 with visual atrophy of lumbar paraspinals bilaterally L3

through S1.SLR is 45° L and 60° R. Passive intervertebral mobility testing shows L3 limited in R sidebending (2/6) and R rotation (2/6). Pt. has never used a lumbar corset. Pt. observed to bend at the waist with knees extended to pick up purse and pushes with hands on thighs to rise from chair. Reflex testing is equal and symmetrical for the Achilles and Patellar reflexes bilaterally. Sensation to light touch is intact L2 through S1 bilaterally.

Assessment: Lumbosacral strain in a deconditioned, moderately obese health care provider.

Plan: Per orders, will see pt. 2 times per week for 4 weeks and include the following treatments:

1. Body mechanics and ergonomic training
2. Posture awareness training
3. Therapeutic exercise including stretching of the hamstrings and strengthening of the trunk and pelvis (esp. gluteals), abdominals, and low lumbar paraspinals
4. Joint mobilization of L3 dysfunction to restore R sidebending and R rotation
5. Job simulation activities/retraining
6. Soft tissue mobilization of lumbar spine
7. Ultrasound to bilateral low lumbar area
8. Instruct pt. in walking program
9. Possible referral for smoking cessation and weight loss programs

Goals

Short Term Goals:

1. Improve trunk flexion to allow ease in donning/doffing of shoes and socks in 3 weeks
2. Ability to tolerate sustained sitting, more than 30 min. to allow drive time to and from work without LBP in 3 weeks
3. Able to lift 60#s from chair to bed height demonstrating proper body mechanics and controlled speed in 4 weeks

Long Term Goals: Improve trunk stability to allow pt. to complete workday without increase in back symptoms in 3 months.

SUMMARY AND CONCLUSION

Hopefully seeing a comparison document of a case study in *Guide* format will stimulate you to open your *Guide* and read it. After that, what are you going to do? The following ideas could help you begin incorporating the *Guide* into your every day practice.

1. Begin by placing each patient you treat in a practice pattern. This allows you to become familiar with related ICD-9-CM codes, as well as what is included, and excluded in each pattern.
2. Update your current department forms to reflect *Guide* language. One purpose of the *Guide* is to provide a standardized terminology format. This will become more important as time goes on and we are required to gather data.
3. Select a patient as a Case Study, and rewrite your initial note in *Guide* format. This could be an individual or group project at a department meeting.

4. When conducting department chart reviews, decide if the practice pattern given as the diagnosis fits the patient examination, and if the actual number of treatments provided fall within the expected range of number of visits per episode of care for that pattern. After all, this is what the third party payers will be doing!
5. Develop a department initial evaluation form that incorporates all 5 elements of patient/client management. Consider using check boxes and spaces for additional words as necessary.

Now, armed with this comparison, you've read the first 3 chapters in the *Guide*, and have some ideas to try in the clinic. You can move forward with confidence instead of dread and trepidation into the new world of the *Guide*.

Please note that this was written in the months prior to the revised edition of the *Guide*. The next challenge is to integrate this "old" *Guide* information with the "new" *Guide* information.

The authors are all members of the Minnesota APTA Orthopedic Outcomes Work Group has been meeting since 1990. The Outcomes Work Group is just one of the practice work groups within the MN APTA. Quality Improvement Committee. The group has studied the Patient Management Model based on the *Guide*, and is developing a Functional Task Patient Questionnaire based on WHO's ICIDH-2 to assist in outcomes data collection. The Outcomes Work Group has discussed a video training tool which would demonstrate components of the *Guide*, such as choosing a Practice Pattern, utilizing commonly used tests and measures, examples of an episode of prevention, an episode of care, and an episode of maintenance, as well as transfers across settings.

Preventing and Managing Patient Allegations of Provider Sexual Misconduct

Jonathan Cooperman, MS, PT, JD

Despite increased delegation of routine tasks to supportive personnel and the use of “high-tech” modalities, physical therapy remains an intensively hands-on profession. Therapists spend time evaluating and treating individuals with a variety of painful syndromes and disabilities. Establishing rapport, listening to patients, being empathetic and the ability to therapeutically touch are traits generally valued by physical therapists. Although it is surprising to some that allegations of sexual misconduct are on the rise within physical therapy, the incidence of sexual misconduct has long been disproportionately high in the health care environment.¹ Any allegation of sexual misconduct can have a devastating effect on a health care provider. The defendant-provider might find themselves in criminal or civil court, or before administrative bodies such as State License Boards. Physical therapist members of the APTA may face sanctions from the Ethics and Judicial Committee for violations of the Association’s Code of Ethics.² In addition, professional liability policies do not usually provide coverage for these type of claims (making the health care provider personally responsible), and an individual’s standing in the community may be tarnished by the allegation, regardless of the outcome. Fostering awareness of these problems and taking definitive steps toward risk management should play a significant role in lessening the chance that these claims will be brought.

SEXUAL MISCONDUCT

Sexual misconduct usually gives rise to claims of sexual assault and battery or sexual abuse. A sexual assault is commonly defined as a *nonconsensual* touching of a patient for the purpose of arousing or gratifying the sexual desires of either party to the relationship. Sexual abuse is often thought of in terms of the engaging in sexual conduct with an individual who is incapacitated or to whom the perpetrator owes a special duty of care (minors, students, or the elderly). Either definition can apply in patient care. In fact, state statutes may not distinguish between the two.

Physical therapists owe a fiduciary duty to their patients, ie, they have the legal and ethical duty to act primarily in the patient’s best interests. Because the health care provider is in a position of power, and because patients are often in pain and thereby vulnerable, *any* patient-provider relationship is inherently exploitive. Although, a response to allegations of sexual misconduct with a patient might be that the conduct was con-

Establishing rapport, listening to patients, being empathetic and the ability to therapeutically touch are traits generally valued by physical therapists.

sensual, “consent” on the part of a patient is a legal fiction. If a patient-provider relationship exists, there can be no consent to a sexual relationship. The physical therapist is always responsible for creating the relationship, regardless of who might have initiated the emotional or physical contact. The APTA Guide for Professional Conduct states unequivocally that the physical therapist “shall not engage in any sexual relationship or activity, whether consensual or nonconsensual, with any patient while a physical therapist/patient relationship exists.”²

If a relationship is about to occur, the therapist should disengage him or herself from the care of that patient, and transfer the care to another provider. Risk management strategies for avoiding allegations of sexual misconduct include obtaining informed consent and keeping one’s conversations on a professional level. Telling inappropriate jokes and engaging in sexual double entendre are bound to increase the risk that someone will be offended.

SEXUAL HARASSMENT

Brought to public attention during the confirmation hearings of now United States Supreme Court Justice Clarence Thomas, the laws surrounding sexual ha-

arrassment have been in place for some time. Title VII of the 1964 Civil Rights Act³ forbids discrimination against employees (and job applicants) on the basis of race, gender, religion, and national origin. Although Title VII cases can only be brought in the Federal court system and only apply to employers with 15 or more employees, there are often state laws that mirror Title VII. In addition, those receiving federal funds, eg, those in the school systems, can file claims of sexual discrimination under Title IX of the Education Amendments of 1972.⁴

The Equal Employment Opportunities Commission (EEOC), the federal regulatory body charged with interpreting and enforcing these laws, states that sexual harassment is a form of sex discrimination that violates Title VII. In 1981 the EEOC promulgated its guidelines that state, in part...

Unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature constitutes sexual harassment when submission to or rejection of this conduct explicitly or implicitly affects an individual’s employment; unreasonably interferes with an individual’s work performance; or creates an intimidating, hostile, or offensive work environment.⁵

Legal scholars refer to employment-related decisions premised on sexual conduct, as *quid pro quo*, a Latin term meaning something for something. In contrast, most of the cases brought before the EEOC deal with allegations of a hostile or offensive work environment. These complaints are always decided on a case-by-case basis.

At the very least, these complaints must allege that the conduct is unwelcome, is of a sexual nature, and unreasonably interferes with the work environment. The harasser may be a man or a woman, a supervisor, an agent of the employer, a co-worker, or a non-employee. The **hostile environment** may manifest itself in a one-time incident of sufficient severity.⁶

In 1998, The United States Supreme Court decided several cases relating to

sexual harassment. In the Oncale case, the Court ruled that same-gender sexual harassment is actionable.⁷ More significantly, in 2 combined cases, the Court clarified the responsibilities of the employer for the acts of its agents, supervisors, and managers.⁸ The employer is clearly subject to vicarious liability for acts of its supervisors who create a hostile environment. However, if the individual alleging harassment has suffered no "tangible job detriment" (job termination, demotion, cut in pay, etc.), an affirmative defense is available. In other words, the employer can escape liability by showing:

1. the employer exercised reasonable care to prevent and correct promptly any harassing behavior; and
2. the plaintiff employee unreasonably failed to take advantage of preventative or corrective opportunities provided by employer.

CREATING AWARENESS

Outpatient facilities, especially those with a younger staff, often have a casual working atmosphere. Although this is generally good for staff morale, therapists need to be aware that their conversations and/or actions could offend patients and visitors to the clinic. Therapists need to respect the fact that their own "comfort zone" of behavior might be significantly broader than that of others.

The recent proliferation of electronic mail and Internet usage has brought with it a new set of problems for risk management officers. Everyone who has access to the Internet or e-mail needs to be cognizant about what is being sent and received. Sexually charged jokes and personal comments have no place in the workplace, even if one assumes that they are being sent through "secured" channels.

I am not recommending a sterile work environment. Rather, physical therapists must recognize the inherent differences between genders in our society. In an interesting article on gender bias, Struckman-Johnson⁹ looked at college men's reactions to hypothetical uninvited sexual advances from casual female acquaintances. The authors found a beauty bias, in that men had a more positive reaction to the women labeled as *very attractive*, even when moderate to high levels of coercion (force) were used. Clearly, men and women respond differently to different situations.

Some of the current approaches within physical therapy—especially those sometimes referred to as "alternative therapies"—involve therapeutic

touch that occurs away from the area of chief complaint. Techniques such as "pelvic unwinding" may place the physical therapist at increased risk for an allegation of inappropriate sexual behavior. Regardless of the efficacy of the clinical approach or the modalities employed, therapists need to recognize that patients can become attached to their provider. This "transference" is well documented in the psychological literature.¹⁰ Thus, the ability to touch, one of the traits that therapists pride themselves in, can potentially lead to their professional demise.

RISK MANAGEMENT

Many of the risk management strategies are common sense based. Announcing oneself before entering the patient treatment area ensures that patients will not be in an inappropriate state of undress or that others will not witness a portion of the patients' treatment. Along those lines, staff should be instructed in proper draping techniques. Seemingly innocent exercises, like having a patient perform straight leg raising exercises with their feet toward the open clinic (as opposed to toward a wall) can lead to problems if while wearing shorts the genital area is exposed to other patients and staff.

Informed consent policies should be instituted so that patients are clear as to the procedures they will be experiencing.^{2,11} Informed consent can be obtained orally or in writing. At the very least, a written clinic policy should exist explaining informed consent and its elements, and the procedures for how informed consent will be obtained from each patient. Clinic managers must decide for themselves whether or not to obtain written informed consent for some of the more intensively "hands-on" procedures or for procedures that might have an associated higher risk of injury. Regardless of whether informed consent is obtained in writing or orally, it serves to make the patient an active participant in the rehabilitation process—which generally reduces risk.

With regard to sexual harassment, here are several risk management tips for employers:

- the employer should have a strong policy statement in place defining sexual harassment and stating that it will not be tolerated,
- the employer should take steps to educate the workplace about sexual harassment,
- the employer should express strong disapproval of any actions which might be considered to be sexual in nature,

- a grievance procedure should be in place and employees should be aware that it exists,
- a fair and unbiased investigation should be undertaken immediately following an allegation of sexual harassment, and
- the employer should take prompt remedial action when inappropriate conduct is identified (note: The EEOC recognizes prompt and remedial action as an appropriate defense to claims of hostile workplace. This is not true for claims of quid pro quo (where the harassment is an explicit or implicit condition of employment or is used as a basis for employment decisions).

RISK MANAGEMENT STRATEGIES

The following are good risk strategies to employ:

- obtain informed consent;
- same sex chaperon when palpating, evaluating, or treating;
- knock and enter policy; and
- educate staff regarding patient handling.

Case Study

John Smith, PT was referred a 14-year-old female patient (Kimberly) with the diagnosis of low back strain. Kim was a competitive soccer player, in season, and was rated as the district's top prospect for "athlete of the year." Kim's mother dropped her off at the therapy office in time for her 5:00 PM appointment and then left to pick up her other 2 children, promising to return in approximately 1 hour. The receptionist (Sally) took the appropriate information for billing and had the mother sign the consent to treat form. The chart was completed and the receptionist left for the day. John escorted Kim into the area of the clinic reserved for evaluations. John, after a thorough assessment, agreed with the diagnosis provided and instituted a plan of treatment that included stretching, the appropriate use of heat or cold, exercises and soft tissue mobilization to the lumbar paravertebrals. John carefully positioned Kim in neutral, lowered her sweatpants to allow access to the sacral base and began his soft tissue work. About that time, Kim's mother returned. The rehabilitation aide, Frank, was covering the front desk and offered to escort Kim's mom to the treatment area. As Frank and the mother neared the curtained area, Kim moaned as John did some deeper soft tissue work. Kim's mom hurriedly pulled back the curtain to see

Kim's buttocks partially exposed with John's hands on them. She asked Kim to get dressed and quickly took her home. The next day, John received a temporary restraining order and learned that a complaint had been filed with the local police department.

What happened??

John had done nothing wrong. He had done a thorough evaluation and had offered treatment consistent with what an ordinary, reasonable, physical therapist would do in the same or similar circumstances. Or had he?

How could this situation have been avoided?

"Consent to treat" is not informed consent, which should have been obtained from the mother since Kim is a minor. Explaining all the aspects of treatment to Kim's mom would have avoided any surprises. A same sex chaperone should have been available in the clinic (assuming that when the receptionist went home, there was only Frank and John left in the clinic). A knock and enter policy would have given John the opportunity to drape Kim and then explain to her mom about the treatment, before resuming.

REFERENCES

1. Scott RW. *Promoting Legal Awareness in Physical and Occupational Therapy*. St. Louis, Mo: Mosby; 1996.
2. *Code of Ethics: Guide for Professional Conduct*. 1996. Alexandria, Va: American Physical Therapy Association; 1996.
3. Civil Rights Act of 1964, Title VII, 42 USC, Section 703(a).
4. Title IX of the Educational Amendments of 1972, 42 USC, Sections 1681-1683.
5. Sex Discrimination Guidelines, Equal Employment Opportunity Commission. 29 CFR 1604.11, Federal Register. November 10, 1980; 45:74677.
6. *Radtke v. Everett*, 442 Mich. 368, 395 (1993).
7. *Oncale v. Sundowner Offshore Services, Inc.* No. 96-568 (US Supreme Court, March 4, 1998).
8. *Faragher v. City of Boca Raton*, Case No. 97-282 569 (US Supreme Court, June 26, 1998) and *Burlington Industries, Inc. v. Ellerth*, Case No. 97-569 (US Supreme Court, June 26, 1998).
9. Struckman-Johnson CS, Struckman-Johnson D. Men's reactions to hypothetical female sexual advances. *Sex Roles*. 1994;1:387-405.
10. Kaplan HI, Sadock BJ. *Synopsis of Psychiatry*. 7thed. Baltimore, Md: Williams & Wilkins, Inc.; 1994:826.
11. Purtillo RB. Applying the principles of informed consent to patient care. *Phys Ther*. 1984;64:934-937.

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President's Message

(Continued from page 6)

me anytime. Together, in synergy, we can make a difference.

The APTA and ABPTS recently announced that we have over 240 new Orthopaedic Clinical Specialists that just passed the Orthopaedic Clinical Specialty Exam. Congratulations to all. We hope and believe that each new class will further strengthen and enhance our profession. Also, the new Description of Advanced Clinical Practice (DACP) now called the Description of Specialized Practice (DSP) will, hopefully, make its debut. This new document, which will update the last DACP, was put into *Guide* language and given an evidenced-based practice perspective. I hope that this document will be approved sometime soon. Special thanks go out to Jeannie Bryan Coe, Robert Johnson, Nancy Henderson, Rob Landel, Subrina Linscomb, and last but definitely not least, Aimee Klein for all the hard work in preparing this seminal document. The DSP, when finished and approved, will help guide Orthopaedic Practice (art), the ortho-

paedic specialty exam, and hopefully orthopaedic physical therapy research (science) for years to come.

Finally, we also recently named a new Home Study Course Editor, Mary Ann Wilmarth. If you have any suggestions or are interested in writing on a topic please contact the Home Study Course Coordinator, Kathy Olson, at the Section office. We again thank Carolyn Wadsworth (who also was a past Orthopaedic Section President) for all of her hard work as Home Study Course Editor the past five years.

Hopefully, after reading this message you came away with the importance of the synergy needed to make good things happen. I wish all the best to you and hope you stay involved—we need your cooperation also.



*Orthopaedically PT
Yours,
Michael T. Cibulka,
PT, MHS, OCS
President*



NATIONAL PHYSICAL THERAPY MONTH
AMERICAN PHYSICAL THERAPY ASSOCIATION

A Novel Use for Disability Scales: Goal Setting

Todd A. Watson, DPT, OCS, FAAOMPT, Chris P. Rodriguez, MA, LMFT

INTRODUCTION

Physical therapists have been using self-reported functional measures (ie, disability scales) to assess back pain related disability for 2 decades, particularly 2 of the most commonly used scales¹—which are the Roland-Morris Questionnaire² (RMQ) and the Oswestry Low Back Pain Disability Questionnaire (OSW).³ This paper purposes to present a novel use for these tools, using them in setting goals for our patients, thereby expanding the utility of the instruments. We advocate a second administration of these scales at the initial evaluation (in addition to its standard use prior to initial evaluation), asking the patient to answer the disability questions as they would like to see themselves at the conclusion of their physical therapy program.

DISCUSSION

The RMQ is a 24-item questionnaire containing statements of disability due to back pain. The RMQ is scored 1 point for each statement selected. A score of 0 (no selections) is classified as no disability, and a score of 24 (all statements selected) is classified as severe disability. The OSW is a 10-item questionnaire that addresses function by asking the patient to rate his or her perceived disability level concerning different tasks of daily living. Each item is scored 0 to 5 where higher values represent greater disability, and then the total score is multiplied by 2 to give a percentage. Consequently the higher the percentage score the higher the patient's perceived disability related to low back pain (LBP). Both the RMQ and the OSW require an estimated time of completion and time to score of less than 5 minutes each.

In an effort to understand the physical etiology of biological dysfunction, many have turned to a medical model for insight and direction. From this perspective, philosophy of reductionism is used to understand and predict the impairment process. Further, this stance moves to separate the relation of psychological and physiological functioning. Unfortunately, the medical model falls short of explaining many experiences seen with regard to patient response in a variety of clinics, be it internal medicine, psychiatry, or physical therapy. For years ideas have grown to consider the psychologi-

cal and social influences on the physical process, culminating in the biopsychosocial model. Engel⁴ described the biopsychosocial model as the clinician's approach to any patient involving 3 interacting dimensions of the patient's functioning: biological (physical or organic processes), psychological (aspects of mental functioning, including thought, behavior, and emotion), and social (interactions with others, including family, friends, colleagues at work, professionals, and others important to the patient). These variables interact in complex and interdependent ways to affect the patients' experience of illness. By considering each of these factors, the clinician is more likely to achieve "meaningful understanding" of the patient. For example, if the patient's problems are clearly biological, then the clinician should focus on the biological dimension of the assessment. In other patients, psychological or social factors may predominate, and the clinician should then emphasize these areas of functioning. In most circumstances, however, all 3 factors—biological, psychological, and social—must be considered in order to understand the patient. This model is presented as a language and paradigm in an attempt to provide greater breadth of knowledge for which scientist and clinician alike can achieve a more meaningful understanding of the patient response system.

Traditional paradigms such as the medical model have fallen short of explaining why some patients respond better than others. From the biopsychosocial model we begin to appreciate the potential for greater insight via the interaction of the biological, psychological, and social systems. Social scientists also have sought to understand and predict the origins of pathology in an attempt to offer viable treatment with predictable outcomes.

The solution-focused model directs patients to shift their thoughts away from being problem-focused. By modifying the language used in therapy to what a client desires versus what they hope to avoid, many clinicians have documented a more favorable outcome.⁵ Rather than concentrate on the patient's complaints in an attempt to overcome their problems, the clinician draws attention to their strengths, abili-

ties, and potentials, helping enable the patients to recognize and build on those strengths. From the solution focused approach, a patient presenting to physical therapy with a chief complaint of chronic low back pain would be asked to consider times when they experience an absence of back pain and improved function. The intent of this questioning is to redirect a person's orientation towards their desired outcome rather than what they wish to avoid. This assists in shifting the patient's paradigm from impairment to function.

Beattie and Maher⁶ state that self-reported functional measures have 2 primary clinical applications. First, to screen patients for comorbid conditions such as systemic disease or psychobehavioral risk factors; and second, to quantify the patient's perception of his or her impairment/pain, functional limitations, and disability. One consideration should be re-evaluation of the scaling questions we extend to our patients as a means of assessing their confidence, hopefulness, and investment in their willingness to work towards solutions. To achieve this, using the biopsychosocial model, we propose that disability scales used at initial evaluation be administered a second time in the following manner. The patient should be instructed to answer the disability questions *not* as they describe their condition on that day, but rather as the patient would answer the question when they finish their physical therapy program (ie, how do patients see themselves answering the question when their condition is better). This use of the tool can assist physical therapists in not only knowing what our patient's personal goals are, but if they are appropriate. Patients may have goals in mind that are too lofty given their prognosis, or their goals may be simply too low. This method attempts to establish patient goals relative to the tool used to monitor functional status.

Disability scales can be administered a second time at the initial evaluation to assess a patient's desired outcome (ie, expectation). Following completion of the initial evaluation, based on the patient's prognosis, it may be determined if the patient's goals from the disability questionnaire are realistic. Subse-

(Continued on page 15)

Thromboembolic Disease Anticoagulation Therapy

Gary Shankman, OPA-C, PTA, ATC, CSCS

This column is geared toward the physical therapist assistant and is being coordinated by Gary Shankman, PTA, MS, OPA-C, ATC, CSCS.

Thromboembolic disease, deep venous thrombosis which propagates to pulmonary emboli (PE), is among the most common causes of mortality and morbidity with hospitalized patients.¹

Hip and knee arthroplasty place patients at very high risk of developing thromboembolic disease without any other known risk factors. Generally, most high-risk orthopaedic patients have a 40% to 70% chance of developing deep vein thrombosis (DVT).^{1,2}

PATHOPHYSIOLOGY OF THROMBOEMBOLISM

Most thrombi are initiated in valve cusps of deep veins in the lower leg. Thromboplastin, thrombin, and fibrin are part of the coagulation cascade of events which stimulate the adherence of platelets to vessel walls. Platelet adherence at valves creates a build up of cells, which coagulates into a thrombosis.¹

A dislodged clot from the thrombus is referred to as an embolus. Pulmonary emboli (PE) are a threatening consequence where the lower lobes of the lungs are 4 times more involved than the upper lobes.²

VIRCHOW'S TRIAD

Three class factors generally lead to the development of deep vein thrombosis. Categorically referred to as Virchow's Triad of factors, hypercoagulability, venous stasis, and endothelial vessel wall injury all contribute to the pathogenesis of thrombi and emboli. Hypercoagulation is the result of tissue trauma (surgery or injury), which initiates and propagates an imbalance between fibrinolysis and coagulation. Trauma exposes collagen fragments, thromboplastin, and fibrinogen, which in turn stimulate platelet activity and volume. The initial trauma of surgery shifts the balance more towards coagulation than towards fibrinolysis and ultimately, the formation of deep vein thrombosis. Vessel wall injury and venous stasis are di-

rectly related to various orthopaedic surgical procedures including total joint arthroplasty, pelvic fractures, and femur fractures.^{1,2}

RISK FACTORS

Several intrinsic and extrinsic risk factors are identified as additive factors in the potential development of thromboembolic disease. Surgery, trauma, obesity, malignancy, older age (> 40 years), oral contraceptives, and immobility are well known causative factors in the development of deep vein thrombosis. In addition, smoking, heredity, congestive heart failure, prior history of DVT, and varicose veins also contribute as risk factors for the development of thromboembolic disease.^{1,2}

SIGNS AND SYMPTOMS OF DVT

Very high levels of suspicion must accompany all complaints of proximal thigh pain, inguinal and lower leg pain following postoperative joint arthroplasty, pelvic fractures, spinal surgery, and general trauma. Symptomatology is nonspecific with generally diffuse complaints of leg pain and tenderness following surgery. Signs include edema, palpable warmth, skin discoloration, prominent superficial veins, and positive Homan's sign.

It is important to recognize that approximately 50% of DVTs are asymptomatic. Symptoms generally arise locally from relatively large thrombi, including or excluding inguinal and proximal thigh veins.¹

DIAGNOSTIC STUDIES

Testing or diagnostic procedures must be sensitive, accurate, specific, reliable, and reproducible in order to convey the precise anatomic status of the patient's pathology. The current diagnostic study for suspected DVT is duplex ultrasonography. This test combines Doppler assessment and ultrasound examination of the venous system with manual compression. Veins that do not easily compress with normal pressure on the transducer may be considered positive for DVT.

Clinical probability estimates of physical examination alone of

Homan's sign, edema, and palpable firmness is approximately 50% reliable for positive DVT. Generally proximal thrombi of the inguinal area, deep proximal thigh and popliteal area are considered more dangerous than deep calf vein thrombi since distal clots are smaller and are less frequently associated with major complications.^{1,2}

PULMONARY EMBOLI

Pulmonary emboli are a result of and a complication from deep vein thrombosis. A dislodged deep vein thrombus may travel to the pulmonary artery or an associated branch, and obstruct the pulmonary blood supply. The result is hypoxia from constriction of bronchioles, mediated by vasoconstrictive substances of serotonin, histamine, and prostaglandins. The net effect is pulmonary infarction, shock, and congestive heart failure.

Signs and Symptoms

Generally patients with symptomatic pulmonary emboli may complain of pleuritic pain, dyspnea, and tachypnea. These signs are broad and nonspecific and are not interpreted as diagnostic. The signs and symptoms of PE are related to the size of the embolus and the cardiopulmonary status of the patient.¹

PHARMACOLOGIC TREATMENT OF THROMBOEMBOLIC DISEASE

High-risk orthopaedic patients undergoing total joint arthroplasty are treated with warfarin (Coumadin), heparin, or low molecular weight heparin (Enoxaparin). The judicious use of LMWH (low molecular weight heparin) has proven both safe and effective in the prevention and treatment of DVT in orthopaedics. The use of LMWH is more predictable than heparin with 92% bioavailability compared to 29% bioavailability of Heparin.¹

Therapeutic administration of anticoagulation begins 12 to 24 hours postoperatively. Optimal therapeutic effect of warfarin (Coumadin) takes 4 to 7 days. Methods of delivery of LMWH (Enoxaparin) is via subcutaneous injection rather than intramus-

cular. Warfarin (Coumadin) is indicated for prophylaxis and treatment of DVT and PE. Long-term treatment of verified DVT and/or PE may take 3 to 6 months. Warfarin is administered orally. Secondary to its poor gastrointestinal absorption, heparin is administered either intravenously or subcutaneously.¹

Nonpharmacologic treatment of DVT is generally with the use of anti-embolism stockings and/or intermittent pneumatic compression (IPC). Contraindications for the use of pneumatic compression devices include local ulcerations, cellulitis, and arterial insufficiency.

REFERENCES

1. Hyers TM. *Handbook of Deep Venous Thrombosis in Hip and Knee Replacement*. Philadelphia, Pa: Science Press; 1996.
2. Morris CD, Creevy WS, Einhorn TA, Pulmonary Distress and Thromboembolic Conditions Affecting Orthopaedic Practice. In: *Orthopaedic Basic Science Biology and Biomechanics of the Musculoskeletal System*. Buckwalter JA, Einhorn TA, Simon SR, eds. 2nd ed. AAOS. 2000.

(Continued from page 13)

quently, questions could be asked to address a patient's unrealistic perceptions and challenge their expectations to meet that which is indicated by the prognosis. These questions may be asked on a global level, or if indicated, on an individual questionnaire item.

In the case where the patient's perception of desired outcome is too low, the follow-up question should address what obstacles the patient sees as preventing their improvement. Alternatively when the patient's goals are perceived too high by the clinician, the follow-up question can be similar, using Socratic questioning, asking what may stand in the way of achieving the desired outcome.

CONCLUSION

In conclusion, we recommend the expansion of the use disability scales to facilitate goal setting and improved clinician patient understanding. This can be accomplished with a second, modified administration of the instrument, requiring only an additional few minutes to complete as well as score.

REFERENCES

1. Beurskens AJ, deVet HC, Koke AJ, et al. Measuring the functional status of patients with low back pain: assessment of the quality of four disease-specific questionnaires. *Spine*. 1995;20:1017-28.
2. Roland M, Morris R.A study of the natural history of back pain part 1: Development of a reliable and sensitive measure of disability in low-back pain. *Spine*. 1983;8(2):141-4.
3. Fairbank JC, Couper J, Davies JB, O'Brien JP. The Oswestry Low Back Pain Disability Questionnaire. *Physiotherapy*. 1980;66:271-3.
4. Engel GL. The clinical application of the biopsychosocial model. *Am J Psychiatry*. 1980;137:535-44.
5. Walter JL, Peller JE. *Becoming Solution-Focused in Brief Therapy*. Philadelphia, Pa: Brunner-Routledge; 1992.
6. Beattie P, Maher C. The role of functional status questionnaires for low back pain. *Australian Physiotherapy*. 1997;43:29-38.

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New Residency Curriculum Guidelines Form Template for Programs in All Specialty Areas

Are you looking for guidelines for starting a residency program?
Are you considering entering a residency program?

The newly published document, **Guidelines for Postprofessional Residencies in Orthopaedic Physical Therapy and Orthopedic Manual Physical Therapy**, is now available for purchase. The American Academy of Orthopaedic Manual Physical Therapists (AAOMPT) and the Orthopaedic Section brought together residency directors, clinicians and educators from across the country to prepare this comprehensive resource document.

The document provides examples of part-time and full-time models for residency education in various health care settings. Recommendations on how to design the mission, philosophy, program goals and performance outcomes of a residency and how to integrate theoretical content with clinical course content are also described. Numerous examples are presented of instructional ob-

jectives, learning activities, methods for practical and written examinations and forms for program evaluation. Factors to consider in selecting and training faculty are discussed along with financial considerations for developing a residency budget.

The Guideline document is designed to assist residency programs applying for credentialing with the American Physical Therapy Association and/or recognition by the AAOMPT. **Because of the scope of the curriculum materials presented, the document provides outstanding resources for developing residencies in ALL specialty areas.** Individuals interested in residency education can use this information to evaluate current programs. Current programs can re-evaluate their curriculum for further growth.

Cost: \$45 for Orthopaedic Section and AAOMPT Members; \$65 for APTA Members; \$80 for non-members

How to Obtain: The Orthopaedic Section will be handling all purchases.

Make check payable to: Orthopaedic Section, Inc. and mail to: 2920 East Avenue South, Ste. 200, La Crosse, WI, 54601-7202. Phone: 1-800-444-3982

Prepared by Carol Jo Tichenor, MA, PT

Book Reviews

Coordinated by Michael J. Wooden, PT, MS, OCS

Stern SH. *Key Techniques in Orthopaedic Surgery*. New York, NY: Thieme; 2001: 338 pp., illus.

This book was written by an Orthopaedic surgeon, and intended primarily for orthopaedic surgeons, residents, and medical students. The text was developed to cover the basic surgical procedures in a straightforward and reproducible manner. The style of the book is easy to follow allowing for quick referencing and review of basic steps and issues associated with orthopaedic procedures. Each chapter covers a specific joint or region with various common surgeries. Chapters follow a common format and are structured as follows:

- indications and contraindication: list of common indications for the procedures;
- preoperative preparation, special equipment, positioning, and anesthesia;
- tips and pearls of advice for particular procedures;
- common pitfalls of which to beware;
- postoperative care issues; and
- operative technique.

This format allows quick access to all information.

As mentioned by the author, the book was not intended to be an all-encompassing reference in its scope. However, a varied and wide selection of procedures is described.

Although the book was written for MDs, it is also extremely relevant for the physical therapist (the sections on postoperative issues are especially germane). A clear and comprehensive understanding of what is involved in orthopaedic surgery is presented. The writing is clear and concise, and the figures, of which there are many, are superb. Also, the more informed understanding we have the more appropriately, intelligently, and safely we can treat our patients.

I highly recommend this book as a resource for the practicing orthopaedic physical therapist. The author is to be commended for writing a text that is both concise and straightforward in its approach to orthopaedic techniques in surgery.

Dan Bankson MSPT, CSCS



Swedan NG. *Women's Sport Medicine and Rehabilitation*. Gaithersburg, Md: Aspen Publishers, Inc.; 2001: 448 pp., illus., hard-cover.

This textbook was written to serve as an in-depth resource designed to address the specific health care needs and injury management considerations of the female athlete. Thirty-two authors representing many different medical disciplines contributed to this textbook, making it an excellent multidisciplinary source of current ideas.

The textbook is organized into 4 sections with 24 chapters. Part I begins with 6 chapters on the musculoskeletal system. While these chapters discuss some gender differences regarding muscle morphology and anatomy, the authors mostly describe the diagnosis and management of common musculoskeletal injuries. Also within Part I are chapters describing how clinical biomechanics may be used to understand chronic injuries in women and the challenges that women with disabilities may face as they pursue sport.

Part II describes the needs of active women across the lifespan; it details the physiological responses, benefits, and concerns relating to younger, older, and pregnant women involved in sport.

Part III deals with medical issues and challenges that may be faced by women athletes. Several chapters in Part III have substantial clinical impact for those health care professionals working with women involved in sport. Topics include exercise and the female with cancer, pain and headaches, bone metabolism and injury, and the female athlete triad.

In Part IV, several topics relating to the health and wellness of women athletes are discussed, including the nutritional, psychological, and social factors that affect health, recovery, and athletic performance.

Overall, this textbook is extremely well written. The material presented is current and complemented nicely by photographs and line drawings. Furthermore, there are several appendices which assist in the practical application of the material. For example, appendices are used to outline a comprehensive patellofemoral rehabilitation program and present exercises that may be used

for stability and balance development. This book is highly recommended for clinicians who treat women with athletic injuries or are involved in the health and wellness of women.

Michael D. Ross, PT, DPT, OCS



Rhodes J. *Peak Performance Fitness: Maximizing Your Fitness Potential Without Injury or Strain*. Alameda, Calif: Hunter House Inc.; 2000: 134 pp., illus.

From the beginning, this book claims to be "different from most fitness books," offering a "revolutionary approach." However, the book fails to live up to those standards, and in many instances conflicting impressions are given.

The book's cover states that "muscle alignment" is emphasized and, for a fitness book, this is welcome. However, it further claims that this emphasis is not only for injury prevention, but also for "Body Sculpting." Most experts would consider this a questionable concept, at best. More importantly, is it an idea that physical therapists trying to encourage active lifestyles and realistic outcomes want to perpetuate? This notion is one example of how the author's background as a personal trainer and aerobics instructor may have clouded her judgement as a physical therapist, thus diminishing the credibility of the book.

The book begins with a brief introduction and a review of the organization of the chapters. It is divided into 7 sections: alignment, low back, lower extremity, upper extremity, flexibility and stretching, cardiovascular exercise, and finally, the exercise plan itself. The addition of a discussion about posture and alignment, although different, is not completely new to fitness books. Many "fitness experts" and personal trainers are jumping on the bandwagon and including this topic. With the continual blurring of the line between what is health care and what is fitness and exercise, postural alignment is a more and more common subject. The author recommends that each person evaluate his own posture in private, wearing the least amount of clothing possible. This is a great idea and good information is pre-

sented. On the other hand, I think it may be too difficult a task for a person to rely on solely. The author hints at the notion that with such a self-evaluation, one can easily determine one's weaknesses and then correct them. There is a fine line, however, between this and self-diagnosis, and the author really doesn't delineate that line for the reader. Again, the impression the book leaves with you is confusing. If the reader can analyze posture at home, why is it necessary to visit a physical therapist for the same purpose?

In the sections dealing with the low back and the extremities, the author begins by telling the story of one of her patients. She describes this person's problems (mostly related to posture or muscle imbalance) and the exercise program for that person. However, the book seems to recommend these exercises as part of the "solution" for everyone. The program includes 4 to 5 exercises that seem safe and effective, but prescribing one "solution" for the low back or the upper extremity is an over simplification. If the author's exercise program is the "solution" to any kind of upper extremity pain or dysfunction, why even see a physical therapist?

These "one size fits all" programs are the book's greatest weakness. Even the stretching section is presented as this type of program; the same 5 stretches for everyone. These negate the point of even describing your own posture and they alter the book's impact as a system that is different and better at getting results.

Another conflict in the book can be found in examining some of the exercise techniques offered by the author. For example, activating the transversus abdominis correctly is difficult even in the presence of a trained professional who knows what to look for and how to cue body movements. The intention of teaching these exercises is a good one. But photographs and instructions that compromise quality of movement are too great a risk especially when the book targets people who are in pain. The author cannot correct incorrect form; she can only encourage the reader and inform them of the consequences. This idea is rooted more in fitness than physical therapy.

The facedown row is another example of questionable technique. The figure and caption instruct the reader to "bend over your kitchen table or desk so that your right arm is hanging off the side." The figure does not emphasize proper alignment, nor is the entire body position included in the photo. The inconsistency is that alignment is emphasized in some places but not in others.

A section dealing with cardiovascular exercise was appropriately included in a book that espouses peak performance fitness. Surprisingly, the information presented was brief and oversimplified. The author writes that a typical cardiovascular exercise session should be 45 to 60 minutes long and maintain 60% to 80% of one's target heart rate. Finding target heart rate is demonstrated well, although the figure demonstrating the radial pulse could have been more focused on the region of the wrist and not a picture of the entire upper body with the wrist at the bottom of it. In my opinion, prescribing cardiovascular exercise for 45 to 60 minutes per session doesn't facilitate compliance. The main reason people report not exercising is that they have no time. The answer to this is not telling them that their program has to include 60 minutes of exercise per session.

To achieve what she refers to as peak performance fitness, the author discusses strength, flexibility, and cardiovascular endurance. She comments, appropriately so, on the importance of foot wear. However, there is no mention of nutrition and its role in health and peak performance. The picture cannot be complete with some discussion about the fuel that our bodies need, but there is no discussion even about the food pyramid. The book advertises itself as a complete program designed to achieve peak performance, and yet the focus lies almost completely on the external.

This is not a book that I would give to my patients. It should not replace instruction by a therapist in exercises to continue performing at home or the health club. At times the book does offer a creative view of exercises. At other times the author's background as a personal trainer and aerobics instructor seems to override her perspective as a physical therapist. The result is that the book does not present itself in a cohesive way. People will certainly be motivated by the author's enthusiasm. They may go through the process of learning the exercises in her "solutions;" they may follow the program consistently for 12 weeks. And they may even see results. But to paraphrase the author, if it was as easy as reading a book, everyone would already be doing it. Certainly, if giving people what they need to stay with a regular exercise program and be active for life was as easy as writing a book, it would have occurred many times over by now.

Allyson L. Baughman, MPT



Gonzalez E, Myers S, Edelman J, Liederman J, Downey J. *Downey and Darling's Physiological Basis of Rehabilitation Medicine*, 3rd ed. Boston, Mass: Butterworth-Heinemann; 2001:865 pp., illus.

This is the third edition for this classic text. The first edition was published nearly 3 decades ago. Since then, the scope of physical medicine and rehabilitation has greatly expanded, but it continues to focus primarily on management of patients with impairments of function brought on by disease, trauma, or aging. In this text the authors thoroughly present the physiological basis of rehabilitative medicine based on current science.

It was not the authors' intent that the information provided be immediately applied to patient-specific problems. Rather, it is to provide a wealth of background knowledge to explain the rationale for various treatment modalities and rehabilitative techniques. This is a key underlying concept for this text.

Rehabilitation medicine encompasses a wide spectrum of topics. The authors have chosen to expand on areas in which new evidence has been found. They have tried to avoid areas where the research is not as current, or not likely to be modified or disproved in the near future.

Seventy-six experts contributed to this text. The book is divided into 4 sections. The first section, Basic Structure and Function, is covered in 12 stimulating chapters including Cerebellum and Basal Ganglia, Physiology of Synovial Joints and Articular Cartilage, among others. In section 2, Neurophysiology is covered. There are 3 chapters involving the motor unit and electromyography, as well as evoked potentials.

Within Section 3, the topics of activity and energy expenditure and transfer are discussed in 7 chapters. Pertinent clinical areas such as exercise, peripheral vascular function, and weight control are covered. Section 4, Applied Physiology, contains 15 concise chapters covering aging, pain and emotion, peripheral nerve regeneration, and many additional clinical topics. The material was presented in a understandable way despite its complexity. Extensive reference lists are provided for each chapter.

The authors have done a superb job providing up to date information.

(Continued to page 19)

Vice President's Report

To Do: Investigate with APTA developing web based educational courses. Bring proposal to AC 2001. Work with Paul Howard and Tom McPoil. Status: Tara Fredrickson, Beth Nolte, Marilyn Phillips, Paul Howard, Tom McPoil, and Lola Rosenbaum were assigned to this item. A proposal has been submitted by the APTA for discussion at the BOD meeting. **Discussion Item:** Review the web-casting proposal from the APTA and discuss the possibility of the Orthopaedic Section cosponsorship.

JOSPT Self-publication Task Force Update: The task force is composed of Bill Boissonnault, Tab Blackburn, Terry Malone, and Lola Rosenbaum. We have participated in 3 conference calls. We have collected information from several sources and are in the process of collecting RFPs for self-publication for 2002 and 2003. To date we have received proposals from Allen Press, The Orthopaedic Section (thank you to Sharon), and are waiting for a response from the APTA. Hopefully, we will have the APTA RFP prior to Annual Conference.

*Lola Rosenbaum, PT, MHS, OCS
Vice President*

Education Program Committee

The committee would like to welcome Ellen Rogers Hamilton, PT, OCS as the new Vice Chair of the committee. Ellen brings several years of experience on this committee to her new position.

CSM 2002 will be held in Boston from February 20-24. The committee is hard at work organizing the programming for this conference. The Section's SIGs and Education Groups have outstanding program ideas for Boston. Some of our hot topics for the conference include: Improving the Continuum of Care for Persons with Hip Fracture, Designing a Residency Curriculum in Orthopaedics and Manual Therapy: A 'How To' Workshop, Use of Clinical Reasoning Skills for Decision Making with Orthopaedic Patients' Cases with Reference to the *Guide to Physical Therapist Practice*, and Complex Regional Pain Syndrome: Current Standards of Assessment and Treatment. Also come join us at the Orthopaedic Exposition. This 2-hour session will give attendees the opportunity to informally circulate among the tables with members of our 5 SIGs and 4 Education Groups present. Come take a look at all the Section has to offer. Starting with CSM 2002 hand-outs for all orthopaedic

programs will be available before and after CSM at the Section's website. APTA members will be able to download and print the handouts of presentations they plan on attending before they leave for CSM. **HANDOUTS WILL NOT BE AVAILABLE ON-SITE AT CSM.**

In addition to planning for CSM 2002, the Education Committee is assisting Lola Rosenbaum, Tom McPoil, and Tara Fredrickson in investigating the possibility of joining efforts with APTA to offer Home Study Courses through the webcasting system.

*Paul D. Howard, PT, PhD, Cert MDT
Education Program Committee Chair*

Home Study Courses

Since the last report at CSM, the HSC series has completed 10.4, Disorders of the Knee, with a total of 505 registrations to date. We are in the process of publishing 11.1, Solutions to Shoulder Disorders, with 604 registrations to date. These courses will be kept current for 5 years, and I expect registrations for each to exceed 1000.

We are busily preparing for publication of 11.2, Current Concepts of Orthopedic Physical Therapy. This will be the largest course we have ever published, comprising a total of 12 monographs. It is also a milestone for our Section, in which we are publishing our first comprehensive document on orthopaedic physical therapy. I hope that it will provide an outstanding educational experience and stimulate interest in specialization. This course begins August 2001 and we have 98 registrations to date.

We welcome Mary Ann Wilmarth as Editor as we prepare for our 2002 courses. I will be working with her on 12.1, Prosthetics and Orthotics, for which the authors have completed 5 out of 6 monographs to date. We expect monographs for 12.2, Orthopedic Interventions for Selected Disorders, to begin arriving soon. This promises to be an extremely productive year as the demand for our HSC courses remains strong.

It has been my pleasure to serve the Orthopaedic Section as HSC Editor for the past 5 years. I have learned much along the way and hope that our publications have added significantly to the orthopaedic literature.

*Carolyn Wadsworth, PT, MS, OCS, CHT
Home Study Course Editor*

Public Relations Committee

Component Leadership Seminar: Rick Watson, PR Committee member, attended the Component Leadership Seminar. The focus of this seminar was on membership and public relations. The APTA has changed the emphasis of their PR program away from using direct marketing to the consumer, which is very expensive. Our advertising will now be focused on the groups which restrict our practice, such as insurers, purchasers, and legislators. Increasing membership, satisfaction, and awareness regarding their responsibilities as professionals, are also goals, with more emphasis being placed on the development of 'PR kits' and other materials that can be used by our members in their own advertising and media events. I think these changes will have a positive impact on the membership of the Orthopaedic Section. Thanks Rick for giving up your weekend.

Advisory Panel on Public Relations. I attended the APTA Advisory Panel for Public Relations meeting in June. We met with the Membership Development Task Force to develop ways to use marketing and PR to enhance membership. We were also able to preview the movie that APTA has developed, which will be made available to all members, to use for PR. It was also shown at the opening ceremonies of the Annual Conference and House of Delegates. For more information see June issue of *PT Magazine*.

Exhibit Booth. The exhibit booth (and I) will be in Chattanooga, TN for the American Society of Orthopaedic Physician's Assistants Conference. I have talked to Hal Blank, who is the President Elect ASOPA, and will meet with him to explore other opportunities to reach their members. I hope to have the opportunity to attend some of their business meeting as a liaison. The physician assistant is an important referral source for our profession and from my experience very open to communication and exchange of ideas, on both the clinic and professional levels.

Reminder: The student guest program has been changed. We will now sponsor a student to the annual Student Conclave. The conclave attracts students who are interested in the professional organization. The purpose is to foster involvement in the Section by students and hopefully impact their decisions regarding membership after graduation. Thanks to Tara for working on getting the information out to the schools.

*Terry Randall, PT, MS, OCS, ATC
Chair*

Orthopaedic Section, APTA, Inc.
Annual Conference
Board of Directors Meeting
June 22, 2001 • Anaheim, CA

MINUTES

The 2001 Annual Conference Board of Directors Meeting was called to order in Anaheim, CA, at 11:00 AM on Friday, June 22, 2001 by Michael Cibulka, President.

ROLL CALL:

Present:

Michael Cibulka, President
Lola Rosenbaum, Vice President
Ann Grove, Treasurer
Joe Farrell, Director
Gary Smith, Director
Paul Howard, Education Chair
Susan Appling, OP Editor
Phil McClure, Research Chair

Bill Boissonnault, Immediate Past President
Terri DeFlorian, Executive Director
Tara Fredrickson, Executive Associate

Absent: None

=MOTION 1= Mike Cibulka moved to approve the minutes from the CSM Board of Directors meeting dated February 16, 2001 were approved as written. **=ADOPTED=**

=MOTION 2= Paul Howard moved to appoint Ellen Rogers Hamilton, PT, OCS as Vice Chair of the Education Committee. **=ADOPTED=**

=MOTION 3= Joe Farrell moved that the Orthopaedic Section pay for the shipping of the booth to the "2nd International Symposium on Rehabilitation and Physical Therapy in Veterinary Medicine being held in Knoxville, TN, in August 2002. **=ADOPTED=** Fiscal implication is approximately \$100 for shipping the booth.

=MOTION 4= Lola Rosenbaum moved to re-word the following policy adopted at the CSM 2000 Board of Directors meeting. Current policy, 'The Fall Board of Directors meeting will alternate every other year between La Crosse and Alexandria. In 2000 the meeting will be held in La Crosse, in 2001 the meeting will be in Alexandria.'

New policy, 'The Fall Board of Directors meeting will be held every other year in La Crosse. In the off years the meeting will be held in Alexandria or another location as determined by the Board of Directors.' **=ADOPTED=** Fiscal implication will be the travel, lodging, and meal expenses for those approved to attend.

=MOTION 5= Ann Grove moved to change the motion regarding the Section's future donations to the Foundation for Physical Therapy, adopted at the CSM 2001 Board of Directors meeting, by replacing ' \$100,000 hard money will be paid in January 2002' to ' \$50,000 hard money will be paid in March 2002 and \$50,000 hard money will be paid in September 2002'. **=ADOPTED=**

ADJOURNMENT 4:00 PM

Section Members in the News

Association leaders, PTs, and PTAs gathered at a recognition ceremony during Annual Conference to honor and thank their colleagues for their contributions and commitment to practice, research, and education. Congratulations to the following Orthopaedic Section members who received honors:

Mary McMillan Lecture Award: Jules M Rothstein, PT, PhD, FAPTA

Lucy Blair Service Award: Jan K Richardson, PT, PhD, OCS

Marian Williams Award for Research in Physical Therapy: Michael J Mueller, PT, PhD

Dorothy Briggs Memorial Scientific Inquiry Award: Christopher M Powers, PT, PhD

Jack Walker Award: Lisa D Shoaf, PT

Golden Pen Award: Gail Jensen, PT, PhD

Dorothy E Baethke-Eleanor J Carlin Award for Excellence in Academic Teaching: Pamela K Levangie, PT, DSc

Mary McMillan Scholarship Awards: physical therapist professional education students— Shayna B Gross, Jennifer Phillips, Sheri L Tasson,

Minority Scholarship Award for Academic Excellence: physical therapists professional education students— Olabisi M Jarrett

William G Boissonnault, PT, DPT, MSc, received the Foundation for Physical Therapy Charles M Magistro Award for Distinguished Service. The award recognizes a volunteer for outstanding dedication to furthering the Foundation's research mission. Boissonnault was honored for his support as the President of the Orthopaedic Section, APTA as well as his personal commitment to the Foundation and its mission.

Book Reviews

(Continued from page 17)

Most of the references are from the last 3 years. The authors make no claim that this text is exhaustive in scope, but they have chosen exciting, relevant areas of rehabilitation where significant changes have occurred. Some helpful features include clearly explained tables and graphs, and informative figures. Additionally, the length of most chapters is a manageable 20 to 40 pages.

This text is very applicable not only to physicians but also to physical therapists (particularly Section 3), occupational therapists, and speech therapists. The authors have met their goal of providing updated, relevant, and evidence-based information which challenges the reader to analyze and question the way patients are treated.

I would recommend this text as a reference to clinicians, and as a tool for physical therapy educational programs.

Dan Bankson, PT, MS, CSCS



APTA's Members Mentoring Members: A Brief Explanation

There is no single formula for good mentoring—mentoring styles and activities are as diverse as the individuals involved. Different protégés will require different amounts and kinds of attention, advice, information, and encouragement. The bottom line—a good mentor is approachable and available within whatever mentoring relationship is established.¹

APTA's *Members Mentoring Members* program was developed with this flexibility and informality in mind. Although it may not fit a traditional expectation involving long-term, intense mentoring relationships, the program was designed to meet the needs of a wide-range of APTA's membership. Envisioning a mutually satisfying long-term mentoring relationship is fine, however there are many types of mentoring opportunities, and brief encounters are just as valuable. As Laurent Daloz states in his book, *Mentor: Guiding the Journey of Adult Learners*, "[T]he part [mentors] play varies according to the particular transition faced. Since most of us make a number of changes throughout our lives, it is not surprising that on reflection we may recall a number of mentors. Some remain for years, some for only a few months; sometimes the relationship is intense, sometimes purely instrumental." Daloz continues, "[Mentors] often appear in less conventional form.... Yet always, if we are to call them mentor, they helped us through a transition of some sort. And if the relationship was positive, we have grown from it in some way, for the idea of growth is inextricable from the idea of mentor."²

How APTA's Program Works

APTA does not match mentors and protégés, but rather provides comprehensive information through the directory, which allows potential protégés to contact prospective mentors directly. As the name implies, *Members Mentoring Members*, this program is an APTA membership benefit and is open to APTA members only.

The directory, available online at https://www.apta.org/About/special_interests/womeninitiatives/membersmentor, lists mentors by state and by expertise. Each listing includes contact information and a personal statement that provides additional details about the mentor and a complete list of

the mentors' self-identified areas of expertise. Since the program's database of volunteer mentors is updated continually, the online directory provides immediate access to an up-to-date listing of mentors.

Mentoring Directory Search

Last Name: PT All
 PTA

State:

Expertise:

How to Participate

If you are interested in becoming a mentor, simply fill out and submit the online application. Your information will then be included in the mentoring database. Mentoring application forms also are available through the Association's Fax-on-Demand System at 800/399-2782 (document #1573).

All participants receive a mentoring newsletter containing updates and information about the program, and are contacted periodically in an effort to track the effectiveness of the *Members Mentoring Members* program.

The strongest and most compelling reasons for serving as a mentor may be the desire to fulfill one's own need to contribute to the growth, development, and wish fulfillment of an aspiring professional. The act of mentoring allows one to repay, in some measure, the intrinsic benefits he or she has derived from the profession. So, **be an APTA mentor!**

To paraphrase Yoda in *The Empire Strikes Back*, **The profession creates the force, makes it grow. Its energy surrounds us and binds us. Luminous beings are we.**

REFERENCES

1. National Academy of Sciences. Adviser, Teacher, Role Model, Friend: *On Being a Mentor to Students In Science and Engineering*. Available at www.nap.edu/readingroom/books/mentor/. Accessed July 5, 2001.
2. Daloz, LA. *Mentor: Guiding the Journey of Adult Learners*. San Francisco, Calif: Jossey-Bass; 1999.

Primary Care Physical Therapy Educational Group Established

A petition to formally organize a group of Orthopaedic Section members interested in the area of Primary Care Physical Therapy was submitted and approved by the Orthopaedic Section at the 2001 Combined Section Meeting in San Antonio, Texas. More than 200 Section members signed the petition for establishment of the Primary Care Physical Therapy Educational Group (PCEG). Consistent with the Section's Strategic Plan, Goal #4, the PCEG's primary focus is to promote knowledge of and provide support for physical therapists as an entry point in the management of musculoskeletal dysfunction.

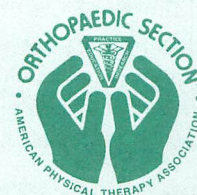
Other functions of the PCEG are to provide a means of communication and continuing education for physical therapists interested in Primary Care Physical Therapy. It is anticipated that PCEG group members will participate in practice analyses related to primary care in an effort to define, analyze, validate, and revalidate the competencies necessary for the practice of Primary Care Physical Therapy (PCPT). Once PCPT competencies are identified, the PCEG plans to develop, validate, and publish a description of PCPT practice which could be used to foster the development of postprofessional APTA credentialed PCPT residency sites. Additionally, the PCEG plans to influence political action and policy-making processes related to PCPT. The political timeliness of the PCEG is evidenced by the APTA House of Delegates recently endorsed 2020 Vision Statement as related to physical therapists becoming "practitioners of choice to whom consumers have direct access... holding all privileges of autonomous practice."

The PCEG will offer 3 hours of educational programming at each CSM. The PCEG program at CSM 2002 in Boston is titled "Differential Diagnosis and Medical Screening in Primary Care Physical Therapy," and is scheduled for Saturday, February 23, 2002, from 12:30-3:30 PM. A PCEG business meeting will directly follow the program (3:30-4:30 PM). Your participation is requested. If you have any motions, new business, or agenda items you would like to have discussed, please email robertduvall@sprintmail.com.

Respectfully Submitted,
Bob DuVall
Chair, PCEG



OCCUPATIONAL HEALTH PHYSICAL THERAPISTS SPECIAL INTEREST GROUP



ORTHOPAEDIC SECTION, APTA, INC.

Fall 2001

Volume 13, Number 3

Upper Extremity Cumulative Trauma: An Early Focus on Functional Assessment and the Workplace

Karen Elton, PT, MA

Previous articles have highlighted the prevalence of work-related upper extremity cumulative trauma disorders in support for the establishment of the Federal OSHA Ergonomics Standard. Although the standard was repealed, the Department of Labor Secretary is hosting national public forums on the subject this July. Irregardless of the status of the proposed Federal OSHA Ergonomics Standard, our patients who are diagnosed with cumulative trauma injuries will still need to be treated. We need to find ways to expedite our patient's safe return to work as well as prevent future or reoccurring injuries. State of the art physical therapy care for occupational injuries requires that we investigate work-related issues immediately, starting at the first visit. This early focus can give you, the medical provider, a tremendous advantage in successful care of the injured worker.

I work in an outpatient orthopaedic private practice that fosters a team approach to these work-related injuries. We provide a continuum of care for our patients including in clinic care, education, and work-site consulting. Within Oregon, the state that I practice in, 1998 Worker's Compensation statistics reveal that "sprains and strains" contributed to nearly 50% of the work-related injuries filed, with 28.5% of the injuries associated with an "overexertion" event. Outcomes statistics from 300 clinics within our TAOS network show that upper extremity worker's compensation cases with an average acuity (time since onset) of over 2½ months had a 52% reduction in their pain, 47% improvement in their function, and a 71% overall improvement on average, over an average of 13 visits.

FUNCTIONAL EVALUATION

The Patient

As in all thorough orthopaedic PT evaluations, a complete upper quarter screen should be performed. Assessment of the employee's tolerances for repetitive upper extremity use and functional materials handling tolerances also are important components to include in your testing and rehabilitation protocols. You can fabricate tests that look at general reaching, turning, manipulation, and assess endurance for these tasks; you can develop tests based on components of the job description and relate them to the employee diagnoses; or you can use standardized testing methods (ie, grip/pinch, Minnesota Rate of Manipu-

lation, Valpar, Purdue pegboard assessment). We may use a BTE (Baltimore Therapeutic Equipment, Inc.), repeated grip measures, metronome for production pacing, muscular re-education via biofeedback devices and videotaping of patient exercise participation to reach our rehabilitation goals with the patient. Endurance work in your patients also can be facilitated by use of pulleys or an upper body ergometer device, referring to ACSM exercise and testing guidelines for appropriate protocols. Repeat testing of key components of essential job functions at the beginning/end of a session or over several sessions also can indicate patient progress. Sensorimotor retraining is often important in the rehabilitation of cumulative trauma injuries as well.

Materials handling assessments should consider UE diagnoses, functional deficits, specific objects handled at work (dimensions, weights, handle availability, contact surface, hand object coupling, etc.), and single arm vs. bimanual task tolerances in the testing and rehabilitation process. Does the patient exhibit accentuated shoulder girdle or trunk substitution during lifting with extended vs. near reach lifts? Do they use an altered prehension pattern or support the object with their forearm/body vs. the hand? Will the worker have to be able to carry a tray, malleable bag, or solid box?

The Workplace

As acute treatment is initiated, early intervention with regards to work-site performance should be initiated as well. This might include obtaining job descriptions (from the employer and/or employee), determining barriers to return to work, prescribing home exercise and rehabilitation exercises geared towards work tasks, or contacting the insurer and employer regarding pertinent issues related to the claim. Details regarding the regular work demands, tools used, production pace required, and light/modified work options are all important considerations in the rehabilitation of the injured worker. The therapist may need to expand on the job description details received from the employer or insurer to facilitate more accurate simulated exercise for the employee. If so, research based assessment tools such as RULA (Rapid Upper Limb Assessment),¹ Hand Activity Level endorsed by the ACGIH (Industrial Hygienist-www.ACGIH.org),² or activity frequency/recovery rate³ type assessment tools may come in handy.

The challenge is always to include all the correct pieces in the puzzle to assist the patient in attaining their maxi-

mal functional recovery. Early focus on workplace issues will improve your credibility with your patients, lead to improved functional outcomes, as well as put you a step ahead of your competition in providing state of the art services to your patients and referral sources.

REFERENCES

1. McAtamney L, Corlett EN. RULA: A survey method for the Investigation of Work Related Upper Limb Disorders. *Appl Ergonomics*. 1993;(24): 91-99.
2. Latko W, Armstrong T, Foulke J, Herrin G, Rabourn R, Ulin S. Development and Evaluation of an Observational Method for Assessing Repetition in Hand Tasks. *Am Industrial Hyg Assoc J*. 1997;58(4): 278-285.
3. Rodgers, Suzanne. Recovery Time Needed for Repetitive Work. *Seminars in Occup Med*. 1987;2(1):19.

Karen Elton, PT, MA is a practicing clinician in an outpatient orthopedic office and the Director of CareConnections, Therapeutic Associates Work Injury prevention and treatment program in its 45 offices within Oregon, Washington, California, and Montana.



The Orthopaedic Section, APTA, Inc.
and the
Occupational Health SIG, Orthopaedic Section
proudly present:

**"OFFICE ERGONOMICS:
The Basics and Beyond"**

**Wednesday, February 20, 2002
Combined Sections Meeting
Pre-Conference Course
Boston, Massachusetts**

Questions about the course? Contact Stefanie Snyder
at the Orthopaedic Section office: 800.444.3982

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FOOT & ANKLE

SPECIAL INTEREST GROUP ORTHOPAEDIC SECTION, APTA, INC.

PRESIDENT'S MESSAGE

Greetings to All

In the last edition of *Orthopaedic Practice* (Vol. 13, No. 2) the Physical Therapy Foot Care Survey was presented to the membership to fill out and return. This had also been sent out early 2000 to FASIG members with 122 respondents. At this time we are hoping for more respondents to the survey. The survey will also be on the FASIG section of the Orthopaedic Section web page. The results of the survey respondents are published in this edition. This information will be used to set a referral source for foot and ankle physical therapists.

FIND A FOOT AND ANKLE PHYSICAL THERAPIST:

In keeping with the mission of the Orthopaedic Section, our SIG will be using the web page to help locate physical therapists that see patients with foot and ankle conditions. After much discussion with the Orthopaedic Section and staff, the list on the web page will be by state. Each physical therapist listed on the web page will have their contact information available.

If you choose to be on this list, you need to contact Stefanie Snyder at the Section office by email (ssnyder@centurytel.net) or by phone (800-444-3982 x205). The criteria for your name to be in this list are:

1. Member of the Orthopaedic Section
2. Member of the Foot and Ankle Special Interest Group
3. Completion of the FASIG survey

Education Program for Combined Sections 2002

Mark Cornwall, PT, PhD has been active in securing our education presentations for the CSM 2002. Our SIG will continue to have 4 hours of programming at the conference. In addition there will be a business meeting of our SIG following the educational sessions. As always, our programming is very well attended. The final education program will be presented in the next *OP*.

Secretary/Treasurer

Steve Paulseth, PT, MS, SCS has been in contact with the American Orthopaedic Foot and Ankle Society to establish a liaison relationship with this group.

Please see the attached preliminary results of the first 122 respondents for the foot survey. As always I can be reached through email at reischl@earthlink.net.

Sincerely,

Steve Reischl, DPT, OCS

FOOT AND ANKLE SPECIAL INTEREST GROUP PHYSICAL THERAPY FOOT CARE SURVEY

This survey was mailed out to members of the Orthopaedic Section who designated themselves as members of FASIG. A total of 122 respondents were tabulated into the results presented here. A copy of the survey was published in the Volume 13, No.2 edition of *Orthopaedic Practice*.

If you are interested in becoming part of a database for the Foot and Ankle Special Interest Group and "Find a Foot and Ankle Physical Therapist" listing, please complete the form and return to the Section office.

Thank you,

Steve Reischl, DPT, OCS

Survey Results

Current Practice Setting: The majority of respondents practice in an outpatient setting with 50% in a private practice.

Major Job Responsibility: Was spread over many different job titles (could select more than one)

Staff PT	56
Senior PT	35
Supervisor	17
Director	35
Clinical Instructor	24
Clinical Coordinator	9

Patients with foot and ankle conditions seen per week:

1-3	37 responded
4-7	36 responded
8-12	23 responded
>12	22 responded

Types of foot and ankle conditions treated each month: These diagnoses were obtained from the AAOS publication, *Essentials of Orthopaedic Care*.

Most common reported

Ankle sprain
Plantar fasciitis
Posterior tibial tendon disorders
Achilles tendon disorders
Fracture
Lower leg pain (shin splints)
Metatarsal head pain



Less common reported

Plantar fibroma
Diabetic foot care
Bunionette
Claw toe
Sesmoiditis

In looking at the list of conditions, some of the conditions could have been grouped into one area such as grouping the various diagnoses of MT head pain, claw toe, sesmoiditis and bunionette into a larger group such as forefoot disorders.

Frequency of PT visits: This demonstrated a wide range of the frequency of patients seen in PT.

Specific Treatment Interventions: This question also demonstrated a wide range of response on the various responses.

Types of Foot Orthoses: The respondents could pick more than one answer and showed a varied use of the types of devices used in their practice settings

Over the counter foot orthoses purchased by patient elsewhere 58 responded

Prefabricated foot orthoses dispensed by the therapist or office 34 responded

Prefabricated foot orthoses with modifications done by therapist 39 responded

Foot orthoses fabricated in the practice location by therapist 30 responded

Foot orthoses fabricated in the practice location by another health professional 35 responded

Foot orthoses fabricated from a cast sent to outside laboratory 56 responded

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PASIG



Performing Arts Special Interest Group • Orthopaedic Section, APTA

Message from the President

I am sure that it has been a busy summer for everyone. As we get ready for a new school year, don't forget to let us know about any special projects you were involved in over the summer—screenings, involvement in performing arts intensive programs, research. Contact your regional director today (see contact information below) to fill us in!!!

Your Executive Board has been busy this summer as well. Programming is shaping up for CSM 2002. Our network of regional directors is gradually taking shape. And *our Nominating Committee is hard at work soliciting nominees for 3 positions—President, Treasurer, and Nominating Committee (see descriptions below)*. This is YOUR chance to help move the PASIG on to bigger and better things.

The practice analysis is progressing, and you should look forward to receiving a survey from us this fall. In the meantime, mark your calendars for CSM 2002—we look forward to seeing you at our business meeting, and at all the wonderful educational programming that Lynn Medoff and her committee are putting together.

All My Best,
Jennifer M. Gamboa, MPT
President

COMMITTEE UPDATES

All committees have met or in the process with the president to develop strategic plans for the year. Committee membership involves a 3-year commitment. Some committees still need members. If you have an interest in committee involvement, please contact the Committee Chairperson, who is listed in the directory on the last page of this newsletter.

EDUCATION COMMITTEE CSM 2002 PASIG PROGRAMMING

The planning for next year's CSM programming continues to be underway. Programming will be divided into 3 areas:

1. Content Presentations: Presenters will discuss the role physical therapists play in influencing young musicians and dancers to develop healthy training practices.
2. Research Forum: A dialogue will be facilitated between a panel of researchers and clinicians to improve evidence-based practice in performing arts physical therapy.
3. Shop Talk: Clinicians will present how they apply the *Guide to Physical Therapist Practice* to performing arts physical therapy.

We invite all of our members to participate in any of the above presentations and as always, any ideas and suggestions are most welcome. Please contact Lynn E. Medoff MA MPT at (520) 527-8601 or email: lemedoff@hotmail.com.

Lynn E. Medoff, MA, MPT
Vice President—Education Committee Chair

PUBLIC/MEDIA RELATIONS COMMITTEE

Greetings to all from the **Public/Media Relations Committee and the Regional Directors!** While it took us a bit longer than expected to get going, the regional directors are alive and well. We will be trying to contact all of the PASIG membership either by phone, fax, or e-mail in the near future. Since we do not yet have enough regional directors in the Northwest and Western regions, we need your input!!! PASIG is redoing our directory this year and that means we need to confirm all addresses and contact information. We want to be able to keep you up to date on PASIG goings-on...but that means that we need to speak to each of you by some means. So, **if you haven't been contacted yet**, or if you know of someone in PASIG that has not yet been contacted, we may not have correct contact information in order to do so. **Please contact Jeff Stenback ASAP** at (305) 595-9425; e-mail: JSPTOCS@aol.com; fax (305) 595-8492. We want to include everyone, but this is a large undertaking and we need your help!

Currently we have divided the membership into 6 regions and we have openings in the following regions for Directors:

1. Northwest (ID, MT, NB, ND, OR, SD, WA, WY)
2. West (CA, CO, NV, UT, TX, NM, AZ, HI, AK)

This is an excellent opportunity for you to meet and network with fellow PASIG members. If you would like to get more involved with the PASIG and would like to get to know more of your fellow PASIG members, consider becoming a "regional director!" If you would like to **volunteer as a regional director** in your area, please contact Jeff Stenback, PT, OCS.

To the membership: Remember that we still have **PASIG logo pins, glossaries, membership directories, and brochures for sale**. Contact the Orthopaedic Section at 1-800-444-3982 for information.

Jeff Stenback, PT, OCS
Treasurer—Public/Media Relations Committee Chair

NOMINATING COMMITTEE

Last Call for Nominations!

We invite you to serve and help steer the direction of the PASIG and to make yourself heard! We are in the process of nominating members of the PASIG to run for office. Our goal is to put together an Executive Board that represents dance and music equally, and represents therapists from across the country. This is your opportunity to become a part of the governing board of the PASIG. We invite you to run for President, Treasurer, or a member of the Nominating Committee.

Nomination Guidelines: Nominees must be PASIG members, therefore also Orthopaedic Section members. Nominees must give their consent to be nominated before their names are put forward. Nominees may be self-nominated. Nominees' names should be submitted to Amy Wightman, Nominating Committee Chair, by e-mail at abwightman@hotmail.com, or by phone (860) 643-3562. Nominees should be prepared to provide a brief biography and candidate statement describing their goals for the office for which they are nominated.

President: Three year term; serves as the official head of and public spokesperson for the PASIG, facilitates growth and development of the PASIG, presides over all meetings of the PASIG and the Executive Board; acts as a neutral member of the PASIG in voting matters; exercises the right to vote to resolve a tie vote; is a liaison to the Section.

Treasurer: Three year term, assists in growth and development of the PASIG with the Executive Board, assumes responsibility for the submission of the PASIG budget report, receipt, disbursement, and accurate recording of all PASIG funds; presents a written financial report at PASIG Executive Board meetings.

Nominating Committee: Three year term, one of three committee members; assists nominating committee chair to network among the PASIG membership and help develop new candidates for office; assists in overseeing the PASIG election process. A new Nominating Committee member is elected yearly, and in the last year of the term assumes the Chairperson position.

*Amy B. Wightman, PT
Nominating Committee Chair*

GET INVOLVED IN THE PASIG AND THE FUTURE IS YOURS!

Join your fellow PASIG members in becoming an ambassador for the Performing Arts! The PASIG wants to encourage all our members to become actively involved by serving as committee members, regional directors, officers, and by offering your input at business meetings and through communication with other PASIG members. Remember, when you give of your time and energy to the PASIG, it's like giving a gift to yourself! The PASIG is only as strong as its members.

Practice Committee: To develop, in coordination with the membership, the practice guidelines and standards for physical therapy for performing artists; to assist in the development and implementation of student affiliations as well as advanced clinical mentorships/residencies/fellowships; to serve as an advocate for performing arts physical therapy practice issues; to facilitate communication among members regarding practice

patterns and exchanges of clinical information [Time Commitment: 8hrs/quarter].

Education Committee: To develop and coordinate 3 hours of annual programming for PASIG membership; to coordinate with the Research Committee for 1 hr. of annual "Dialogs in Performing Arts Research" programming [Time Commitment: 10 hr/1st and 2nd quarter; 3 hrs/3rd and 4th quarter].

Research Committee: To facilitate clinical research in physical therapy for performing arts; to facilitate dissemination of research relevant to performing arts physical therapy [5hrs/1st and 2nd quarter; 3 hrs/ 3rd and 4th quarter].

Membership Committee: To develop outreach mechanisms to increase retention of current members, and recruitment of new members [6hrs/quarter].

Public/Media Relations Committee: To raise awareness of performing arts physical therapy within the physical therapy profession, the performing arts community, and with the public at large; to assist members in marketing their services to the performing arts community; to act as a clearinghouse for clinical pearls, regional news and specific membership achievements; to act as an ambassador for performing arts clinicians [3hrs/quarter].

Regional Directors (Subcommittee of P/M Relations): To highlight regional activities of the performing arts physical therapy community, and PASIG members in particular; to foster communication and interaction among PASIG members; to act as an ambassador for the PASIG Executive Board to the regional members [3 hrs/quarter].

PASIG Resources

Let PASIG help you MARKET your services!

PASIG BROCHURES AND LOGO PINS are available to help you advertise and build your performing arts patient base. You can use the **BROCHURES** to market yourself to the performing arts community, the medical community, and to colleagues in the physical therapy community. You may proudly wear the **PASIG Logo Pin** to increase professional exposure.

The **PASIG MEMBERSHIP DIRECTORY** is an excellent resource for referrals, especially when your patients travel out of state. It includes state-by-state and alphabetical listing of PASIG members, as well as a Student Affiliation Site List. And don't forget, we still have **DANCE/MUSIC GLOSSARIES** available to assist you and your colleagues in communication with your performing artist patients. **ORDER NOW!**

PASIG PINS	\$5.00
PASIG DIRECTORIES	\$3.00
PASIG BROCHURES	\$15.00(package of 25)
GLOSSARIES	\$2.00

TO ORDER: Call the Orthopaedic Section at 1-800-444-3982. All proceeds benefit the PASIG.



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Public/Media Relations Committee Chair:

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Joe Berman, Susan Guynes, Jill Olsen

Members:

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Marshall Hagins, Marijeanne Liderbach
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PERFORMING ARTS SPECIAL INTEREST GROUP • APTA

MEMBERSHIP FORM

To be a PASIG member, you must also be a member of the Orthopaedic Section. You may use this form for **new membership, change of address, or updating your information.**

Name: _____
Address: _____
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What percent of your patient population are performing arts patients?

____ Dancers ____ Gymnasts ____ Skaters
____ Musicians ____ Singers ____ Circus Performers

If you are affiliated with any performing arts schools, companies, or groups, please list them:

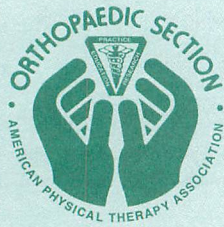
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Pain MANAGEMENT

SPECIAL INTEREST GROUP • ORTHOPAEDIC SECTION, APTA, INC.

President's Message

Joe Kleinkort, PT, MA, PhD, CIE

There are so many new modalities and abilities to manage chronic pain; I think it is only appropriate for us practicing in the field to have a greater knowledge of these modalities. The same is true with new inroads in science and knowledge of mechanisms that cause pain. In discussing the neurobiological aspects of chronic pain, Butler's new book has refreshing new insights to some of the neurobiological mechanisms that recently have been found to take place in the patient with chronic pain. I highly recommend his latest text.

In a like manner, there is an area of treatment medically that has received very little attention in the US and that is the use of ozone. It is a treatment of choice for many conditions in the rest of the world. I hope this article is enlightening to you that other options are available. I do hope that you all consider sending short articles for publication in this media. It is through this common dialogue that we can grow and become all that we can be to serve our fellow humans.

The Use of Current Perception Threshold Testing in the Pain Management Physical Therapy Clinic

John E. Garzione, PT AAPM

A screening procedure that provides for the quantification of peripheral neuropathies can be performed quickly and easily in the clinical setting using the noninvasive, nonaversive diagnostic technique known as current perception threshold (CPT). The integrity of a sensory nerve can be measured by recording the intensity of neuro-selective electric stimuli applied transcutaneously. The device is the Neurometer CPT, a portable battery operated, (6v) nerve stimulator emitting a graded sinusoidal wave at frequencies of 5 Hz for C fiber stimulation, 250 Hz for A delta fiber stimulation, and 2000 Hz for A beta fiber stimulation. The current is delivered at intensities of up to 10 milliamperes, while maintaining constant alternating current. The skin is stimulated from a pair of 1 cm diameter gold-covered electrodes (separated by 1.7 cm) placed on the distal portions of the peripheral nerve fiber. The reported CPT value corresponds to the minimum amount of applied electrical stimulus that an individual perceives 50% of the time. To determine this, a single-blind experimental procedure is employed, with the controls hidden from the patient's view to ensure accuracy and reproducibility. The test selector indicator can be switched, producing an audible "click," in any of the 3 positions—true, rest, or false. While in the "true" position, the operator increases

the applied current until the subject reports a sensation of tingling, buzzing, or burning (corresponding to 2,000, 250, and 5 Hz respectively). The current is subsequently turned off and then stimulus is reapplied at decreasing intensities. These minimum values of CPT are then compared to established normative values to determine what degree, if any, of nerve dysfunction is present. This device is capable of detecting hypoesthetic as well as hyperesthetic conditions of any or all of the 3 types of sensory nerve fibers.

The following case reports illustrate how Current Perception Threshold studies were used to help locate sources of neural compression and improve the probability of treatment success.

CASE HISTORY I

The patient was a 47-year-old female nurse's aide who was referred because of persistent pain and paresthesia in the lumbar spine and into the right leg because of a work injury 2 years prior. EMG and NCV were reported normal, but her MRI suggested a mild disc bulge at the L5, S1 level.

CPT testing was performed and indicated a 0 score at L4, a +3 score at L5, and a +2 score at S1. Based on her CPT findings, she underwent a discogram which indicated prolapse of the L5, S1 disc.

Patient subsequently underwent decompression surgery and returned to work after a 6-week course of lumbar rehabilitation.

CASE HISTORY II

The patient was a 46-year-old male telephone lineman who was referred because of paresthesia of the right 5th finger, which lasted over 2 years. EMG, NCV, MRI, and Thoracic Outlet provocation tests were negative. X-rays suggested a slight forward slippage of C7 on T1.

CPT testing was performed and indicated a 0 score at C6 and C7 and a +3 score at C8. He was treated with physical therapy—consisting of iontophoresis with salicylate, IFC electrical stimulation, and cervical stability exercises, for 2 months and was retested by CPT. His score at C8 had returned to 0 and he was discharged asymptomatic.

CASE HISTORY III

A 55-year-old female assembly worker was referred because of bilateral hand paresthesia due to over usage at work. EMG and NCV were normal.

CPT testing showed a grade 0 for C5, C6, and C7 but +2

for C8. CPT testing was done during the pectoralis minor provocation test showed C8 to be +3. She was treated with physical therapy, consisting of thoracic outlet exercises for 2 months and was retested. Her C8 grade was 0 but her pectoralis minor provocation CPT test was +2.

This evaluation technique can also be used to monitor progression of a neural compressive disorder.

CASE HISTORY IV

A 58-year-old female homemaker was referred to physical therapy for pain and numbness of her left 1-3 fingers. She was unable to sleep at night due to the pain. EMG and NCV confirmed Carpal Tunnel Syndrome and her CPT score was +3.

She was treated with resting splints for night use; iontophoresis with anti-inflammatory agents, sternocleidomastoid biofeedback, and carpal mobility stretches for 1 month. She reported that she had no pain and was able to sleep through the night. Repeat CPT measurement showed a score of +9 indicating a complete anesthetic condition. She underwent carpal decompression surgery, and 2 months later her CPT score was 0.

CONCLUSION

This testing technique is attractive for physical therapists as it is transcutaneous, requires a short (usually 2 days) training period, and is more sensitive than NCV in detecting neural compression. A recent study reported in the *American Journal of Pain Management* found that CPT agreed with MRI in 82% of the symptomatic cases tested.

Testing with the CPT unit is more cost effective than MRI (approximately \$40 for the CPT vs \$1000 for the MRI), and can be done easily in the physical therapy clinic. Serial testing can be done at regular intervals for objective measurements of treatment outcomes.

Natural Approaches to Resolving Headaches

Tom Watson, PT, MEd, FAAPM

You begin the day by driving to work in rush hour traffic and people are honking at you. You're late for work, your boss yells at you, and your paycheck is short \$500. Your neck gets stiff, your shoulders tighten up, and your wife calls to tell you your dog left a message in the living room for you and it's another rush hour drive home. Tension headache No. 423 has been going on all day.

Ninety seven percent of all headaches are tension type; more than 2% are vascular (migraine); and the other 1% are tumors, sinuses, and ex-spouses. The International Headache Association lists 167 different types and headache No. 168 is "not classified." What are you going to do? Take 2 aspirin and call me in the morning? Other things may be effective as well.

Massage therapy is one of the oldest forms of treatment for this condition. First, massage to the cervical, upper trapezius, and upper thoracic area can be very relaxing especially when combined with a topical ointment.

Acupressure to Li 4 at the web space of the thumb and index finger or to GB 20 just inferior and medial to the mastoid process for 30 to 60 seconds can bring immediate relief of the headache.

An osteopathic technique that I use can stop a headache in 30 seconds. Slide your thumb across the mid-roof of your hard palate until you come into contact with the soft palate. Gentle upward pressure for 30 seconds can stop a headache. This technique is a combination of cranial mobilization and indirect pressure to the sphenopalatine ganglia.

New Choices in Natural Health Prevention, Rodale Press, Inc. 1995 offers other options for headaches:

1. Aromatherapy: a drop of peppermint added to unscented facial lotion and applied to the nose or behind the ears can significantly decrease a headache. It is also available in a neck wrap which when heated and applied to the neck can be extremely soothing.
2. Ayurveda: a plain warm water enema can relieve constipation and accumulation of toxins in the colon. It is believed these toxins and constipation can cause headaches.
3. Food therapy: a cup of caffeinated coffee can increase the effectiveness of aspirin or other medications by about one-third or by itself cause vasoconstriction which relieves some headaches.
4. Herbal therapy: one part each of dried herbs winter green, willow bark and meadow sweet, steeped for 10 minutes and strained, then cooled to a drinkable temperature.
5. Juice therapy: Eve Campanelli, PhD, a holistic family practitioner in Beverly Hills believes "the most common cause of headaches are due to constipation and liver malfunction." She recommends a twice-daily dose of 8 ounces of apple juice with one ounce of spinach juice blended into it. This will help to flush out toxins.
6. Stretch-based relaxation techniques are another suggestion.

There are no doubt multiple other ways of relieving headaches. You should always seek the advice of a medical doctor in the event of an abrupt onset of severe headache; exercise-induced headache; associated tingling, dizziness or loss of balance; and progressive increase in frequency and duration of headaches.

Finally, common sense says avoid those things that may give you a headache. "Pain does not have to be a way of life."

Tom Watson, PT, MEd, FAAPM

A Simple Solution to a Complex Pain Problem

Frank Lawlis, PhD, Andrew Messamore, MD, Joe Kleinkort, PT, PhD, CIE

Everyone knows that one of the essential elements for life is oxygen. Like harnessing fire, this element may become the most powerful healer of our time, especially for chronic pain. Our bodies require it for functioning and without it for only a few minutes, our tissues die. Deprivation of oxygen to the body through our contemporary environments create many of our modern day problems. For example, polluted air, sedentary lifestyles, or junk food diets require increased oxygenation for elimination and encourages anaerobic microbes to proliferate. Over-growth of harmful microbes will lead to breakdown of enzymatic reactions, overload of metabolic wastes, and ultimately cell death. Under similar anaerobic conditions, cells tend to mutate to more primitive life forms, turning from aerobic to anaerobic respiration for

energy synthesis. The growth of cancer cells is a fermentation process, which can be initiated only in the relative absence of oxygen.

Ozone is one of nature's most powerful oxidants. It is used in water purification and sewage treatment and is now being applied medically in Europe to treat everything from wounds and colitis to cancer, stroke, and AIDS. The same ozone in the atmospheric layer that is responsible for shielding off ultra-violet light from the sun and oxidizing the pollutants in the air can be produced from medical oxygen via electrical discharge. It is administered as an ozone/oxygen (O₃/O₂) gas mixture. According to the dosage and concentration range, medical ozone is a pharmaceutical agent that exerts specific properties and a well-defined range of efficacy.

The oxidative power of ozone has proven to be effective in destroying lipid enveloped viruses such as Epstein-Barr, herpes, cytomegalovirus and viruses that causes hepatitis. One recent study indicates that ozone treatment was 97% to 100% effective in destroying HIV in vitro (*Journal of American Society of Hematology*, October 1, 1992.) The restitution properties of ozone can be observed by its oxidative influence on the oxygen metabolism, the induction of specific enzymes, and the activation of immunocompetent cells.

OZONE FOR BACK PROBLEMS

In the last 10 years, there has been a growing interest in alternatives to surgery. An alternative therapy that has been receiving exposure in Europe is the use of medical ozone in the treatment of herniated spinal discs. Medical ozone has been used in Europe for 40 years and now is seriously being considered as a possible treatment for herniated discs. The use of medical ozone in the treatment of spinal disc problems was developed by Cesare Verga in 1983. Dr. Verga has since treated over 8,000 patients with spinal disc problems and has documented a 95% cure rate. In 80% of the clinically healed cases, there are also corresponding CT and MRI images confirming resolution. In 15 years of treatments Dr. Verga states that relapses occur in less than 2% of cases. The method involves the administration of 40/60cc of ozone gas mixture at a concentration of 20/30 micrograms per cc, repeated 8 to 14 times. The injection is generally made into the paravertebral musculature, and in the hernia zone. In the recent initiation of our studies in the United States, all of the 5 patients have been successfully treated with significant reductions of pain. Interestingly, it does not seem to matter if the problem is acute or chronic or if the patient has been operated on previously.

MECHANISM OF ACTION EXPLORED

The exact mechanism of action is not known but several insights may be made. Several studies suggest disc inflammation as a mechanism of sciatica due to disc herniation. Ozone has been shown to have an effect on the inflammatory cascade by altering the breakdown of arachadonic acid to inflammatory prostaglandins.

Another explanation is that the environment around a disc can be compromised. The herniation can impinge on

the venous and arterial flow and cause phlebostasis and arteriostenosis. The combination of these conditions can then lead to serious hypoxemia. The sensory roots are more particularly sensitive to anoxia. By applying the ozone to the disc area, both a direct and indirect hyperoxygenation of the zone occurs and reduces the pain. There is a direct effect of the oxygen directly diffusing into the area.

A third mechanism may be the effect of removing water from the disc that is 70% to 90% water. Ozone has a direct effect on the proteoglycan structure of the nucleus pulposus, breaking down this material so that the disc no longer holds water. Another action may be the stimulation of fibroblastic activity by ozone. Fibroblasts initiate the repair process by stimulating the deposition of collagen. Although yet to be validated, this mode of action could explain the resolution of CT scans and the small percentage of patients who have relapses after completion of the treatment plan.

ADVANTAGES OF MEDICAL OZONE FOR SPINAL DISC PROBLEMS

There is a great amount of excitement with the new advent of using ozone in therapeutic approaches to chronic pain. Use of new technology in the formulation of ozone and administration of it to patients apparently holds great promise for patients with chronic back pain. The advantages are:

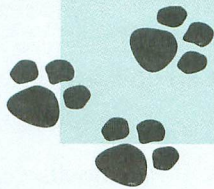
1. No contraindications.
2. No limits to the number of sessions, adapting to the necessity of the patient.
3. Patients who have already had back surgery have benefited from the treatment.
4. The mode in which medical ozone is administered does not in anyway alter the biomechanics of the back.
5. It does not require hospitalization or day surgery admission.

The medical use of ozone has been shown to be promising therapy for patients with herniated intervertebral discs. The modes of action seem to address the underlying pathology without disturbing the biomechanics of the back. Ozone, with all its miraculous properties and accompanied by its lack of toxicity, is undoubtedly an important tool in medicine of the future. It has a double effect. It defends the body via its stimulation of the immune system and at the same time it improves oxygenation and metabolism.

REFERENCES

1. Iliakis E, et al. Ozonotherapy in the treatment of low back pain. *Orthopedics*. 1995; 8(1):29-33.
2. Viebahn R The Use of Ozone in Medicine. 2nd ed. Karl Haug Publishers; 1994.
3. Iliakis E. Utilization of Ozonotherapy in the practice of orthopedics. *Acta Toxicol Ther*. 1996;17(2-3):245-248.
4. Sforza A, Sforza G. Confirmation of the effectiveness of local percutaneous injections of ozone in chronic and acute radiculopathy. *Acta Toxicol Ther*. 1996;17(2-3):245-248.
5. Gualandi G, et al. Preliminary trials, with ozone therapy in the treatment of low back pain. *Acta Toxicol Ther*. 1996;17(2-3):261-264.

Animal Physical Therapist



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THE ANIMAL PHYSICAL THERAPIST SIG UPDATE:

1. Orthopaedic Section member and nonmember directories are available through the Section Office 800-444-3982 Fax: 608-788-3965 or Email: : snyder@centurytel.net. There are currently 544 members to date.
2. State Liaisons: To date there are 33 states that have Animal Physical Therapist SIG Liaisons. Contact Siri Hamilton for further information 865-974-2993 or E-mail: sirivpt@utk.edu.
3. The APTA lists all of the State Practice Acts at www.apta.org/advocacy/state/state-practice

CLINICAL ROUNDTABLE ANIMAL PHYSICAL THERAPIST SPECIAL INTEREST GROUP

2002 Combined Sections Meeting, Boston, MA

The Animal Physical Therapist Special Interest Group is looking for clinical cases to form the foundation of a clinical roundtable for CSM, 2002 in Boston, Massachusetts. The cases should demonstrate principles of basic and clinical science, as well as the rehabilitation process. To obtain a copy of the submission guidelines, contact Dr. Kristinn Heinrichs, 912-921-7346 or by email at heinrikri@mail.armstrong.edu.

Frequently Asked Questions

Research.... the key to validating your practice and expanding opportunities?

Early in my career, before the phrase "outcomes measurement" was hip, I was given wise counsel that made a lasting impression: "unless you validate what you do with sound clinical investigations, your profession will not gain the respect it so justly deserves." As the years have passed, the body of our scientific knowledge has increased; however, knowledge as it applies to animal injury rehabilitation and performance recovery remains scant at best. Every inquisitive clinician, regardless of practice setting, has all the elements of beginning research before them every day.

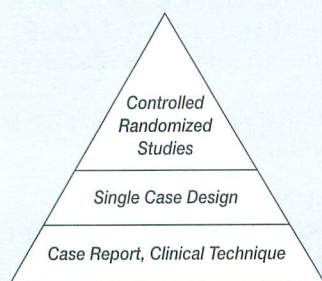
You do not have to be an expert in research design, statistics, or even writing (although that skill does help!) to begin to develop questions. A curious mind and observant eye are sufficient to begin! Your observations, shared with your colleagues in the form of a case report, can stimulate other, more refined questions which, in turn, can generate the traditional scientific inquiry. Think of the specificity of a question and the research design to answer the question as a pyramid, with the case report forming the broad base of awareness of an issue or a broad question. A case report can be used to place what you see as a result

CALENDAR OF EVENTS:

❖ The American College of Veterinary Surgeons (ACVS) will be having a seminar on post-operative rehabilitation as part of their 2001 Symposium, October 11-14, 2001 at the Hyatt Regency in Chicago, Illinois.

❖ The home study course BASIC SCIENCE FOR ANIMAL PHYSICAL THERAPISTS is still available. Contact 877-766-3452 for more information.

of your assessment, intervention, and the outcomes into a theoretical framework as the first step. The next steps are single case research designs (and these can be very powerful designs and lend themselves well to clinical research) and controlled, randomized studies (although a discussion of research design is beyond the scope of this FAQ). If you are fortunate to be near a university with a physical therapy program or exercise science program, take advantage of the possibilities available for collaboration. People in the "ivory tower" can help you with designing a good study (one without fatal flaws!), deciding on the variables and protocols, data analysis, and writing the presentation for either a poster presentation or a platform (oral) presentation, typically 20 minutes in length. I invite you to look at your clients with a new vision for the opportunities for a case report. Submitting a case report for CSM 2002 is a wonderful way to begin sharing what you see on a daily basis and your perspectives with your colleagues—and it is easier than you think!!



As you treat your client, collect all the possible, relevant information: history, radiographs, diagnostic testing, evaluation results, progress notes, photographs, outcomes. Learn more about the condition: anatomical foundations, pathophysiology, or pathomechanics. Veterinary medicine uses the same database as human medicine: Medline. If you have Internet access, you can perform a literature search on Medline: www.ncbi.nlm.nih.gov/entrez. If you have access to a university library, many will also have the SportDiscus database which indexes all the periodicals for exercise science. Searching these two databases will yield the best results.

Once you have collected the relevant information from your case and the background information, you are ready to write your paper. Outline your thoughts according to the abstract submission guidelines. Remember you will be limited to 250 words, so this is not the place for great detail: just the highlights and the main points of the case.

Once your abstract has been accepted, you should begin to work on the presentation. Most papers presented at conferences are created using presentation software, such as Microsoft Powerpoint. Your preparation will be slightly different depending on whether you are preparing for a poster presentation or a platform presentation. Most platform presentations limit you to 15-20 minutes with a 5 minute question and answer period—thus, the information on your slides must be succinct, clear, and interesting. At the most you should have 10-12 text slides (including the title slide) and perhaps two or three slides with images. A template for creating your presentation can be found at <http://www.sportsperformance.org>. Follow the links to the animal discussion group pages and you will find a template to help you create your presentation.

Your reward will come at CSM when your colleagues ask you great questions and thank you for the information—and your name will have been up in lights!!

*Kristinn Heinrichs, PhD, PT, SCS, ATC, CSCS
Animal PT SIG Education Chair*

Recommendations for Arthritis Care Related to Physical Therapy for Dogs

Cheryl Riegger-Krugh ScD, PT

Recommendations for general arthritis care for dogs are listed below followed by a case study of specific examination, evaluation, and intervention for one dog with arthritis. Included is the home program for this dog, Oakley. We hope to present a series like this for other pathologies and for other animals in the future.

Discuss all of these suggestions with your veterinarian. The following is what has worked in my experience for my dogs.

EXERCISE

I recommend gentle physical activity that is consistent from day to day. Avoid the length of walks or level of physical activity that leads to stiffness and pain. You can judge this by the difficulty your dog has following this activity and particularly the difficulty in coming to standing after resting following the activity. Increased difficulty will result in use of momentum of the head and neck and excessive motion of the head, neck, and upper body with attempts to rise from a lying down position after the activity.

Swimming is a great exercise option if available. You may want to inquire about water therapy and/or use of an underwater treadmill.

STRETCHING

The soft tissues around arthritic joints tend to get stiff. Very gently and slowly try to move the joint through its natural motions. I have found it helpful to gently oscillate the limb to help the muscles relax and let go. Example: to get the hip joint to straighten out or extend, gently pull the thigh toward the tail while gently oscillating the supported thigh in short amplitude abduction and adduction motions. Passive motion should be performed gently and slowly, with proper knowledge of the shapes of the articular surfaces, and with proper training in using the knowledge of joint concavity and convexity when performing passive range of joint motion.

MASSAGE

Yes and often. Gentle massaging motions in the areas of the arthritis, adjacent body segments, and throughout the body, are helpful, as often there is compensation in body movements that result in soreness throughout the body.

REST AREA

I recommend a thick soft and comfortable bed area and rest area, if there is a rest area that is different from the bed area. The area should be sufficiently warm, to avoid chilling. If the dog will tolerate, pillows can be used to position

joints for comfort. For example, with the dog in lateral recumbency, a pillow between the stifle and the tarsocrural joint positions the top hip in a position of reduced stress.

MODALITIES

A warm compress should relax and ease pain around the arthritic joint. This can be accomplished by placing a “warm to the touch” compress or pack on the arthritic joint for about 15 minutes. A pack that is microwavable is easy to use if available. Check regularly to be sure that the pack is not getting too hot. Be observant if your animal starts to squirm as that may mean that the compress is getting too hot.

If you have access to a physical therapist or veterinarian, you may want to ask about an EquiLight System. The EquiLight System is a modality that mobilizes use of nitric oxide in the body. This enhancement process occurs with the body’s natural healing. With this modality, there is no need to shave the fur. Electrical stimulation and ultrasound are other modalities used for improving muscle contraction ability and for deep heating. You may want to inquire about acupuncture.

MODIFICATION OF THE ENVIRONMENT

If possible, avoid jarring motion to the arthritic joint. Examples include:

- Elevating food and water bowls for dogs with cervical spine arthritis. This would be recommended for dogs with risk of developing cervical spine problems. These dogs include ones with big heads and/or long necks.
- Monitoring and modifying jumping up and down, such as into a car or up onto a couch or bed. Modifications could include physical assistance, use of ramps or a secure step stool, or placing a big sturdy pillow on the floor by the bed to decrease the jump distance into and from the bed.

SUPPLEMENTS

Ask your veterinarian about use of supplements. The following was developed with a veterinarian and has worked well in my experience.

Veterinarians I have talked to recommend glucosamine and manganese supplements that match the supplements of the veterinary prescription medication cosequin, which contains these supplements and chondroitin sulfate. They may recommend chondroitin sulfate as well. You can get the same supplements for less money if you purchase them as separate supplements, rather than as the prescription of cosequin. Use a reputable source as these products are not prescription, therefore, the purity is not assured. Veterinarians in the Denver area recommend the Vitamin Cottage brand of NOW (or other brand in a reputable health food store). The standard dose in Cosequin is 1500 mg of glucosamine, 1200 mg of chondroitin sulfate, and 10 mg of manganese per day. I divide the dose into AM and PM doses if possible, however, my source of manganese is 10 mg so I use the whole 10 mg for my dogs in the AM. You can give these tablets in a thin slice of cheese.

With my dog, use of glucosamine and manganese for hip arthritis was equal to about 95% of the effectiveness of rimadyl, an anti-inflammatory prescription medication that improves function but also can harm the liver.

Note: chondroitin sulfate does not appear to be as effective in humans as glucosamine, perhaps because the molecular weight of chondroitin sulfate may be too large to have it pass into the joint. The same may or may not be true for dogs. It may be that the original use of chondroitin sulfate in horses was reported as effective, because it was administered as an injection into the joint.

These supplements might be used preventatively, if the dog has some risk factors for developing arthritis. Risk factors include: overweight, skeletal malalignment, growing too fast, and posture or movement or status (such as amputation) that overloads one or more limb.

One of the veterinarians for my dogs suggested 1 tablet of ascriptin 1 hour before and 1 hour after a longer walk. This worked well for my dog with bilateral hip arthritis. You can give these tablets in a thin slice of cheese.

You may want to ask your veterinarian about Adequan, which are injections.

Canine Osteoarthritis – A Case Study

Caroline Adamson, MS, PT

“Oakley”, a 1-year-old female Labrador Retriever, presented at Alameda East Veterinary Hospital on May 1, 1997 with a history of intermittent lameness. Evaluation revealed a diagnosis of hip and elbow dysplasia.

On May 3, 1997, Oakley underwent bilateral elbow arthroscopy and left triple pelvic osteotomy. A fragmented coronoid process was present in the left elbow that was subsequently removed. The right elbow revealed only minor erosion and irregularity associated with the coronoid and ulnar surfaces. No degradation of cartilage was present. A triple pelvic osteotomy was performed on the left hip to reduce the degree of joint laxity.

Oakley returned on May 16, 1997 with continued lameness in the right forelimb. A dynamic ulnar osteotomy was the recommended treatment for the elbow incongruity and thus was performed on June 5, 1997. Osteomyelitis developed and on September 20, 1997, Oakley underwent debridement, removal of tissue for culture and sensitivity, and lavage of the right ulnar shaft. An elbow scope on November 28, 1997 revealed severe cartilage degradation in the right elbow as a consequence of the degenerative joint disease secondary to elbow incongruity.

On February 3, 1998, radiographs revealed that the bilateral ulnar osteotomies had healed. A follow-up exam by the surgeon on February 9, 1998 stated that “Oakley is doing better. Still lame on right front leg. Currently on cephalexin and flagyl for 2 more weeks. Does well on Cosequin/occasional aspirin.”

Another follow-up appointment by the veterinarian on April 7, 1999 revealed the following: “joint effusion and decreased range of motion in the right cubital joint; currently on Rimadyl and Cosequin. Plan included an increase in physical therapy: specifically swimming, ‘wheelbarrowing,’ and passive range of motion.” No physical therapy notes were available.

Oakley presented to the Colorado Canine Sports Medicine/Rehabilitation Clinic on August 28, 2000. Initial evaluation showed full range of motion on the left forelimb. The right forelimb maintained full range at the shoulder and carpus, but was lacking 15° of elbow extension and 20° of elbow flexion. In

sitting, "Oakley" held up her limb >75% of the time. At a stance, she was nonweightbearing to occasional toe-touch weightbearing. At a walk, "Oakley" would weightbear on approximately 50% to 75% of strides with a severe limp and external rotation and circumduction of her shoulder. Weightbearing decreased to about 25% to 50% of strides at a trot, with occasional touching of her limb on the ground. Surgically, the next option was arthrodesis of the cubital joint.

Physical therapy began on August 28, 2000 through September 18, 2000. Ambulation in the underwater treadmill was done 2 to 3 times per week. The EquiLight (monochromatic infrared energy) was performed 5 to 7 days per week for 45 minutes per treatment. The EquiLight therapy was continued with the same frequency and duration from 2/12/01 through 2/22/01.

On February 22, 2001, Oakley continued to show decreased range of motion in the right cubital joint. At a stance, she was partially weightbearing, though occasionally holding up the limb. Weight was noticeably shifted onto the left forelimb. At a walk, she continued to show a limp, but was weightbearing on approximately 95% of strides. At a trot, she occasionally "skipped" a step and led with the left forelimb. Her stride on the right forelimb was ~50% that of the left forelimb and external rotation and circumduction of her right shoulder was still present, especially at faster gaits. To date, no further surgery has been performed.

On September 12, 2000, client education regarding osteoarthritis was discussed. Below is a copy of Oakley's arthritis home care program.

OAKLEY'S Home Care Program

1. Osteoarthritis tends to follow a course of exacerbation and remission. During a period of aggravation, Oakley should not be forced to exercise. Low impact exercises, such as leash walking and swimming are ideal.
2. One sign of degenerative joint change is stiffness, especially in the morning. Begin the day by taking time to warm her joints, especially her right elbow. This can be done using warm water bottles, heating wet towels in the microwave (comfortable enough for you to tolerate on your own skin), or a bathtub/whirlpool (~85°) for 15 to 20 minutes.
3. Following warming, apply passive range of motion to her right shoulder, elbow, and carpus. Fifteen to 20 SLOW repetitions, holding for a few seconds in between, is sufficient. This allows for decreased stiffness and increased motion of her forelimb.
4. Continue throughout the day taking Oakley on several short walks (at least 3) with long rest periods in between. Let her set the time and distance. Begin walking 10 to 15 minutes at a time, gradually increasing your goal. Multiple short walks are more beneficial than 1 to 2 long walks. Note any discomfort, increased fatigue or stiffness, or refusal to go any further. Should this occur, cut the previous level of activity in half and continue from there.

**Differentiate between muscle soreness and joint pain:

muscle soreness—painful upon palpation of muscles
joint pain—painful when flexing or extending a joint

5. As her tolerance and endurance improves, activities to further improve mobility, reduce pain, and increase muscle strength may be added. Some ideas may be to incorporate

- ramps, inclines, or stairs into her walking program in incremental amounts. Once again, let her set the boundaries.
6. Following exercise, a period of cool-down is necessary. Use massage and a bag of frozen vegetables or an ice pack on her joints for 15 to 20 minutes to minimize any postexercise swelling that may have occurred.
7. No anti-inflammatory medications should be given for the first 2 days when beginning a rehabilitation program. The anti-inflammatory effect may mask painful joints associated with exercise progression. After 2 days, if no joint pain is noticed, medications may be given 1 hour prior to exercise. Withhold medications for 2 days as exercise is increased.
8. Osteoarthritis treatment is a lifelong commitment. If rehabilitation is stopped, any benefits gained will likely be lost.

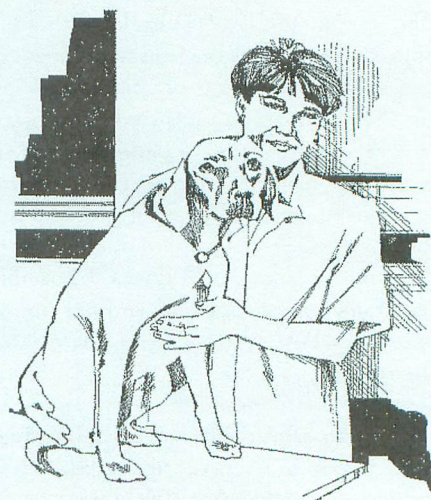
State Liaisons

The Animal Physical Therapist Special Interest Group is currently looking for individuals to fill the position of State liaison in the following states. Our goal is to have all 50 states represented.

- Arkansas
- Delaware
- District of Columbia
- Maine
- Minnesota
- Mississippi
- New Jersey
- New Mexico
- New York
- North Carolina
- North Dakota
- Oklahoma
- South Carolina
- South Dakota
- West Virginia

As state liaison, you will be responsible for contacting both the veterinary and physical therapy state boards securing a copy of the respective practice acts. This will limit the number of inquiries to both professional state boards. You will become the contact person for those individuals who are needing information about practice acts in your state, individuals who may be looking to refer patients, or people who may be seeking collaborative relationships. You will establish and maintain a list of those individuals in the state who are interested or involved in animal rehabilitation with the goal of sharing information with others within and outside your state.

Help us reach our goal of nationwide coverage by getting involved. Interested persons should contact me, the State Liaison Coordinator: Siri Hamilton PT, LVT at work: 865-974-2993 or via email at sirivtpr@utk.edu



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Instructions to Authors

Susan A. Appling, MS, PT, OCS, Editor
Sharon L. Klinski, Managing Editor
800/444-3982

1. *Orthopaedic Physical Therapy Practice (OPTP)* will publish articles pertaining to clinical practice. Articles describing treatment techniques as well as case studies and reviews of literature are acceptable. Language and format of articles should be consistent with the *Guide to Physical Therapist Practice*.
2. Manuscripts should be reports of personal experiences and written as such. Though suggested reading lists are welcomed, references should otherwise be kept to a minimum with the exception of reviews of literature.
3. Manuscripts are accepted by mail or electronically. If by mail, two copies of the manuscripts should be submitted along with a 3.5" disk with the document saved as Microsoft word or ascii. They should be double-spaced, with one-inch margins on each side. Four double-spaced pages equals one page in print. The *American Medical Association Manual of Style*, 9th ed. should be followed. The title page should include the author's name, degree, title, place of work, corresponding address, phone and FAX numbers, and email address. The manuscript should be sent to: *Orthopaedic Physical Therapy Practice*, ATTN: Managing Editor, 2920 East Avenue South, Suite 200, La Crosse, WI 54601-7202. If submitted electronically, please e-mail to Sharon Klinski, Managing Editor (sklinski@centurytel.net) and Susan Appling, Editor (sappling@utm.edu), as well as mailing a hard copy to the Section office.
4. Black and white photographs to accompany the texts should be glossy 5 x 7. A photo release form must accompany any photographs where patients may be seen. Digital photos are also acceptable. Any tables that might add to the usefulness of the article are also welcome.

REQUEST FOR PROPOSALS

ORTHOPAEDIC SECTION, APTA, INC.

Purpose: The Orthopaedic Section must support its members by funding studies designed to systematically examine orthopaedic practice issues. The purpose of this grant program is to address the urgent need for clinical research in orthopaedic physical therapy.

Targeted Recipients of the Grant Program: The grant program is designed to provide funding for any Orthopaedic Section member who has the clinical resources to examine a well-defined practice issue, but who needs some external funding to facilitate the completion of a clinical research project.

Studies Eligible for Funding: The four types of studies that will qualify for funding are studies that: 1) examine the effectiveness of a treatment approach on a well-defined sample of patients with orthopaedic problems; 2) examine patient classification procedures for purposes of determining an appropriate treatment; 3) further establish the meaningfulness of an examination procedure or a series of examination procedures used by orthopaedic physical therapists; and 4) examine the role of the orthopaedic physical therapist in the health care environment. Authors must stipulate which purpose their grant is designed to address.

Categories of Funding: Two Grants at \$10,000 maximum
Two Grants at \$5,000 maximum

This program is designed for therapists who are ready to begin a project but need additional resources. The grant may be used to purchase equipment, pay consultation fees, recruit patients, or fund clinicians. Clinicians receiving funding from this program will be expected to present their results at CSM within 3 years of receiving funding. Recipients will receive \$300.00 to allay costs associated with presenting at CSM.

Criteria for Funding:

Applications for this grant must be 10 pages or less and include the following

- A specific and well-designed purpose that is judged to be consistent with the four types of studies eligible for funding and described above
- The sample studied must include patients. For studies examining the role of the orthopaedic physical therapist in the health care environment, the sample studied would be therapists involved in the delivery of care
- Priority given to projects designed to include multiple clinical sites
- Priority given to studies examining treatment effectiveness
- Institutional Review Board approval from participating site(s) and letter of support from facility(ies) participating in the study
- Principal investigator **MUST BE AN ORTHOPAEDIC SECTION MEMBER**
- Priority given to projects that are currently not receiving funding
- Evidence of some pilot work
- A copy of the Principle Investigator (PI) and Co-Investigator(s) (CI) curriculum vitae (not to exceed 3 pages each). The curriculum vitae are not to be included in the 10 page limit
- A one-page summary showing proposed work and timetable
- The funding period will be 1 year, renewable for up to 3 years, if judged to be appropriate

Determination of the Award: Deadline for submission of grant proposals is December 1, 2001. Each application should include one original and six copies of all material. The Grant Review Committee will review and evaluate each eligible application. A total of \$30,000 is budgeted for grants each year (two at \$10,000 and two at \$5,000). All applicants will be notified of the results by March 1, 2002.

To receive an application, call or write to:

Clinical Research Grant Program
Orthopaedic Section, APTA, Inc.
Attn: Stefanie L. Snyder
2920 East Ave. South, Suite 200
La Crosse, WI 54601
800/444-3982 * 608/788-3965
e-mail: SSNYDER@CENTURYTEL.NET

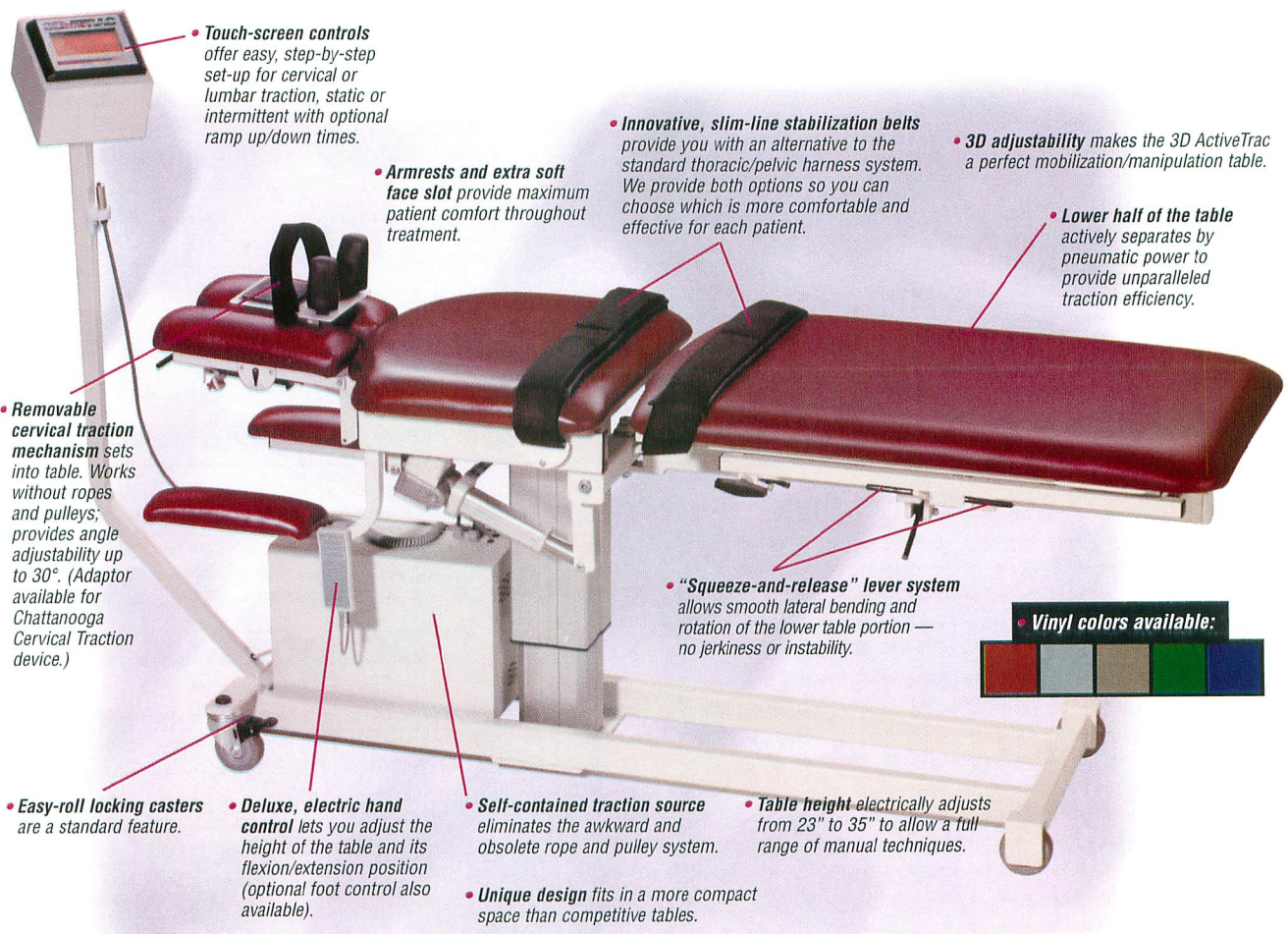
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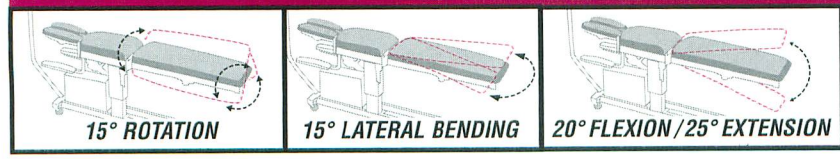
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- **Deluxe, electric hand control** lets you adjust the height of the table and its flexion/extension position (optional foot control also available).
- **Self-contained traction source** eliminates the awkward and obsolete rope and pulley system.
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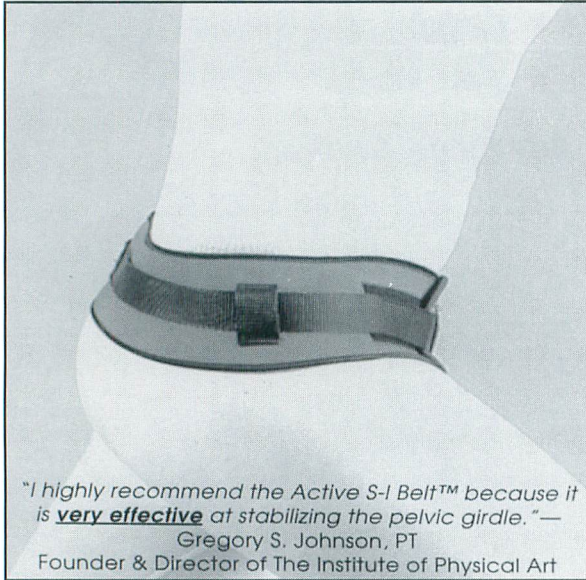


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Attention CSM 2002 Attendees!

In previous years, handout booklets for Orthopaedic Section CSM programming were available at the Orthopaedic Section booth.

PLEASE TAKE NOTE: Handouts WILL NOT be available at CSM 2002! Instead, all Orthopaedic Section handouts will be available via the Orthopaedic Section's Website: orthopt.org.

These handouts will be available by January 15, 2002, and will be easily downloaded for printing.