

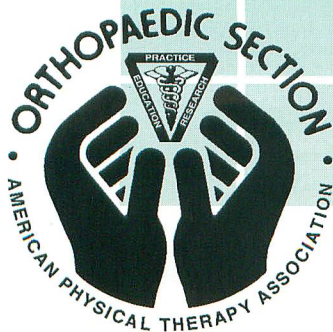
ORTHOPAEDIC

PHYSICAL THERAPY PRACTICE

THE MAGAZINE OF
THE ORTHOPAEDIC SECTION, APTA

VOL. 12, NO. 3

2000





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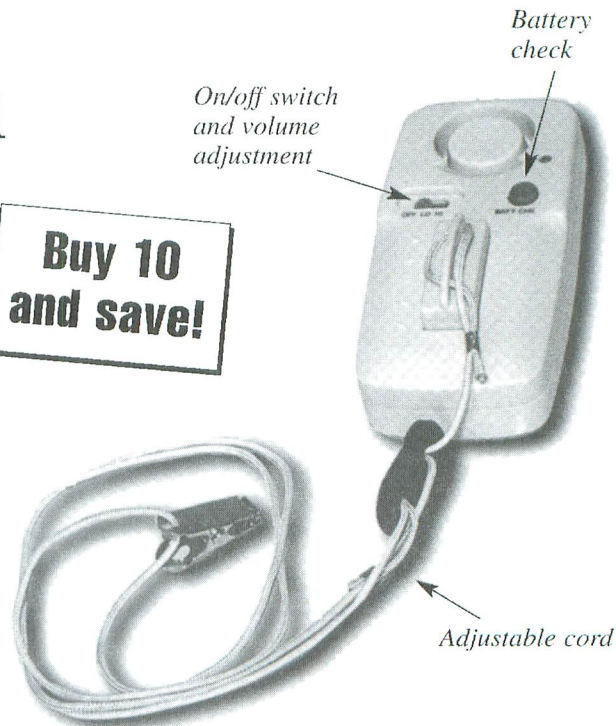
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ORTHOPAEDIC PHYSICAL THERAPY PRACTICE

TABLE OF CONTENTS

IN THIS ISSUE

- | | |
|----|--|
| 7 | Sacroiliac Joint Dysfunction Secondary to Leg Length Discrepancy in a Long Distance Runner
<i>Paul J. Mackarey, PT, MS, OCS</i> |
| 12 | Use of Coccygeal Manipulation: A Case Study
<i>James A. Viti, PT, MSc, OCS</i> |
| 14 | Being Politically Correct & Successful While Taking a Stand
<i>Stephen McDavitt, PT, MS, Helene Fearon, PT</i> |
| 16 | PTA's Focus on Flexibility & Overuse Injury
<i>Brad Thuringer, PTA, BS</i> |

REGULAR FEATURES

- | | |
|-----|--|
| 5 | Editor's Message |
| 6 | President's Message |
| 17 | Book Reviews |
| 23 | Annual Conference BOD Meeting Minutes |
| 24 | Section News |
| 26 | Section Members in the News |
| 27 | Congratulations OCSs |
| 31 | Occupational Health SIG Newsletter |
| 33 | Performing Arts SIG Newsletter |
| 35 | Animal Physical Therapist SIG Newsletter |
| IBC | Index to Advertisers |

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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



A Vision Emerged at a Pit Stop in Indy

Sound like a tabloid headline to you? Well, for a week in June, many physical therapists and physical therapist assistants made a "pit stop" in Indianapolis and we all came away with a new vision. By the end of the week, the House of Delegates endorsed Vision 2020. The full text is found in Bill Boissonnault's "President's Message" on page 6.

The Vision 2020 sentence and statement may not look new to some of you, as it has been floating around and being "word-smithed" for about a year. However, a few changes were made on the House floor. One thing that did not change is that the vision includes all physical therapists practicing as doctors of physical therapy. It is an ambitious goal, but some educational programs have already awarded and many others are on the way to awarding the DPT as the first professional degree. However, the real challenge is to be sure that ALL licensed physical therapists have a legitimate pathway to become DPTs if they so desire. We have to be sure that there is a method for all of us without the DPT to achieve that professional designation, if not the degree. That will require investigating our options, looking at how other professions made similar transitions, and being inclusive and supportive of PTs who want to get to the DPT level. We must also be wary of upstart programs that charge a great deal of money to grant a title of "DPT." There is a great challenge before us, but meeting the challenge will provide great rewards, both personally and to the community (public) at large.

As you know, Indianapolis is home of the famous Indy 500 road race. What you may not know is that the Indy 500 is the largest single-day sporting event in the world. In order for the delegates to learn a little more about racing, members of the Indiana Chapter taught us about the many flags used in the sport. In fact, they even provided us our own checkered flags and made us practice the appropriate use. As a delegate in the House, I appreciated that instruction, as



There is a great challenge before us, but meeting the challenge will provide great rewards, both personally and to the community (public) at large.

I often felt like I was in a race—the RC 70. While we did not finish all the business brought to the House, we did dispense with 52 of the 70 RCs. While many motions received the checkered flag, some ended up crashing and burning, while others just got stuck in the pit. Many thanks to Pam Duffy, PT, OCS, Speaker of the House and all the House officers for doing such a great job of keeping us on track.

In addition to the other business conducted, we elected new officers of the Association. Ben Massey was elected President, Jayne Snyder was re-elected as Vice-President, Annette Iglarsh and Babette Sanders were re-elected to the Board of Directors, Joan Bohmert was elected to the Board, and David Powers was elected to the Nominating Committee. The National Assembly of Physical Therapist Assistants also elected new officers: Randal Titony, Presiding Officer;

Dean McCall, Secretary; Regional Directors Travis Hale Carlton, Juli Robine, and Teri Ryan; Marie Setley, Nominating Committee; and Debbie Prather, National Assembly Delegate. Congratulations to all of you! Also, Jan Richardson, immediate Past President of APTA (and a Past President of the Orthopaedic Section) deserves our congratulations for a job well done and appreciation for all that she has done and continues to do for physical therapy.

In this issue of OP, we have case studies from James Viti and Paul Mackarey on coccygeal manipulation and sacroiliac dysfunction, respectively. For our PTA series, Brad Thuringer provides an interesting article on flexibility and overuse injury. Also, in the Occupational Health SIG newsletter, Ray Vigil's article on the cultural aspects of rehabilitation provides interesting insight and suggestions for your consideration when working with those different from yourself. If "interventions performed exclusively by physical therapists" is of great interest to you, don't miss the "Practice Affairs Corner." As usual, we have several great book reviews that might save you time (and money) when considering your next book purchase, as well as the ever-popular Special Interest Group Newsletters. I hope you find lots of clinically useful and thought-provoking information in this issue. The checkered flags are flying!



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

President's Message

Annual Conference 2000

Indianapolis was a hotbed of activity and it wasn't only the Pacers and Lakers that were busy. Physical therapists and physical therapist assistants from all over the country converged on downtown Indianapolis. Even though the Orthopaedic Section no longer holds a business meeting at Annual Conference, the Section's Board of Directors (BOD) was extremely busy. On June 10th the BOD met to discuss Section business. Topics of discussion included the following:

1. Specialization: In response to the recent ABPTS decision to reduce the hours of practice requirement (from 6000 to 2000 hours) to sit for the OCS examination, we invited Donna Cech (ABPTS chair) and Joe Black (Senior Vice President, Division of Education, APTA) to join our meeting. Our discussion ranged from the rationale for the reduction in hours, to the meaning of specialization, and the current state of postprofessional PT education. It was made clear the 2000-hour requirement will remain for at least the next 3 years. Everyone understands there is no magic number of hours that guarantees competence or an advanced level of skill. ABPTS hopes the analysis that will be done at the end of this 3-year period will shed some light on this issue. Although I still have significant concerns about the reduction in hours, I am most concerned that after all these years there is a clear lack of consensus of what clinical specialization truly means. Does the OCS designation imply an expert clinician or merely competence in a specialty area? For specialization to be a credible process and accepted by "the masses" this question must be answered. Discussion on this topic will continue with ABPTS and APTA.

2. Manual Therapy Legislative Strategic Plan: Productive meetings with APTA staff and Randy Roesch, the Section APTA Board liaison, were held. We are making progress on the education, legislative, and regulatory fronts. A plan was developed for educational

programming on manipulation which will occur at the fall AAOMPT Conference, the Education Section's Academic Administrator's SIG Fall Meeting, and Combined Sections Meeting 2001. Dr. Stanley Paris spoke on the topic of manual therapy in Indianapolis, including a historical overview of manipulation and the physical therapy profession. A panel discussion followed with Dr. Paris, Nancy Garland (APTA staff), and Helene Fearon and Steve McDavitt (Section Practice Committee Co-Chairs) all providing expert testimony. Although we still have a ways to go, chapters are much better prepared to meet the chiropractic legislative challenges than they were a few years ago.

3. Foundation for Physical Therapy: Jayne Snyder and Christine Williams of the Foundation's Board of Trustees met with our Board to discuss Foundation activities. Building on the success of the University of Pittsburgh Clinical Research Center, the Foundation is developing plans for the creation of additional research centers. The Section will consider supporting this venture at our Fall BOD Meeting.

4. House of Delegates: The Section lobbied hard for the passage of RC-45, Position on Direct Interventions Exclusively Performed by Physical Therapists (see Practice Committee report). Broad support for the RC was evident by the number of Chapters that spoke in favor of RC-45 and the fact that 16 other Sections ended up cosponsoring the RC. The APTA BOD support for this RC was also extremely important to the success of this initiative. This position adopted by the House sends an important message to membership, our patients, and to external professional communities.

The House also endorsed a vision sentence and statement:

By 2020, physical therapy will be provided by physical therapists who are doctors of physical therapy, recognized by consumers and other health care professionals as practitioners of choice to whom consumers have direct access for the diag-

nosis of, intervention for, and prevention of impairments, functional limitations, and disabilities related to movement, function, and health.

Physical therapy, by 2020, will be provided by physical therapists who are doctors of physical therapy and who may be board certified specialists. Consumers will have direct access to physical therapists in all environments for patient/client management, prevention, and wellness services. Physical therapists will be practitioners of choice in clients' health networks and will hold all privileges of autonomous practice. Physical therapists may be assisted by physical therapist assistants who are educated and licensed to provide physical therapist-directed and -supervised components and interventions. Guided by integrity, life-long learning, and a commitment to comprehensive and accessible health programs for all people, physical therapists and physical therapist assistants will render evidence-based service throughout the continuum of care and improve quality of life for society. They will provide culturally sensitive care distinguished by trust, respect, and an appreciation for individual differences. While fully availing themselves of new technologies, as well as basic and clinical research, physical therapists will continue to provide direct care. They will maintain active responsibility for the growth of the physical therapy profession and the health of the people it serves.

This vision represents a collaborative effort of the APTA BOD, the "vision task force," hundreds of our members, and the House of Delegates. The language will provide clear direction for the Association as we set goals and objectives for the next 20 years; I am pleased the phrase "doctors of physi-

(Continued on page 16)

Sacroiliac Joint Dysfunction Secondary to Leg Length Discrepancy In a Long Distance Runner

Paul J. Mackarey, PT, MS, OCS

INTRODUCTION

Sacroiliac joint dysfunction (SIJD) is a source of great controversy among health care providers treating patients with low back pain. While some authors report that SIJD is of little significance,^{1,3} others report that it is an important source of low back pain.^{4,8} Some authors feel as much as 20% of low back pain may be derived from SIJD.⁹

Recently, the relationship between gait and SIJD was studied from the perspective of a lower kinetic chain model.¹⁰ Cibulka and Koldenoff presented the relationship of leg length discrepancy in SIJD, purporting that it is necessary to correct leg length discrepancies to prevent SIJD.¹¹

Some researchers suggest that athletes may have a greater prevalence of SIJD than nonathletes. Barakatt et al¹² found a higher incidence of pelvic obliquity in gymnasts when compared to nonathletes. Also, SIJD has been recognized as a source of low back pain in runners.¹³

Manipulation as a treatment for SIJD has been supported by the literature.^{4,6,14} Specifically, Chibuka et al¹⁵ suggested in treating SIJD, that if a posteriorly rotated innominate bone is manipulated, it will more likely result in movement in an anterior direction.

Walker authored a thorough literature review of the sacroiliac joint and challenged clinicians to provide well-documented clinical case studies to further understand the relationship of SIJD and low back pain.¹⁶ In response to Walker's call, the author of this paper provides a case report describing the treatment of a patient with SIJD secondary to a leg length discrepancy.

CASE STUDY

Patient History

A 25-year-old Caucasian female long distance runner, 160 centimeters (5 feet 4 inches) in height and 47.6 kilograms (105 pounds) in weight, was referred to physical therapy with a primary diagnosis of low back pain (LBP). The patient reported a 2-year history of occasional LBP after running, which lasted 1 to 2 days and was described as a right low back stiffness. The patient complained of right-sided LBP, occasionally radiating

to the right posterior lateral thigh. Prior to last year, she typically ran 10 to 15 miles per week. During the past year, however, she was training for a marathon and was running 25 to 30 miles per week. Three months prior to her onset of LBP, she was running 30 to 35 miles per week. Many of her long distance training runs (12 to 20 miles) were on hard surface, rural roads with crowning. She ran on the left side of the road. Also, the patient reported that she noticed an increase in her symptoms with menstruation and ovulation. She denied pain with coughing or sneezing, bowel and bladder signs, or symptoms below the knee. X-ray and MRI studies were negative.

PHYSICAL THERAPY MUSCULOSKELETAL EXAMINATION

Methods

This is a retrospective case study involving a patient seen at a private outpatient physical therapy clinic where the author was clinic director. While the clinic had no Institutional Review Board, it was our policy to require informed consent prior to treatment. Also, for the purpose of this case study publication informed consent was received retrospectively.

Pain Assessment

A numeric pain scale assessment was performed according to Blankenship and revealed the following¹⁷: LBP 4/10 with most daily activities and 8/10 when running 10 to 20 meters. Right lower extremity pain above the knee was reported to be occasional (2-3/week), 5-6/10 on the pain scale and was associated with increased activity, especially following running. Also, the Oswestry Low Back Pain Disability Questionnaire was completed by the patient and showed a 34% disability score upon initial evaluation.¹⁸

Lower Quarter Assessment Standing posture

Visual inspection was performed by bony landmark palpation of the patient standing barefoot and displayed the following: right iliac crest and right anterior superior iliac spine (ASIS) higher, right posterior superior iliac spine

(PSIS) lower, a pronated right foot; the left shoulder/scapula region was slightly lower as compared to the right, a mild thoracolumbar curve (convexity to the left). The left greater trochanter, fibula head, and medial malleolus were all slightly lower as compared to the right.

Following barefoot standing inspection, a 2.0 centimeter (cm) wedge was placed under the left foot. Symmetrical improvements were noted in the shoulder/scapula, iliac crest, lumbar convexity, and greater trochanter. The fibula head and medial malleolus were partially corrected but not bilaterally symmetrical. There was a change in the height of the ASIS/PSIS cephalically toward symmetry. However, the aforementioned ASIS and PSIS rotational asymmetries, (higher right ASIS with lower right PSIS as compared to the left) persisted, which were indicative of an innominate posterior rotation of the right sacroiliac joint.⁶

Sitting posture

Visual inspection was performed by bony landmark palpation with the patient sitting on a level surface. Sitting with legs over the edge of a firm plinth revealed a lower right PSIS as compared to the left. The PSIS asymmetry appeared more evident in sitting than in standing.

Lumbar AROM Signs – measured with a fluid filled goniometer (Chattanooga Corporation, 4717 Adams Road, Chattanooga, Tn. 37343)

In standing, the patient displayed the following lumbar AROM: 0° extension with right LBP; 65° flexion with right LBP; 10° symmetrical side flexion with right low back pain at end range of right side flexion. Also, the patient displayed a positive standing forward flexion test for sacroiliac dysfunction.^{6,19}

Neurological signs

Neurological signs tested by manual muscle tests and deep tendon reflexes were found to be negative and bilaterally symmetrical.

Compression/spring test

Compression and spring tests to the thoracic and lumbar areas were negative. The right sacroiliac joint was positive,

reproducing pain when compressed in prone and supine compared to the left.¹⁹

Passive intervertebral mobility testing

Passive intervertebral mobility testing was performed according to procedures described by Maitland.³ Testing of the thoracic and lumbar regions of the spine were nonremarkable.

Alternate signs

Hip - active, passive, and resistive range of motion tests were nonremarkable with the exception of external rotation. Passive external rotation was full and created right LBP at end range. Hip joint compression tests were negative.

Sacroiliac - The patient displayed 9 of 9 signs and symptoms suggestive of SIJD as described by Cibulka.⁶ The following positive SIJD signs and symptoms were found on the right: pain and tenderness located at the PSIS; pain with walking, pain on *straight leg* raising above 70° (75° in supine and 90° in sitting on the right), pain with FABER test, pain with pelvic compression, uneven PSIS when sitting, positive standing flexion test, positive prone knee flexion test, positive supine long sitting test. The reliability of the aforementioned tests for SIJD has been the subject of great debate, however, they continue to be widely used in clinical practice.^{19,22}

The supine long sitting test found a change in leg length discrepancy. The involved right lower extremity was 1.2 centimeters longer in supine and increased in length to 2.2 centimeters in long sitting as compared to the left.

EVALUATION

Based upon the findings of the patient's past medical history, present history, pain scale, and Oswestry disability index, as well as physical findings found on the physical therapy musculoskeletal examination, the author concluded that the patient had a leg length discrepancy of 1.2 to 2.2 centimeters in the left lower extremity with a posterior rotation of the innominate bone of the right sacroiliac joint. Additionally, the patient had corresponding pronation of the right foot in the longer lower extremity.

The lumbar spine was ruled out as a source of pain due to the negative findings upon AROM, compression/spring testing, and passive intervertebral motion testing. The hip joint was ruled out as a source of pain because the only positive hip motion that reproduced pain was passive external rotation. This

movement is also a component of the FABER test used to detect SIJD.²³ All other active, passive, and resistive hip motions and tests were nonremarkable, including hip joint compression performed in supine.

It was concluded that the sacroiliac joint was the primary source of pain and dysfunction. Nine of 9 SIJD tests were found to be positive. Additionally, the pelvic asymmetry of the ASIS and PSIS in standing, further supported the suspicion of SIJD.

The leg length discrepancy on the left uninvolved lower extremity was confirmed in supine, long sitting, and standing. This was further supported by the fact that the leg length discrepancy persisted to be equally short (2.0 centimeters) in supine, long sitting, and standing after the SIJD was corrected by manipulation. Also, the right involved longer leg exhibited rearfoot pronation. This is often found in a longer leg in an attempt to compensate and shorten to achieve symmetry.²⁴

INTERVENTION

Treatment 1

The initial treatment began with patient education, home postural exercises, instruction in proper body mechanics and ergonomics. A moist heat hydrocollator pack was applied for 10 minutes prior to manipulation. Manipulation was performed to the right sacroiliac joint using a distraction and rotation force. This technique was recommended by Cyriax.²⁵ However, Cyriax advocated this test for the correction of an annular tear of the intervertebral disk, not the sacroiliac joint specifically (Figure 1). Immediately following manipulation, the patient was reassessed for the 9 of 9 previously positive SIJD signs and symptoms. Improvement was found in all nine SIJD signs and symptoms that were positive prior to treatment. Also, all areas previously asymmetrical in sitting, supine, and long sitting were corrected to a symmetrical position. However, the leg length discrepancy on the left continued in standing, long sitting, supine, and prone. In standing, the ASIS and PSIS were equally lower on the left and corrected to symmetry when a 2.0 centimeter wedge was placed under the left foot. The leg length discrepancy remained at 2.0 centimeters in all positions. It appeared that the leg length discrepancy on the left was structural.

Following the manipulation, muscle energy techniques were performed to assist in maintaining the sacroiliac re-

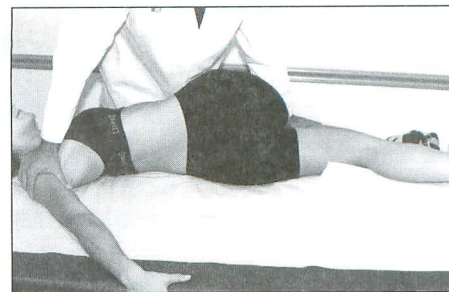


Figure 1. Manipulation – Distraction and rotation manipulation used to reduce a posterior rotation of the right sacroiliac joint.

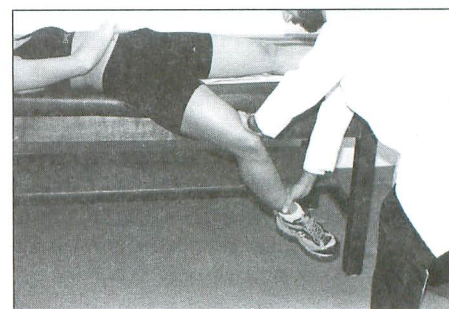


Figure 2. Muscle Energy Technique – Isometric contractions to the partially lengthened iliopsoas, sartorius and rectus femoris muscles of the right lower extremity. The technique is employed while stabilizing the distal portion of the muscles, to create tension in an anterior direction to assist in maintaining a correction of a posterior rotation of the right sacroiliac joint.

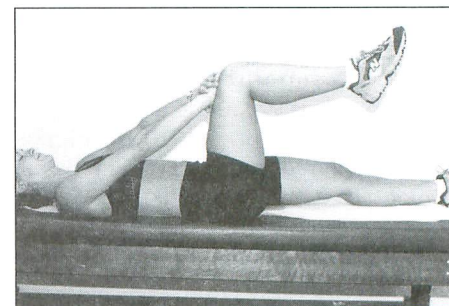


Figure 3. Muscle Energy Technique Home Program for the Right Iliopsoas – Isometric exercise to the right iliopsoas is performed by the patient to promote bilaterally symmetrical balance and strength to assist in maintaining a correction of a posterior rotation of the right sacroiliac joint.

duction.¹⁴ Isometric contractions were performed in a partially lengthened position of the iliopsoas, sartorius, and rectus femoris muscles on the right lower extremity (Figure 2). Also, on the first visit, the patient was instructed in a home program using muscle energy with isometric exercise to the right iliopsoas (Figure 3) and left gluteus maximus (Figure 4), to promote bilaterally symmetrical muscle strength and balance of the sacroiliac joint. The rationale for

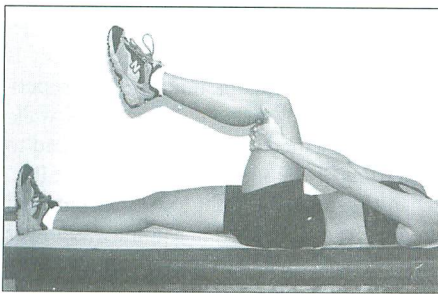


Figure 4. Muscle Energy Technique Home Program For Left Gluteus Maximus – Isometric exercise to the left gluteus maximus is performed by the patient to promote bilaterally symmetrical balance and strength to assist in maintaining a correction of a posterior rotation of the right sacroiliac joint.

this treatment was to use the contraction of the proximal portion of the iliopsoas muscle (while stabilizing the distal segment simultaneously), to pull or maintain the ilium anteriorly on the right, producing an anterior rotation of the innominate bone. This exercise was alternated with the contraction of the proximal portion of the left gluteus maximus (while stabilizing the distal segment simultaneously), to pull or maintain the left ilium posteriorly.²⁶ The patient was told to refrain from running until the joint reduction had time to heal and scar in place. Lastly, cold gel packs were applied for 10 minutes to the right sacroiliac area following manipulation and muscle energy techniques.

Treatment 2

(3 days postinitial evaluation)

Three days following the first visit the patient returned to physical therapy reporting a positive treatment response lasting 2 days. At the end of day 2, however, 9 of 9 SIJD signs and symptoms returned. The treatment employed on day one was repeated. The patient had a similar positive response with correction of SIJD signs and symptoms as on day 1. A sacroiliac belt (SI-LOC, OPTP, Minneapolis, Minn) was issued to further promote stabilization. To maintain aerobic conditioning the patient was allowed to swim with limited kicking in freestyle and backstroke. The home program consisting of posture and muscle energy techniques was continued.

Treatment 3

(7 days postinitial evaluation)

Four days later the patient returned to physical therapy with a return of SIJD symptoms. She noted that she had symptom relief for 3 days after the last treatment. The same treatment including manipulation and muscle energy techniques were employed

successfully. The home program was continued.

Treatment 4

(11 days postinitial evaluation)

Four days later the patient returned with symptoms after 3 days relief. The patient complained that the sacroiliac belt was ineffective, irritating, and caused increased low back pain. She decided to discontinue the use of the belt 1 week prior, after her last reoccurrence of symptoms. Manipulation and muscle energy techniques were successfully employed again.

After a reassessment of the 2.0 cm. left leg length discrepancy, it was concluded that the difference had to be addressed to maintain the sacroiliac reduction. Experimentally, a 1.25 centimeter heel lift was issued for the left shoe to create a partial correction. The patient was instructed to use the device when weight bearing. The lift was gradually introduced for 1 hour, twice the first day. The usage was increased by 1 hour, twice daily, until seen again.

Treatment 5

(15 days postinitial evaluation)

The patient returned 4 days later without a return of symptoms. No manipulation was employed. Muscle energy techniques were performed as previously described. Lumbar stabilization exercises were added to the home program.^{19,22} The patient was told to continue swimming, gradually increase walking on level surfaces 1/2 mile per day, and avoid running. At this time, she was wearing the heel lift at all times when weight bearing. The patient was instructed not to return to physical therapy for 1 week unless symptoms returned. Lastly, arrangements were made for the patient to see a podiatrist to be evaluated for custom orthotics.

Treatment 6

(25 days postinitial evaluation)

Ten days later the patient returned to physical therapy painfree, using the custom fitted orthotics fabricated by the podiatrist. The orthotics were primarily designed to correct left leg length discrepancy and right foot pronation. The patient was gradually weaned into the device over a course of 7 days. At this time, using the orthotics, she was allowed to run on the treadmill, 5 miles per hour for 20 minutes. Every 5 minutes she would use 1-minute walking breaks at 3.0 to 3.2 miles per hour. She was also instructed to run with a slight anterior pelvic tilt, in slight lordosis, in an attempt to stabilize the pelvis. Symptoms did not return. The patient was instructed to continue this run/walk program at home every other day. On the days she did not run, she was al-

lowed to walk or swim. She was to stop the running program if symptoms returned and contact PT.

PODIATRY CONSULTATION

REPORT (James M. Haggerty, DPM, FACFS, Dunmore, Pa)

A complete biomechanical exam of the patient demonstrated a limb length discrepancy. The left lower extremity measured 2.0 centimeters shorter than the right. Both feet presented with forefoot varus, however, only the right compensated with subtalar joint pronation. Stance and gait analysis demonstrated right foot pronation with calcaneal eversion. The left foot exhibited supination at the subtalar joint and an inverted calcaneal position.

The treatment plan was to cast the patient for a functional orthotic device to support, correct, and prevent pathologic conditions. The role of the functional orthotic in this particular patient was to prevent compensatory right foot subtalar joint pronation and neutralize left limb length deformity. The patient was placed in a prone position with the subtalar joints in the neutral position and plaster casts were made of both feet. A prescription for orthotic devices, along with the casts, was forwarded to the orthotic laboratory. The laboratory was instructed to elevate the left rearfoot post 2.0 centimeters. The lab was also instructed to use intrinsic posting technique to correct for the right and left forefoot varus deformities. The degree of rearfoot and forefoot posting was limited to the subtalar joint neutral position of the cast. For example, the posting was limited to abrupt 0° to cast.

The orthotic device was fabricated by Creative Orthotic Laboratory (Creative Orthotic Laboratory, Somerdale, NJ). The shell material was made of polypropylene and the posting was comprised of crepe.

Treatment 7 - Discharge

(41 days postinitial evaluation)

The patient returned 16 days later without a reoccurrence of SIJD symptoms. She stated that she ran using the orthotics for 60 minutes continually, without a walk/rest and did not have any difficulty. She was discharged with instructions to continue her home program of posture exercises, lumbar stabilization, proper prerun warm-up and stretching, and to continue using orthotics. The patient was instructed to continue wearing custom orthotics and maintain a slight anterior pelvic tilt while running. She was to avoid running on crowned country roads, which place the left leg lower than the right when running against traffic. If a crowned road was unavoidable, the patient was instructed to run with traffic most of

the time and alternate when necessary.

RE-EVALUATION – DISCHARGE SUMMARY

Pain Scale/Oswestry

The numeric pain scale was 0 with daily activities and running. The Oswestry disability index was also 0%.

Standing posture

Without the use of an orthotic, the patient displayed a lower left iliac crest (with equally lower left ASIS and PSIS) and a pronated right foot. Also noted was a slightly lower left shoulder/scapula with a slight thoracolumbar curve (convexity to left). The left greater trochanter, fibula head, and medial malleolus were all slightly lower as compared to the right.

Standing postural reassessment with orthotic correction found nonremarkable asymmetry in all previously mentioned areas, with minimal asymmetry persisting in the slightly lower left fibula head and medial malleolus. These findings were consistent with those of the initial standing barefoot assessment with a 2.0 cm. wedge.

Sitting Posture

Reassessment found nonremarkable asymmetry.

Lumbar AROM Sign – measured with a fluid filled goniometer as performed initially.

In standing, the patient showed 15° extension, 85° flexion, and 15° symmetrical side flexion. All motions were painfree. Standing forward flexion test was negative.

Neurological signs

Neurological signs were nonremarkable as with the initial evaluation.

Compression/spring test

Compression and spring tests to the thoracic and lumbar areas were negative. Bilateral sacroiliac joints were painless when tested in supine and prone.

Passive intervertebral mobility testing

Passive intervertebral mobility tests were nonremarkable as found on the initial evaluation.

Alternate signs

Hip - Active, passive, and resistive range of motion testing was nonremarkable, including passive external rotation of the right hip.

Sacroiliac - All 9 of the 9 SIJD signs and symptom tests that were found to be positive on the initial evaluation were retested and found to be nonremarkable upon discharge. How-

ever, the left lower extremity continued to show a leg length discrepancy of 2.0 centimeters upon standing, supine, long sitting, and prone testing as compared to the right.

4 Weeks Postdischarge Follow-Up

A phone call follow-up found that the patient had returned to full, unlimited, painfree activity. She resumed long-distance training 30 to 40 miles per week. She continued to use the orthotics and follow her home program.

12 Weeks Postdischarge Follow-Up

Another phone call follow-up was made at 12 weeks postdischarge and found no reoccurrence. While the patient did continue to use the orthotics, she did express that she no longer used the muscle energy or lumbar stabilization techniques. She was running 35 to 45 miles per week in preparation for a marathon in 2 months.

RESULTS

This 25-year-old female long distance runner with LBP was unable to walk more than 20 meters without pain prior to the initiation of treatment. During the first week, pain was reported at 4/10 with most daily activities and 8/10 with running. Also, the patient reported a 34% disability index on the Oswestry questionnaire. After 3 weeks of physical therapy intervention, (patient education, ergonomics, heat and cold modalities, manipulation, muscle energy and stabilization techniques, and a sacroiliac stabilization belt) the patient was only able to maintain correction for SIJD for 3 days. It was not until the use of custom fitted orthotics, to correct a leg length discrepancy on the uninvolved side and control compensatory subtalar pronation on the involved side, that a successful long-term outcome, without reoccurrence, was accomplished. A successful long-term outcome was defined as a 0/10 pain scale and a 0% Oswestry exam with full and unlimited return to long distance running with the ability to maintain the correction for more than 12 weeks following discharge from physical therapy.

DISCUSSION

It has been reported that correction of a leg length discrepancy is an essential component for the prevention of SIJD.^{4,27} The present case study clearly demonstrates the need to correct a leg length discrepancy to maintain a correction of a rotation of the sacroiliac joint in a long distance runner. It is the opinion of this author, that the cause of the discrepancy must be determined for both the prevention of SIJD and to maintain a SIJD correction. If the discrepancy exists because of a rotation of the innominate, it

may lead to a functional leg length change. Conversely, if the leg length discrepancy is structural and remains uncorrected, repetitive microtrauma, (as in daily activities, walking, long distance running, etc.) may lead to a rotation of the innominate creating SIJD.

In this case, the right lower extremity of the involved right sacroiliac joint was longer than the left. In an attempt to achieve symmetry, the long leg pronated at the rearfoot to self correct.²⁸ Over a period of time, running many miles, the cumulative microtrauma from the long leg striking the ground harder than the left short leg, may have been a significant contributing factor in the cause of right SIJD.^{14,29} Paris has discussed the role of microtrauma as a cause of SIJD.¹⁹

Prior to correction, during supine assessment of the leg length, the right lower extremity appeared 1.2 cm longer than the left. This discrepancy lengthened during long sitting to 2.2 cm. Immediately following innominate correction by manipulation, the discrepancy remained essentially the same length, (2.0cm) when retested in standing, sitting, and long sitting. This seemed to suggest that the leg length discrepancy was structural. Therefore, the noted pretreatment 1.0 cm change in length appeared to be due to the SIJD posterior innominate rotation. Radiographic examination and specific measurements of the femur and tibia lengths might have proven more valuable to confirm this theory. Additionally, it would have been helpful to have actual numeric values for leg lengths.

One can not ignore the fact that SIJD tests have been the source of great debate. The signs and symptoms associated with SIJD reported by Cibulka⁶ have also been supported by other others.^{19,21,22} One must consider the research conducted by Potter and Rothstein, however, which questioned the reliability of many SIJD tests.²⁰ While this disparity demonstrates the need for further investigation, the issue of interrater reliability did not influence the outcome in this case. The author took all measurements.

Also noteworthy is the fact that the patient trained on rural country roads, on the left side of the road. This might have further aggravated the problem. Rural country roads are often crowned and sloped, leading to asymmetry when running on the side of the road. Running on the left side of the road would cause the already long right lower extremity to require compensatory functional shortening. By pronating excessively, the subtalar joint could provide this compensatory functional shortening.

It is also important to note that this patient reported increased symptoms with menstruation and ovulation. There is a tendency for increased incidence of noncontact

ligament injuries in female athletes during ovulation due to hormonal effects on ligament laxity.^{19,30,31} This author has experienced numerous similar reports in young women with similar problems. In the case of SIJD, women often are unable to maintain a SIJD reduction during menstruation and ovulation. In this view, a specific segmental mobility grading system, such as the 6 grades of intervertebral mobility employed by Paris, may have provided more objective information regarding the overall joint mobility of the patient.³²

While many possibilities exist for the correction and stabilization of the patient's SIJD in this case, it is the opinion of this author that a cause and effect relationship was established when corrective orthotics were implemented in the treatment program. One must be mindful of the fact that only 30% of the population has equal leg lengths and horizontal sacral bases.²⁷

The case study format has many limitations. Primarily, without a control group it does not account for inherent variables, such as the effect of natural healing or placebo. However, this author was compelled to present this case to share a treatment program, which has been successful on many similar patients over the past 18 years of clinical practice.

It is important to consider the use of orthotics in the maintenance of a reduction for SIJD in the patient with associated leg length discrepancy. Furthermore, it would seem logical, as suggested previously, that correction of the leg length discrepancy may also serve to prevent a SIJD.

CONCLUSION

In a case of a patient with SIJD and a pre-existing leg length discrepancy, the ability to maintain a long-term correction of a posterior rotation of the innominate bone of the sacroiliac joint in a long distance runner can be significantly enhanced by including the use of orthotics in a comprehensive approach.

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REFERENCES

1. Cyriax JH, Cyriax PJ. *Illustrated Manual of Orthopaedic Medicine*. London, England: Butterworth & Co. Ltd.; 1983.
2. McKenzie RA. *The Lumbar Spine: Mechanical Diagnosis and Therapy*. Waikanae, New Zealand: Spinal Publications; 1981:49.

3. Maitland GD. *Vertebral Manipulation*. 4th ed. London, England: Butterworth & Co. Ltd; 1977.
4. Wadsworth CT. *Manual Examination and Treatment of the Spine and Extremities*. Baltimore, Md: Williams & Wilkins; 1988:6-79, 171.
5. Porterfield JA, DeRosa CP. *Mechanical Low Back Pain: Perspectives in Functional Anatomy*. Philadelphia, Pa: WB Saunders Co; 1991:167.
6. Cibulka MT. The treatment of the sacroiliac joint component to low back pain: A Case Report. *Phys Ther*. 1992;72(12): 917-922.
7. DonTigny RL. Anterior dysfunction of the sacroiliac joint as a major factor in the etiology of idiopathic low back pain syndrome. *Phys Ther*. 1990;70:250-265.
8. DonTigny RL. Dysfunction of the sacroiliac joint and its treatment. *J Orthop Sports Phys Ther*. 1979;1:23-25.
9. Timm KE. Sacroiliac joint dysfunction in elite rowers. *J Orthop Sports Phys Ther*. 1999;29:288-293.
10. Lee D. Instability of the sacroiliac joint and the consequences to gait. *J Manual Manip Ther*. 1996;4(1):22-29.
11. Cibulka MT, Koldehoff R. Leg length disparity and its effect on sacroiliac joint dysfunction. *Clin Manage Phys Ther*. 1986;6(5):10-11.
12. Barakatt E, Smidt GL, Dawson JD, Wei SH, Heiss DG. Interinnominate motion and symmetry: Comparison between gymnasts and nongymnasts. *J Orthop Sports Phys Ther*. 1996;23:309-319.
13. Geraci MC. Overuse injuries of the hip and pelvis. *J Back Musculoskel Rehabil*. 1996;6:5-19.
14. Saunders DH. *Evaluation, Treatment and Prevention of the Musculoskeletal Disorders*. Minneapolis, Minn: H. Duane Saunders; 1985.
15. Cibulka MT, Delitto A, Koldehoff RM. Changes in innominate tilt after manipulation of the sacroiliac joint in patients with low back pain. *Phys Ther*. 1988;68:1359-1363.
16. Walker JM. The sacroiliac joint: A critical review. *Phys Ther*. 1992;72(12):903-916.
17. Blankenship KL. *The Blankenship System of Functional Capacity Evaluation Procedure Manual*. The Blankenship Corporation; 1994.
18. Fairbank JCT, Davies JB, et al. The Oswestry Low Back Pain Disability Questionnaire. *Physiotherapy*. 1980;66:271-273.
19. Paris SV. *Introduction to Spinal Evaluation and Manipulation - Seminar Manual*. 3rd ed. Paris Press; 1997.
20. Potter N, Rothstein J. Intertester reliability for selected clinical tests of the sacroiliac joint. *Phys Ther*. 1985;65(11):1671-1675.

21. Grimsby O. *Manual Therapy of the Spine - Course Workbook*. 4th ed. Sorlandets Fusikalske Institutt A/S; 1995.
22. Mooney V. Evaluation and treatment of sacroiliac dysfunction. In: *Proceedings of the Second Interdisciplinary World Congress on Low Back Pain: The Integrated Function of the Lumbar Spine and Sacroiliac Joints*. 1995:393-407.
23. McGee DJ. *Orthopedic Physical Assessment*. Philadelphia, Pa: WB Saunders Co; 1987:252-253.
24. Root ML, Orien WP, Weed JH. *Normal and Abnormal Function of the Foot: Clinical Biomechanics, Volume Two*. Los Angeles, Calif: Clinical Biomechanics Co; 1977:299-301.
25. Cyriax JH. *Textbook of Orthopaedic Medicine, Vol 2*. London, England: Butterworth & Co. Ltd.; 1981: 284-285.
26. DonTigny RL. Mechanics and Treatment of the Sacroiliac Joint. In: *Proceedings of the Second Interdisciplinary World Congress on Low Back Pain: The Integrated Function of the Lumbar Spine and Sacroiliac Joints*. 1995:463-470.
27. Ravin T. Pelvic mechanical dysfunctions. In: *Proceedings of the Second Interdisciplinary World Congress on Low Back Pain - The Integrated Function of the Lumbar Spine and Sacroiliac Joints*. 1995:757-773.
28. Silverman J. The pronation syndrome. *Curr Pod*. 1974;23(7).
29. Richardson JK, Iglarsh ZA. *Clinical Orthopaedic Physical Therapy*. Philadelphia, Pa: WB Saunders Co; 1994.
30. Wojtyls EM, Huston LJ, Lindenfeld TN, et al. Association between the menstrual cycle and anterior cruciate ligament injuries in female athletes. *Am J Sports Med*. 1998;26(5):614-618.
31. Hayne CR. Manual transport of loads by women. *Physiother*. 1981;67(8):226-231.
32. Gonnella C, Paris SV, Kutner M. Reliability in evaluating passive intervertebral motion. *Phys Ther*. 1982;62(4):436-444.

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Use of Coccygeal Manipulation: A Case Study

James A. Viti, PT, MSc, OCS

The purpose of the following case study is to describe how intrarectal coccygeal manipulation can be an effective treatment tool for coccygeal dysfunction, how the technique is performed, and the clinical decision making process used in choosing this particular treatment.

INTRODUCTION

Coccygeal pain is generally recognized to come from direct or indirect sources.

Direct sources could include trauma from a fall on the coccyx or from child bearing. Indirect sources could include pull on the sacrospinous ligament that might occur with sacroiliac hypermobility, stress applied through the filum terminale from a disc protrusion in the lumbar spine, or even perhaps a dysfunction of gluteus maximus, which attaches to the coccyx as well. The sacrococcygeal joint is a synovial joint. A synovial joint also exists between the 2 segments of the coccyx. Both these joints are believed to be well innervated, as is the periosteum that surrounds them. Being synovial joints, they are subject to the same type of injuries as other synovial joints more commonly treated by physical therapists (ie, glenohumeral joint). Synovitis and/or hemarthrosis in these joints could result in tightness of the joint capsules or adhesion formation within the capsules. Therefore, these joints could potentially benefit from stretching to restore mobility of the joint capsules and decrease pain, similar to other synovial joints.

HISTORY

The patient was a 25-year-old male physical therapy student who reported falling backwards off his bicycle 4 months prior to being treated in physical therapy. Pain was localized directly over the coccyx and described as dull, hurting, and tender, using the McGill Pain Questionnaire. The patient's pain level had been a 6 on a 10-point scale, but had reduced to 4 out of 10 since taking anti-inflammatory medication 2 weeks prior to being seen in PT. The patient's primary functional limitations included an inability to sit comfortably in class or to ride his bike in a competitive triathlon series in which he had

been participating. Riding his bicycle increased his pain level to an 8 on a scale of 10.

EXAMINATION

During examination, it is important to check the lumbar spine, pelvis, and neural systems since these could be potential contributors to the patient's problem. Examination findings included full and pain free lumbar range of motion. Provocation testing to the sacroiliac joint was negative. Neural tension testing utilizing the slump test was negative. Hip range of motion was full and pain free. Strength was WNL in the lower extremities. No pain was noted with resisted contraction of the gluteus maximus. Neurological findings were

Coccygeal manipulation can be effective in treating sacrococcygeal dysfunction and returning the patient to previous functional activities.

unremarkable. Mobility testing revealed no significant restrictions or provocation of symptoms with PA pressure over the lumbar transverse processes. Pain was noted with PA spring testing over the coccyx. Tenderness was present directly over the coccyx and over the muscular insertions of the gluteus maximus to the coccyx. The patient exhibited no significant postural abnormalities. Radiographs revealed no fracture.

EVALUATION

Since the patient's symptoms could not be reproduced with lumbar AROM, lumbar mobility testing, or sacroiliac provocation testing, these were ruled out as contributors to the patient's impairment. Hip range of motion was full and pain free as well. The filum terminale consists of fibrous tissue continuous with the pia mater and a few rudimentary nerve fibers invested by the dura. It inserts to the dorsal surface of the first coccygeal segment.¹ As men-

tioned, this could be an indirect source of symptoms in the coccygeal region. Due to this anatomical relationship the slump test was performed and found to be negative, which ruled out a neural component to the impairment. The patient had a history of direct trauma and well localized pain and tenderness in the coccygeal region. Since radiographs were negative for fracture and since the lumbar spine, pelvis, hips, and neural system were ruled out as contributors to the impairment, it was decided to treat directly in the coccygeal region.

INTERVENTION

The patient was seen for 3 treatment sessions in physical therapy. The first treatment included ultrasound (US) and massage to the gluteus maximus insertions to the coccyx, instruction in how to make a coccygeal relief pillow with foam padding, and sitting posture instruction. On the patient's second visit, he reported that he had no relief in symptoms following the previous treatment. The second visit included US and massage as before and a coccygeal manipulation/distraction, as described by Paris,² performed intrarectally. The technique was explained to the patient, and the patient consented to treatment. Paris recommends that for medicolegal reasons a second person of the same sex as the patient be present during the treatment as a witness.

TECHNIQUE

The patient was positioned prone with 2 pillows under the abdomen and with the lower extremities internally rotated. This position inhibits contraction of the gluteus maximus. Using a sterile glove and water based lubricant, the middle finger of the manipulating hand is inserted into the rectum and the distal phalanx positioned over the anterior surface of the coccyx. Asking the patient to cough reduces resistance to insertion of the finger. Once in position with the manipulating hand/finger, the thumb of the other hand is placed externally over the coccyx, which helps grasp the coccyx between it and the manipulating finger. The patient is asked to take a deep breath and upon exhaling, a progressive stretch/distraction is applied to the coccyx in the direction in

which it rests. In this particular case there was no deviation of the coccyx noted, so a straight longitudinal distraction was applied. The stretch is repeated 3 to 4 times. The manipulating finger is then removed from the rectum and the patient is given a warm cloth to wipe off the remaining lubricant.

RESULTS

The patient noted soreness the evening following the treatment, but noted at his third visit that his pain level had reduced to a 2 on a scale of 10. Since the patient noted a significant improvement after the manipulation, it was decided to "leave well enough alone" and treat the remaining soreness with ultrasound and gentle friction massage over the coccygeal ligaments. One week following the patient's third visit, he reported that his pain level was reduced to a 1 on a scale of 10 and that he had returned to competition as a triathlete with minimal discomfort.

CONCLUSION

Coccygeal manipulation can be effective in treating sacro-coccygeal dysfunction and returning the patient to previous functional activities.

REFERENCES

1. Gray H. Gray's Anatomy. Philadelphia, Pa: Lea & Febinger; 1973.
2. Paris SV. Introduction to Spinal Evaluation and Manipulation. St. Augustine Fla: University of St. Augustine for Health Sciences; 1999.

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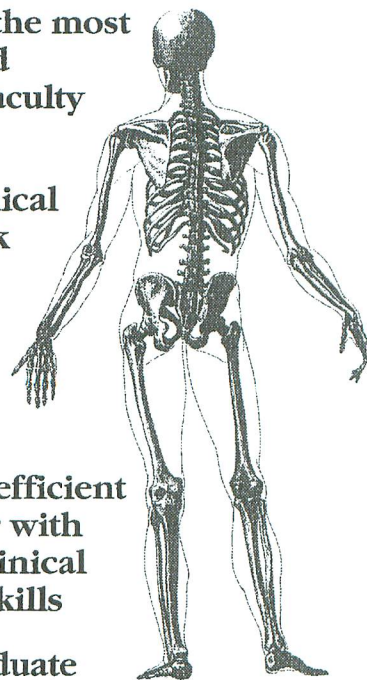
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Practice Affairs Corner

Being Politically Correct and Successful while Taking a Stand

Stephen McDavitt, PT, MS, Helene Fearon, PT

In previous editions of *Orthopaedic Physical Therapy Practice*, Stephen McDavitt PT, MS discussed the issues of a need to take a stand on direct interventions exclusively performed by physical therapists (Vol. 11:1:99, and Vol. 12:1:00). In those articles, he supported the need for us to take a stand as a profession by not teaching or delegating those direct interventions that should be exclusively performed by the physical therapist to assistive or paraprofessionals including manipulation/mobilization.

RC45A-00 Position on Direct Interventions Exclusively Performed by Physical Therapists as proposed by the Board of Directors was cosponsored by the Orthopaedic Section. In the months preceding the House of Delegates, the Orthopaedic Section with its Practice Committee worked hard to provide educational materials to all Components and Sections to assist the House of Delegates in preparation for debate on RC45A-00. Our position statement for support of RC45A-00 is below.

Memo

To: All Interested Physical Therapists

From: Orthopaedic Section, APTA

Re: RC 45A-00 POSITION ON DIRECT INTERVENTIONS EXCLUSIVELY PERFORMED BY PHYSICAL THERAPISTS

It is the position of the Orthopaedic Section of the American Physical Therapy Association that there only be support by vote in the PT2000 HOD for RC 45-A and NOT RC45-B.

SS: We feel both spinal and peripheral joint mobilizations/manipulations are skilled direct interventions within the scope of physical therapist practice and not the physical therapist assistant. Therefore such skilled manual therapy interventions should be clinically performed in physical therapy treatment exclusively by physical therapists.

Not all active and passive manual therapy techniques require the competency skills or qualify as joint manipulation/mobilization. This would include manual therapy techniques in accordance with the *Guide to Physical Therapist Practice* including general manual tissue massage, passive and active range of motion of the limbs and trunk, goniometry or general therapeutic exercise techniques. Total limb and trunk or "osteokinematic" manual techniques as opposed to "accessory" (component and joint play) manual techniques are within the competency of a physical therapist assistant and qualify for delegation to a PTA.

We base this support statement on the following:

1. When considering the application of peripheral or spinal joint manipulation/mobilization, those techniques require the ongoing skills of evaluation, assessment, diagnosis, and varying the technique of manipulation/mobilization intervention during the treatment. This requires the evaluation of the patient's response in addition to accessory movements or arthrokinematics such as joint component movements and joint play. Both peripheral and spinal joint manipulation/mobilization techniques therefore require evaluation and clinical decision making training and skills that PTAs do not have defined in their curriculum. Joint manipulation/mobilization clinical components (peripheral or spinal) are not listed in the PTA Normative Model.
2. The Advisory Panel on Reimbursement recommends that the APTA Board of Directors not remain silent on the issue of potential different valuing of physical therapist assistant's services. "Physical therapist assistants do not provide physical therapy services but rather assist in the provision of physical therapy services."
3. Neither peripheral nor spinal joint

manipulation/mobilization are supportive or assistive physical therapy services fitting within the PTA clinical competency model. They are skilled physical therapist interventions. The primary focal clinical intention of manual forces applied in joint manipulation/mobilization are delivered directly loading the more easily damaged intimate and localized soft tissue and joint structures through principles of arthrokinematics or accessory (component and joint play) joint and soft tissue mechanics. Such manual therapy techniques require the ongoing skills of evaluation, assessment, diagnosis, and varying the technique of manipulation/mobilization intervention during the treatment. These skills are within the competency of the physical therapist and NOT the PTA. From the *Guide to Physical Therapist Practice* American Physical Therapy Association July 1999:

- Manipulation: A skilled passive hand movement that usually is performed with a small amplitude at a high velocity.
- Manual therapy techniques: A broad group of skilled hand movements, including but not limited to *mobilization* and *manipulation*, used by the physical therapist to mobilize or manipulate soft tissues and joints for the purpose of modulating pain; increasing range of motion; reducing or eliminating soft tissue swelling, inflammation, or restriction; inducing relaxation; improving contractile and non-contractile tissue extensibility; and improving pulmonary function.
- Mobilization: A skilled passive hand movement that can be performed with variable amplitudes at variable speeds. *Manipulation* is one type of mobilization.
- 4. In the clinical practice of manual

therapy there are interventions where the primary focal intentional application of manual forces are applied and attenuated across and through many structures simultaneously with less requirement of joint assessment skill and risk of joint and soft tissue injury. Such manual therapy techniques which are "osteokinematic" as opposed to "arthrokinematic" include but are not limited to general tissue massage, active and passive range of motion of the trunk and limbs, goniometry and general therapeutic exercises. All are within the competency of and can be delegated to, the physical therapist assistant in accordance with the *Guide to Physical Therapist Practice*.

CONCLUSION: Therefore RC45-A does not take away but supports the practice of manual therapy techniques within the acceptable clinical physical therapist assistant practice competencies. RC45-A applies to peripheral and spinal joint manipulation/mobilization manual therapy techniques exclusively. RC45-A also promotes and supports the appropriate delegation of manual therapy techniques to physical therapist assistants by the physical therapist in accordance with the *Guide to Physical Therapist Practice*.

It is for these reasons the Orthopaedic Section of the American Physical Therapy Association cosponsors RC 45-A and will not support RC-45-B.

We hope the APTA 2000 House of Delegates will strongly consider and support our position.

Beginning on June 9th and following the Orthopaedic Section Board of Director's meeting on June 10th-June 13th, the Orthopaedic Section represented by President Bill Boissonnault, PT, MS, DPT, Director Joe Farrell, PT, MS, Director Gary Smith, PT, PhD, Practice Co-Chair Helene Fearon, PT, and Practice Co-Chair Stephen McDavitt, PT, MS spent a significant amount of time lobbying and educating the APTA House of Delegates for the support of RC45A-00. Before RC45A-00 was brought before the

House following the lunch break on June 13th, the Orthopaedic Section had acquired cosponsorship from 16 Sections as well as Chapters including South Dakota and Colorado. Debate on the floor included whether or not selective sharp debridement or peripheral as opposed to spinal joint mobilization/manipulation could be delegated to a PTA. The Orthopaedic Section was involved in floor debate clarifying the issues of how RC45A-00 complemented the *Guide Physical Therapist Practice* and the *Normative Model of Physical Therapy Education*. The Orthopaedic Section also provided the House of Delegates with information addressing why peripheral mobilization should not be delegated and how such delegation would affect CPT codes and reimbursement.

In the presence of the support provided from the APTA Board of Directors, the Orthopaedic Section, other cosponsor, and additional support from other delegates, the APTA House of Delegates 2000 voted in support for RC45A-00 providing a position from the House of Delegates on direct interventions exclusively performed by physical therapists. RC45A-00 as amended is provided below.

RC 45A-00 POSITION ON DIRECT INTERVENTIONS EXCLUSIVELY PERFORMED BY PHYSICAL THERAPISTS

That the following position be adopted:

POSITION ON DIRECT INTERVENTIONS EXCLUSIVELY PERFORMED BY PHYSICAL THERAPISTS

The physical therapist's scope of practice as defined by the *Guide to Physical Therapist Practice* includes interventions performed by physical therapists. These interventions include procedures performed exclusively by physical therapists and selected procedures that can be performed by the physical therapist assistant under the direction and supervision of the physical therapist. Procedures that require immediate and continuous examination and evaluation throughout the intervention are performed exclusively by the physical therapist. Such direct interventions within the scope of physical therapist practice that are performed exclu-

sively by physical therapists include, but are not limited to, spinal and peripheral joint mobilization/manipulation, which are components of manual therapy, and selective sharp debridement, which is a component of wound management.

SS: The Association should delineate those interventions which, due to their clinical complexity and the sophistication of judgment required to perform them, precludes delegation to paraprofessionals or others. This position is consistent with the House of Delegate's endorsed *Guide to Physical Therapist Practice* and *A Normative Model of Physical Therapist Education*.

Current Position: Passed HOD 2000 6/13/00

The success of providing accurate information, networking, and gaining delegation support for RC45A-00 was a joint effort by the APTA Board of Directors and the Orthopaedic Section. This effort, debate, and educational process, in our opinion, was exemplary of how such RCs should be presented to the House so that delegates can make more informed decisions when voting on the floor.

Considerable time, effort, and expense were borne by the Orthopaedic Section and its Practice Committee in order to be politically correct. We feel the effort while taking such a stand was worth it and are very pleased to present the Orthopaedic Section membership with the results of the House vote on this very important position statement. We feel this is a good example of another area where the Orthopaedic Section Practice Committee has been involved politically with the Orthopaedic Section BOD to assist the membership in the arena of practice affairs in accordance with our bylaws and strategic plan for the Orthopaedic Section. We hope the membership will continue to keep us informed of their other practice needs as they arise and look forward to addressing them as requested.

Steve McDavitt, PT, MS and Helene Fearon, PT are the Practice Committee Co-Chairs for the Orthopaedic Section, APTA.

PTA's Focus on Flexibility and Overuse Injury

Brad Thuringer, PTA, BS

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

Flexibility is often overlooked in today's therapeutic regimens. Flexibility is crucial to normal kinematic function, and if a stretching program isn't adapted into one's routine, tight muscles and joint capsules could lead to overuse injury.

A thorough evaluation by a physician and physical therapist is the first step in prescribing a flexibility program. The physical therapist assistant can be part of the initial teaching and implementation of this type of program with the patient. Part of the initial evaluation by the physician and therapist should include a subjective assessment which can help determine where the patient may be limited in normal joint function. Regardless of the particular evaluation methods used, flexibility is an area in which all individuals could improve. Even when not a direct cause of an injury, lack of flexibility is a contributing factor.

With the lingering effects of the running boom in the 1970s, popularity of aerobic and weight training in the 1980s, and golf and tennis in the 1990s,

there are a tremendous number of people who exercise to compete. As people are increasing their participation in recreational and sport-related activities and the demands on our work force are increasing, we need to start educating patients on the importance of stretching and the prevention of injuries.

Patellar tendinitis is a frequently reported overuse injury in sports. This injury is also reported with those who have high demand occupations that include extended time either in a standing or sitting position. Most individuals with this condition have pain at the inferior pole of the patella, where inflammation has been localized to the bone-tendon junction. Patellar tendinitis can usually be managed with conservative treatment which includes ice, anti-inflammatory medications, and alterations in training or work positions. Stretching of the hamstrings and quadriceps also may be helpful.

The shoulder is susceptible to rotator cuff and biceps tendinitis caused by overuse. These types of injuries are seen mostly in volleyball and swimming athletes. The assembly line worker is also a candidate for repetitive overuse injury of the shoulder. Patients who have shoulder tendinitis may present with generalized shoulder pain, weakness, or both. Treatment includes relative rest, daily application of ice packs, and anti-

inflammatory medications. In addition a general shoulder rehabilitation program must be prescribed. A rotator cuff tendinitis program should include strengthening of the supraspinatus and internal and external rotators.

Low back injuries account for a significant amount of lost participation and work days. An appropriate treatment regimen for the athlete with a low back injury may include: decreasing jumping activities, playing on softer surfaces, and a low back stretching and strengthening program that includes both flexion and extension. The laborer with low back pain could benefit from soft, shock absorbing standing mats, a low back stretching program, and an evaluation of their foot wear and shoe inserts.

The goal of each treatment and intervention program with the patient should be towards independence. No amount of physical therapy education or athletic training can prevent all injury or overuse syndromes. If the physician, physical therapist, and physical therapist assistant proactively work together towards educating patients about the benefits of flexibility, we could help in the prevention of unnecessary overuse injury.

Brad Thuringer, PTA, BS is Vice Presiding Officer of the National Assembly.

(Continued from page 6)

cal therapy" remains a part of the vision. As I stated in my previous message, *Is there a Doctor in the House?* (OP 2000;12(1):6), I believe this phrase is most appropriate for the future of our profession.

5. **Fall BOD Meeting 2000:** In September 1997, Jody Gandy, PT, PhD, spearheaded a strategic planning initiative that resulted in the formulation of the Section mission and vision. In addition, a 3-year strategic plan was developed. This October, Dr. Gandy will join us once again to revisit our

mission and vision and develop yet another 3-year strategic plan. The draft of the plan will be published in the next issue of *OP* and discussion of the plan will occur during our CSM 2001 Business Meeting. Your critique of the plan will help ensure we are meeting your needs.

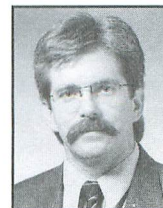
6. **Combined Sections Meeting 2001:** Start your planning now to attend CSM 2001. The Section Program Committee, led by Lola Rosenbaum and Paul Howard, is developing a tremendous educational program and we

will have lots to discuss at our Business Meeting in San Antonio, Texas.

Etc.

1. Thank you Steve McDavitt and Helene Fearon for your tremendous House of Delegates efforts.

2. Thank you Section office staff for your efforts prior to and during Annual Conference.



William G. Boissonnault,
PT, MS, DPT
President

Book Reviews

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

Pechlaner L, Hussl H, Kerschbaumer F. (Anatomy: Poisel S, Illustrations: Gratzner J) *Atlas of Hand Surgery*. New York, NY: Thieme, Inc.; 2000:567 pp, 1459 illustrations.

This atlas is an authorized translation of the 1st German edition, titled *Operationsatlas Handchirurgie*, published in 1998. The atlas represents a compilation of hand surgery techniques derived from the authors' experience in clinical medical practice. The book is targeted to orthopaedic surgeons who deal with specific problems of hand surgery, although the manner in which the information is presented makes it a useful resource to the physical therapist whose practice includes hand rehabilitation.

The atlas is graphics-oriented with brief text to support the illustrations. A total of 1479 excellent color illustrations are included, all created by a single artist who uses a consistent, distinctive style to portray the anatomy. The pages of the atlas are large (9 x 14 inches), and include large illustrations that depict hand anatomy with remarkable clarity. All illustrations are titled, and the anatomical structures are numbered and identified in associated legends. Some errors were noted in which structures were inaccurately labeled or lacked a label. However, the few errors did not detract from the overall superb presentation of the material.

The atlas is divided into 8 chapters. With the exception of the first, each chapter includes a very brief description of the indication, surgical technique, and postoperative management of specific disorders. Chapter 1 covers the systematic and topographical anatomy of the hand and forearm. Chapter 2 provides an overview of skin and soft tissue injuries to include skin incisions, various skin grafts and flaps, and injuries of the fingernail. Chapter 3 focuses on microsurgery of the peripheral nerves and vascular structures and includes an instructive profile for replantation and free toe transfers. Chapter 4 covers compression neuropathies of the upper extremity, highlighting anatomical sites common to peripheral nerve entrapment and surgical techniques to reduce compression. Chapter 5 covers tendon transfers to counterbalance peripheral nerve palsy. Chapter 6 focuses on surgical interven-

tion for extensor and flexor tendon injuries. Chapter 7 provides a detailed overview of fractures and dislocations of the wrist and hand. Chapter 8 covers a variety of disorders to include rheumatic disease, degenerative changes, stenosing tenosynovitis, avascular necrosis, instabilities, wrist ganglia, and Dupuytren's disease.

This atlas provides excellent illustrations of the hand and forearm anatomy and is an exceptional guide for visual interpretation of various surgical techniques performed on the hand. Although the intended audience is orthopaedic surgeons, this text can be very useful to physical therapist educators who seek clear, detailed images of hand anatomy and surgical techniques to support their teaching. The book will also be useful to clinicians who wish to better understand the intricacies of hand surgery. I would recommend this atlas as a resource to complement other written forms of instructional material related to hand anatomy and surgery.

Brenda Boucher, PT, PhD, CHT



Weintraub W. *Tendon and Ligament Healing, A New Approach Through Manual Therapy*. Berkeley, Calif: North Atlantic Books; 1999:180 pp, soft cover, illus.

The primary purpose of this book is to present the author's treatment approach to serious, chronic tendon and ligament injuries. The author has a background in structural osteopathy techniques and certifications in Body Mind Centering and acupressure therapy. His approach is based on his course work and clinical practice over the last 27 years.

The text is divided into 7 chapters. The first chapter is a general overview of the book and a case report. Much of the overview is confusing and somewhat unnecessary. The second chapter highlights characteristics of tendons and ligaments including general physiology, the injury process, and the remodeling of tissues. There is some discussion of electricity and magnetism in repair processes of tissue and some comparisons of standard medical view versus new possibilities in tendon and ligament repair.

Chapter 3 of the text focuses on the author's manual therapy model for tendon and ligament healing and principles on which the model is based. The author attempts to compare "standard conventional medical treatment" with his proposed model. Additionally, the author provides a personal background history of his work and personal experiences, and clinical influences to illustrate how he came to use the techniques in his approach. The author describes his approach as "new" yet at the same time describes the various osteopathic and Body Mind centering techniques that make up "his approach." The originality of his approach is somewhat suspect; however, the author does give credit to the various contributors or originators of the techniques described. The author also describes his ability to detect changes in electrical and magnetic fields around a wound and his specific method to balance those fields. How he is able to detect this is not well elucidated and no evidence is provided regarding a human's ability to detect such minute current changes (if they even exist).

Much of the rest of the text utilizes a case study format and anecdotal reporting. The author attempts to describe these cases as research, yet the model he uses does not conform to any standard research methodology (qualitative or quantitative). The cases are not presented as single subject case study designs. The case studies provided describe patients with tendon and ligament problems with some documented medical pathology and assessments by medical personnel. The author's treatment plans and progressions are well documented. There is no mention of how parameters of variables were measured. The text includes 2 cases described in detail and 10 cases described in an abbreviated format.

The fifth chapter discusses processes and tissue changes in tendon/ligament healing. This discussion describes the different principles of facilitating a healing response and how the author's approach addresses those principles. The author often refers to the previous chapters case reports to illustrate these concepts. This tends to interrupt the flow of the discussion and is better placed with the case studies.

A short chapter on self-help strategies is provided. The information is basic common sense combined with normal inter-

ventions such as splinting, rest, consultation, and home remedies.

The final chapter combines conclusions from the case studies, summary points of healing, and clinical efficacy of the author's approach. Discussions and conclusions of the case studies in the final chapter seem redundant. The cases have been discussed in 4 chapters previously. The author also introduces new concepts in the concluding chapter, which would have been more appropriate earlier in the text.

Overall, I would not recommend this textbook. The weaknesses of this text outweigh the text's strengths. The presentation of ideas is disorganized and transitions between topics and concepts lacks flow. Some concepts and ideas are presented as supporting facts when in actuality they are only theories at best. Much of the evidence to support efficacy of the author's approach is based on anecdotal reporting and not the "research" the author provides in case study reporting. One of the strengths of the text is in supporting the continued treatment of the whole person to maximize the individual's healing response and the use of osteopathic techniques to facilitate that response. The text also raises the possibility of further healing of serious tendon/ligament tears. The subject matter of this text is timely but a more focused presentation of concepts is needed.

Timothy J. McMahon, MPT, OCS



Falvo DR. *Medical and Psychosocial Aspects of Chronic Illness and Disability*. 2nd ed. Gaithersburg, Md: Aspen Publishers; 1999:464 pp.

Looking for a comprehensive source of the psychological, social, lifestyle, and vocational aspects of chronic illnesses and disability? The second edition of this classic text will likely meet your needs. This book is directed toward "... helping professionals understand medical and psychosocial aspects of chronic illness and disability and how it affects the individual's functioning in all areas of his or her life, including the psychological and social impact as well as the impact on activities of daily living and vocational function." This second edition has added chapters on assistive devices and managed care, appendices of diagnostic procedures and case studies, and discussion of psychosocial and vocational implications for each medical condition.

The first chapter is an overview of the aspects of psychosocial and func-

tional concerns of illness and disease. The stress of chronic illness and disability, emotional reactions, coping strategies, stages of adaptation and adjustment, and lifestyle changes are defined and discussed. The importance of the degree of impairment of the individual, rather than the medical diagnosis, is a theme threaded throughout this chapter. Other issues in chronic illness and disability are also addressed in this chapter, such as "invisible disabilities" (eg, diabetes, cardiac conditions); sexuality; family adaptations; adherence with prescribed treatment; and patient, client, and family education.

Chapter 2 addresses adaptive devices and their role in chronic illness and disability. General aspects to consider in assessing the need for adaptive devices are discussed. An overview of the types of devices includes devices for activities of daily living, mobility aids, sensory devices, communication devices, service animals, cosmetic devices, and devices for recreation and for the workplace. This is followed by a brief discussion of appraisal of assistive devices and alternatives.

Chapters 3 through 16 each address a different medical illness or disability and focus on the psychological, lifestyle, social, and vocational issues of each condition. Chapter 3 provides brief descriptions of various chronic nervous system disorders, including specific psychosocial concerns for each disorder. There is a summary of the psychosocial and vocational implications of nervous system disorders at the end of the chapter, which addressed many areas of concern including sexual difficulties and social stigmas. Unfortunately Figure 3-4, which depicts a halo brace, is mislabeled as "Spinal Nerves: Posterior View."

Chapters 4 and 5 address the psychosocial implications of hearing loss and deafness, and visual disorders and blindness, respectively. Chapter 6 covers mental disorders including developmental disorders such as mental retardation, autism, and ADHD; psychotic disorders such as schizophrenia; and mood and anxiety disorders such as bipolar, phobias, and post-traumatic stress disorders. Diagnostic and treatment aspects of these disorders are discussed, followed by functional implications of psychiatric disability. Chapter 7 focuses on substance-related disorders including alcoholism and abuse of various legal and illegal drugs. Disorders of the blood and immune system are covered in chapter 8, and endocrine disorders in chapter 9.

The musculoskeletal system is addressed in chapter 10. This chapter includes a basic description of normal structure and function, followed by com-

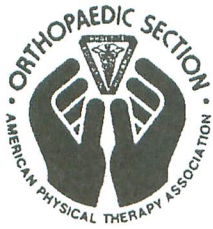
mon musculoskeletal disorders and their treatment. Physical therapists will likely find the discussion of the psychosocial and vocational issues of these disorders more enlightening than the remainder of the information presented in this chapter. The author briefly describes "physical therapy" for musculoskeletal disorders, however, she errs when she limits physical therapists to a "bachelor's degree." The description of diathermy as "... a process in which the temperature of the body part is raised through high-frequency ultrasonic waves" is also incorrect.

Chapters 11 through 15 address disorders of the cardiovascular, respiratory, renal, integumentary, and gastrointestinal systems. Chapter 16 focuses on cancer as a medical condition, including common cancers and specific treatments. As a clinician, I found the discussion of psychological, lifestyle, social, and vocational issues of cancer at the end of this chapter particularly valuable. Managed care and disability are briefly addressed in chapter 17. Ethical issues are discussed, and the impact of managed care on chronic illness and disability is critically analyzed. Interesting questions are posed concerning the "evolving concept" of managed care.

There are very few references to material presented in each chapter (there are none listed at the end of the chapter on the nervous system and the chapter on the musculoskeletal system!), however, there is an extensive bibliography at the end of each chapter. Appendices include glossaries of medical terms, medications, and diagnostic procedures. An appendix of case studies with a focus on psychosocial issues will be particularly valuable for students in physical therapist and physical therapist assistant schools.

The value of this book for physical therapists and physical therapist assistants lies in the focus on psychological, social, lifestyle, and vocational aspects of chronic illness and disability, which are components of all treatment programs but sometimes are not adequately addressed in physical therapy. Faculty may find this book valuable as a required or recommended text for psychosocial issues courses or "systems" courses (eg, neuromuscular system) where patient examination, evaluation, and intervention are addressed.

Thomas P. Nolan Jr, PT, MS



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Foot & Ankle Special Interest Group, Orthopaedic Section, APTA, Inc.
and the

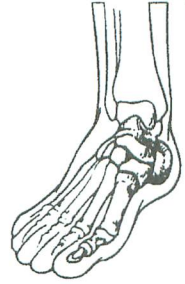
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October 13-15, 2000 * Chicago, Illinois

Rush Presbyterian St. Luke's Medical Center, Physical Therapy Department



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SCHEDULE:

Friday, October 13, 2000

8:00AM -12:15PM: Basic Science of Foot Management

1:15 PM - 5:00 PM: Management of the Rheumatoid Foot

Saturday, October 14, 2000

8:00 AM - 12:15PM: Management of Orthopaedic & Sports Related
Problems of the Foot & Ankle

1:15 PM - 5:00 PM: Management of the Diabetic Foot

Sunday, October, 15, 2000

8:00 AM - 12:30 PM: The Utilization of Footwear and Foot Orthoses

SPEAKERS:

Susan Appling, PT, MS, OCS

James Allen Birke, PT, PhD

Gary C. Hunt, PT, MS, OCS

Tom McPoil, PT, PhD, ATC

Michael Mueller, PT, PhD

Joseph Shrader, PT, CPed

CONTACT HOURS: 21.5

REGISTRATION FEES:

	PT	PTA	STUDENT
Orthopaedic Section Members:	\$200.00	\$125.00	\$85.00
Non-Orthopaedic Section Members:	\$255.00	\$150.00	\$105.00

LOCATION:

Hyatt, Chicago, Illinois

312.529.6002

Room Rates: \$189.00 single/double

CANCELLATION POLICY:

If notification of cancellation is received in writing prior to the course, the registration fee will be refunded, less a 20% administration fee. Absolutely no refunds will be given after the start of the course.

FOOT & ANKLE DYSFUNCTION

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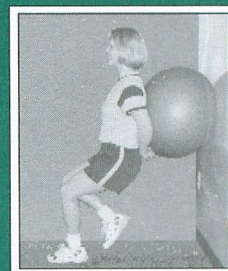
HOME STUDY



COURSE

Disorders of the Knee Home Study Course 10.4

An Independent Study Course
Designed for Individual Continuing Education



Topics and Authors

- 10.4.1 **Anatomy and Biomechanics of the Knee** *Mark Reinking, PT, SCS, ATC*
- 10.4.2 **When the Gears Begin to Grind: Conditioning the Knee of the Aging Athlete**
Gary Sutton, PT, MS, SCS, OCS, ATC, CSCS
- 10.4.3 **Patellofemoral Disorders** *Christopher Powers, PT, PhD*
- 10.2.4 **Lower Quarter Kinetic Chain Disorders** *John Majerus, PT, OCS, CSCS*
- 10.4.5 **Injuries and Rehabilitation of the Knee: Menisci, Ligaments, and Fractures** *Eric R. Sacia, PT, ATC*
- 10.4.6 **Examination of the Knee with Special and Functional Testing**
Robert C. Manske, MPT, CSCS and Steven W. Vequist, PT

Editorial Staff

Carolyn Wadsworth, PT, MS, CHT, OCS — Editor Gary Shankman, PTA, OPA-C, ATC — PTA Editorial Consultant

Course Description

Our course provides you an enlightening series of monographs by authors with a combination of backgrounds in academic, research, and clinical settings. Building on a solid foundation of anatomy and biomechanics, it explores the pathomechanics of knee disorders relative to function. You will learn extensive evaluation skills including a system of lower quarter examination, special testing protocols, dynamic patellofemoral evaluation, and the indications and contraindications for functional testing. The authors also offer a wide array of treatment strategies. Vivid photographs enhance visualization of patient and therapist positioning for testing and treatment techniques.

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10.4 Disorders of the Knee

Name _____ Credentials (circle one) PT, PTA, other _____

Address _____

City _____ State _____ Zip _____

Daytime Telephone Number (_____) _____ APTA # _____

E-mail Address _____

Please check:

Orthopaedic Section Member

APTA Member

Non-APTA Member

(Wisconsin residents add applicable sales tax)

I wish to join the Orthopaedic Section and take advantage of the membership rate.

(Note: must already be a member of APTA.)

I wish to become a PTA Member (\$30)

I wish to become a PT Member (\$50)

Fax registration and Visa or MasterCard number to:

(608) 788-3965

Visa/MC (circle one)# _____

Expiration Date _____ Amount _____

Signature _____

Mail check and registration to:

Orthopaedic Section, APTA, 2920 East Avenue South, Suite 200, La Crosse, WI 54601

Toll Free 877-766-3452



American Physical Therapy Association

OP



The Orthopaedic Section, APTA, Inc.
and the
Pain Management SIG, Orthopaedic Section
proudly present:

“The Paradigm of Pain in the 21st Century”

February 14, 2001
 2001 Combined Sections Meeting * Preconference Course
 San Antonio, Texas

COURSE OUTLINE:

Wednesday, February 14, 2001

8:00 - 9:00	Paradigm of Pain and Physiology of Pain
9:00 - 12:00	Mobilization of the Nervous System
12:00 - 1:15	LUNCH
1:15 - 2:15	ASTM and Industrial Rehabilitation
2:15 - 3:45	Electrotherapy—Iontophoresis, Electrical Nerve Blocks and Transcranial Microcurrent Theory and Application
3:45 - 4:00	BREAK
4:00 - 5:00	Alternative Approaches to Pain—Magnets, Lasers, Nutritional Supplements, Future Modalities/ Procedures Q & A

SPEAKERS:

David Butler, PT	John Garziona, PT, AAPM	Tom Watson, PT, MEd, FAAPM
Russell Foley, PT	Joe Kleinkort, PT, MA, PhD	

TUITION:

	Early Bird (prior to 12/18/00)	Advanced (prior to 1/15/01)	On-Site
Orthopaedic Section PT Members:	\$150.00	\$200.00	\$225.00
Orthopaedic Section PTA Members:	\$125.00	\$175.00	\$200.00
APTA PT Members:	\$205.00	\$255.00	\$280.00
APTA PTA Members:	\$165.00	\$215.00	\$265.00
Non- Members:	\$225.00	\$275.00	\$325.00
Orthopaedic Section Student Members:	\$ 35.00	\$ 75.00	\$115.00
APTA Student Members:	\$ 45.00	\$ 85.00	\$125.00
Student Non-Members:	\$ 90.00	\$140.00	\$165.00

CANCELLATION POLICY:

If notification of cancellation is received in writing prior to the course, the registration fee will be refunded, less a 20% administration fee. Absolutely no refunds will be given after the start of the course.

Sign up early and learn about PAIN and how to treat it from the panel of experts

How to Register: Contact APTA’s Service Center at 800.999.2782 x 3395 for details on registering
Questions about the course? Contact Tom Watson, President of the PAIN SIG: 760.796.6787
 Or Stefanie Snyder at the Orthopaedic Section office: 800.444.3982



STRETCH YOUR MIND

Orthopaedic Section, APTA

Home Study Course Series

History

The Orthopaedic Section, APTA, Inc. offers excellent continuing education through its Home Study Course series. Since 1991 we have been providing clinicians, faculty, and students with a stimulating choice of contemporary professional topics. Each course comprises comprehensive monographs that address different aspects of the topical area. Our carefully selected authors are experts in their respective fields.

How It Works

Each home study course includes 6 monographs and a binder to hold the course materials. Each monograph averages 20-28 pages in length and requires 4 to 6 hours to complete. All monographs contain 10 self assessment multiple-choice questions (answers are on the last page). Upon completion of the course, registrants receive a final examination containing 24 multiple-choice questions. To receive continuing education, registrants must complete the examination and return the answer sheet and the CEU form and must score 70% or higher on the exam. Registrants who successfully complete the exam will receive a certificate recognizing the contact hours earned. Only the registrant named on the registration form may obtain contact hours. Registrants are responsible for applying to their State Licensing Board for CEUs.

For courses in progress, registrants receive monographs monthly and must return their exam within 4 weeks of receiving the final monograph. For completed courses, registrants receive all 6 monographs and must return the exam within 90 days.



Continuing Education Credit

30 contact hours will be awarded to registrants who successfully complete the final exam.

Completed Courses Currently Available

HSC 96-1 The Cervical Spine
HSC 96-2 Topics in Orthopaedic Physical Therapy Assessment
HSC 97-1 The Hip & Sacroiliac Joint
HSC 97-A Clinical Approach to Management of Arthritis (This is a 3 monograph course. Contact the Section office for fees.)
HSC 97-2 The Elbow, Forearm & Wrist
HSC 98-1 Occupational Health
HSC 98-A Strength & Conditioning Applications in Orthopaedics
HSC 98-2 Pharmacology
HSC 9.1 Diagnostic Imaging of Bones & Joints
HSC 9.2 Orthopedic Interventions with Seniors
HSC 9.3 Managing Lumbar Spine Dysfunction

2000 Courses

HSC 10.1 Basic Science for Animal Physical Therapists (January-June 2000)
HSC 10.2 Orthopedic Interventions for Pediatric Patients (April-September 2000)
HSC 10.3 Contemporary Topics on the Foot & Ankle (July-December 2000)
HSC 10.4 Disorders of the Knee (October 2000-March 2001)

2001 Courses

HSC 11.1 Solutions to Shoulder Disorders
HSC 11.2 Current Concepts of Orthopaedic Physical Therapy

Editor: Carolyn Wadsworth, PT, MS, OCS, CHT

If notification of cancellation is received in writing prior to the course, the registration fee will be refunded less a 20% administrative fee. Absolutely no refunds will be given after the start of the course.

Special discounts offered for multiple registrants. Contact the Section office for details.

Registration Fees

\$150 Orthopaedic Section Members
\$225 APTA Members
\$300 Non-APTA Members

REGISTRATION FORM

Course #: _____ APTA #: _____

Name: _____ Credentials: _____

Address: _____ City: _____ State: _____

Zip Code: _____ Daytime phone : _____ E-mail address: _____

Please check:

- Orthopaedic Section Member
 APTA Member
 Non-APTA Member
WI residents add sales tax.

- I wish to join the Orthopaedic Section and take advantage of the membership rate. (Must already be an APTA member.)
 I wish to become a PTA Member (\$30)
 I wish to become a PT Member (\$50)

Fax registration and Visa or MasterCard number to 608/788-3965 or phone toll free 877/766-3452.
Visa/MC # _____
Exp. _____ Amount _____
Signature _____

OP

Please make checks payable to Orthopaedic Section, APTA.

Mail check and registration form to Orthopaedic Section, APTA, 2920 East Avenue South, Ste 200, La Crosse, WI 54601.

Orthopaedic Section, APTA, Inc.

Annual Conference Board of Directors Meeting

The 2000 Annual Conference Board of Directors Meeting was called to order at the Westin Hotel in Indianapolis, IN at 8:00 AM on Saturday, June 10, 2000 by Bill Boissonnault, President.

ROLL CALL:

Present:

Bill Boissonnault, President
Nancy White, Vice President
Ann Grove, Treasurer
Joe Farrell, Director
Gary Smith, Director
Lola Rosenbaum, Education Chair
Susan Appling, OP Editor
Phil McClure, Research Chair
Steve McDavitt, Practice Co-Chair
Helene Fearon, Practice Co-Chair

Randy Roesch, APTA Liaison
Terri DeFlorian, Executive Director
LaVerne Gurske, Executive Secretary

Absent:

None

MEETING SUMMARY:

The agenda for the Annual Conference Board of Directors Meeting on June 10, 2000 was approved as printed.

The minutes from the February 4, 2000 CSM Board of Directors Meeting in New Orleans, LA were approved by the Board as printed.

ACTION ITEMS:

=MOTION 1= That the Orthopaedic Section recognize that the existing standard for Orthopaedic Manual Physical Therapy is the DACP developed in 1998 by the AAOMPT. =PASSED=

=MOTION 2= Approve the following dates and times for CSM 2001 meetings:

Friday, February 16 - Board of Directors meeting 8:00 am to 3:00 pm in suite with a working lunch.

Friday, February 16 - Board of Directors meeting 6:30 to 7:30 pm in suite to discuss SIG business meetings-refreshments and hors'dourves only. =PASSED=

=MOTION 3= Home study courses can be purchased only as complete courses. Separate monographs will not be sold separately. Individuals wishing to use only a portion of the HSC for teaching continuing education must purchase an entire course per participant. HSC authors may use concepts, findings, and assimilation of information from their monograph as part of a teaching syllabus only if the material is rewritten and presented in a format that is original and different from the HSC. =PASSED=

=MOTION 4= Amend motion 6 from the 96 Fall Board meeting minutes by deleting the last sentence. The motion now reads as follows:

"The Orthopaedic Section modify its policy on Board and Committee Chairs speaking at Section sponsored educational events to allow them to present (speak or write) only with prior approval of the Board of Directors." =PASSED=

=MOTION 5= Offer to pay Terry Randall a \$1,200 honorarium for writing his home study monograph. =PASSED=

=MOTION 6= Accept the definition of manipulation/mobilization: The skilled passive movement to a joint and/or the related soft tissues at varying speeds and amplitudes including a small amplitude, high velocity therapeutic movement. =PASSED=

=MOTION 7= That Article X, Section 1.D be amended by deleting "at least every third year" and replacing with the word annually so the statement will read, "The Section must be represented in the House of Delegates annually." =PASSED=

POLICIES:

1) The role of the BOD liaison is to provide a consistent contact person who could be a resource or "go between" for each of the committee chairs and SIGs or any external organization representatives recognized by the Orthopaedic Section. It is the responsibility of the committee chairs or representatives of external organizations to contact their BOD liaison by Phone/FAX/E-mail 5 weeks prior to the CSM, Annual Conference, and Fall Board Meeting. The communication will be especially important prior to Annual Conference where not all committee chairs are present. A review of action items/discussion items/"To Do's" and current issues or projects would be in order during these contacts. Committee reports should be faxed or e-mailed to the Section office and the office will send to liaison for approval prior to going into meeting notebooks.

NOTE:

• This "Guideline" will be sent out annually by the Section Office Staff and as needed when committee chairs change.

• The rationale for FAXING or E-mailing committee reports to BOD Liaison prior to submission to the Section Office is to improve communication and stimulate possible discussion or action items.

- 2) SIG mastheads (logos) must adhere to the Section and APTA logo policies for printed material.
- 3) The Steve Rose video will be shown during Black Tie and Roses on special occasions and anniversaries. Steve Rose's picture will be made into a poster and displayed each year at the Black Tie and Roses reception.
- 4) When authors cannot accept an honorarium because they are employed in the armed forces, serve as an officer or committee chair of the Section, etc., they will receive a maximum of 3 complimentary home study courses or have the Section donate \$500 on their behalf to the nonprofit organization of their choice.
- 5) Authors who receive complimentary home study courses in lieu of their honorarium can take the final exam for those courses and if they pass will receive the appropriate CEUs at no charge. Authors are only eligible to receive CEUs if they complete and pass the exam.
- 6) Authors who receive a complimentary HSC, for writing a monograph for that course, can take the final exam and if they pass will receive the appropriate CEUs at no charge. Authors are only eligible to receive CEUs if they complete and pass the exam.
- 7) The HSC Advisory Panel receives complimentary copies of all home study courses published during their term on the panel. They can take the exam at no cost and if they pass receive the CEUs.
- 8) Authors will receive a complimentary copy of the entire home study course that they wrote for. By request only, they may receive 3 additional copies of their monograph. If they would like more copies they need to purchase the entire course at a cost of \$150.
- 9) Sell the History Monograph at cost.
- 10) The Section's reimbursement policy will be changed to be consistent with APTA's reimbursement policy which is:
Reimbursement is on the basis of actual hotel expenses (room and tax) plus actual travel costs (plane, train, bus) and actual local ground transportation. Airfare reimbursement is based on coach fare unless only first class is available. Per diem is limited to \$26 per day for breakfast, lunch, and dinner unless receipts are attached to the reimbursement request; whereupon, per diem will be reimbursed up to \$45 per day. Receipts must be attached to reimburse at the \$45 rate.

Adjournment 5:30 PM

Section News

DIRECTOR'S REPORT

Communication is ongoing as the BOD liaison to the Orthopaedic Specialty Council, Nominations and Practice Committees, the Section Historian, and the AAOMPT.

Progress on the following:

1. *Development of a monograph utilizing the 4 history articles published in 1999.* Status: It was decided that Susan Appling and Joe Farrell would work with Sharon Klinski to develop a monograph by APTA Annual Conference 2001.
2. *Contact Private Practice Section, APTA and Health Policy, Legislation and Regulation Section to inquire about reimbursement issues that are affecting our profession.* Status: I contacted the previously mentioned organizations and Helene Fearon who is the Federal Government Affairs Committee Liaison to the Orthopaedic Section. It is evident that from my discussions and numerous e-mails that reimbursement issues are mainly relating to Medicare. I received a summary report derived from a survey of Health Policy, Legislation and Regulation Section members from Bob Sandstrom (Chair, H,P,L, & R Section Government Affairs Committee) that outlined the following issues relating to Medicare:

- A. In room supervision requirement of PTA;
- B. Effect of \$1500.00 cap on physical therapy services;

- C. Patient hardship in meeting 30-day Physician revisit rule; and
- D. Effect on \$1500.00 cap on beneficiaries in SNF.

As changes in Medicare are enacted, the changes appear to strongly influence the private insurance industry. It was suggested by Helene Fearon that we as a Section review the recent Strategic Plan outlined by the APTA Advisory Panel for Reimbursement in an effort to evaluate how involved the Orthopaedic Section should become in relation to reimbursement issues. In sum, numerous organizations within our profession appear to be monitoring and dealing with reimbursement issues thoroughly.

3. Guidelines for BOD Liaisons were developed and approved with minor revisions by the BOD.

Action Items:

1. I am presenting the following motion that was communicated to me by the AAOMPT.
A. The AAOMPT moves that the Orthopaedic Section recognize that the existing standard for Orthopaedic Manual Physical Therapy is the DACP developed in 1998 by the AAOMPT. The above motion was approved by BOD at our June, 2000 meeting.

*Joe Farrell, PT, MS
Director*

MEMBERSHIP COMMITTEE

This is a new Committee within the Orthopaedic Section.

Activities for 2000

Chairman:

- Revise membership committee budget for 2001; submit to the Section office by 7/1/00; Terri DeFlorian to advise
- Review section Membership Policies and Procedures (done)
- Send introduction and information to committee members by 7/15/00, and confirm that they wish to serve on the committee. Information will include:
 - duties and responsibilities
 - objectives and strategies related to goal #9
 - APTA's Strategic Plan for Membership
 - 5-year motion summary (pertaining to membership)
 - Section membership packet
 - questionnaire from chairman re: feedback on information mailed, priorities, task assignment (eg, sub-committees to refine and implement strategies)
 - Locate New Jersey Section members who are willing to volunteer booth time at the National Student Conclave, 10/27/00; Linda Toedter to assist
 - Possibly do the same at Diversity 2000 Meeting in Chicago, 10/14/00

Membership Committee Chair:

Wooden, Michael 4770 Forestglade CT, Stone Mountain GA 30087 770-496-1693 michael.wooden@physio.strykercorp.com

Membership Committee Members:

Anderson, Brent	2574 SW 27 th Lane, Miami FL	305-860-0111	brentlizet@shadow.net
Adkins, Wanda	PO Box 461, Brandon FL 33509	813-828-3829	wanda.adkins@macdill.af.mil
Bosworth, Mari	212 Commerce Ave, Ste H, Cleveland OH 38732	662-843-3004	mrsboz@tecinfo.com
Chevan, Julia	8 Cosmian Ave, Florence MA 01062	413-584-8928	jchevan@mediaone.net
Crill, Matthew	328 Carriage Hill Dr, Athens OH 45701	740-593-3969	vanhalen@compuserve.com
Heiss, Deborah	OSU PT Div, 1583 Perry St, Columbus OH 43210	614-292-0210	heiss.8@osu.edu
Knox, Michael	721 Raymore Ave., Interlaken, NJ 07712	732-531-5009	mjk4372@aol.com
Koford, Mike	332 Manti Place, Henderson, NV 89014	702-451-8322	mchkoford@aol.com
Rose, Shaira	153 Prospect St, Ridgewood NJ 07450	201-444-1444	rosexoxo@hotmail.com
Russell, Byron	Hardin-Simmons Univ, PT Dept Box 16065, Abilene, TX 79698	915-670-1337	brussell@hsutx.edu
Shillue, Kathleen	100 Jersey St, #603, Boston MA 02215	617-236-1572	kshillue@caregroup.harvard.com
Sokell, Geri Ann	35425 Miles Rd., Moreland Hills, OH 44022	440-519-0113	agarrett@email.msn.com
Tollett, Darin	182 East Dawn DR, DeQueen, AR 71832	870-642-3457	darin.tollett@tridhospitals.com
Wilding, Janey	943 Dunlop Ave, Forest Park, IL 60130	708-209-1334	jwildil@uic.edu
Wise, Christopher	70 Victory Way, Limerick PA 19468	610-948-9787	ckjwise@aol.com

- Revise membership needs survey; revise strategy for distribution, collection, and analysis
- Assign specific tasks to committee members

Committee members:

- Provide feedback on member needs survey
- Return questionnaires and comments to me by 9/15/00
- Begin working on assignments

*Michael J. Wooden, PT, MS, OCS
Membership Committee Chair*

EDUCATION REPORT

Our upcoming Foot and Ankle Course is scheduled for October 13-15, 2000 in Chicago, Illinois. This comprehensive foot and ankle course has been offered several times in the past and consistently receives excellent reviews. Course fees for Orthopaedic Section members are purposely set low as a member benefit. Contact the Section office for more information.

The 2001 Combined Sections Meeting is in San Antonio, Texas from 2/14/01-2/18/01. Our Orthopaedic Section Special Interest Groups are planning programming to meet a wide variety of interests. A sample of tentative programming includes: O'NET and Certification for the Occupational Health Physical Therapist; Creative Movement for Pain Relief; Osteoarthritis Management in the Elderly; Diagnostic Imaging, Management of Lower Extremity Injuries in Runners; Introduction to Canine Anatomy and Physiology; and Adhesive Capsulitis of the Shoulder. There is also a preconference course on 2/13/01 entitled, The Paradigm of Physical Therapy and Pain Management in the 21st Century. Speakers will include: Tom Watson, David Butler, Russ Foley, Joe Kleinkort, and John Garzzone. Look for the Combined Sections Meeting Orthopaedic Section programming in the next issue of *OP* or call the section office for more information.

*Lola Rosenbaum, PT, MS, OCS
Education Committee Chair*

PRACTICE COMMITTEE

The Practice Committee remains involved with supporting states and individuals with materials and guidance in maintaining practice privileges in accordance with the *Guide to Physical Therapist Practice*. We have continued to be confronted by issues as they re-

late to the practice of mobilization/manipulation. No other practice issues or requests for assistance have been brought forward by the membership. The Practice Committee continues to provide practice materials and support as well as coordinate efforts with APTA and AAOMPT.

We have worked with Jody Gandy at APTA on a support statement addressing a defense of competency for manipulation in PT education programs. This was completed in March as part of the Orthopaedic Section assignments from the Task Force on Manipulation. More coordination with strategy task completion is needed and is being arranged with Justin Moore at APTA.

The Practice Committee, with the assistance of Bill Boissonnault, also has worked with coordinating representation and discussion on manipulation competency education with the Education Section and Academic Administrators. Trish King, MA, PT will probably be working on this project with us tentatively to take place in Chicago this September.

ADDENDUM TO PRACTICE COMMITTEE JUNE 2000

At the Orthopaedic Section, APTA Inc. Board of Director's meeting on June 10th, 2000, the Board of Directors voted unanimously to accept a new definition for mobilization/manipulation. The new definition accepted by the Orthopaedic Section Board of Directors is that from the AAOMPT Description of Advanced Clinical Practice (DACP 1998).

Manipulation/mobilization: The skilled passive movement to a joint and/or related soft tissues at varying speeds and amplitudes including a small amplitude, high velocity therapeutic movement.

The Orthopaedic Section Practice Committee will be working with the AAOMPT and APTA for consideration to accept that as the definition in the *Guide to Physical Therapist Practice* as opposed to having separate definitions for mobilization and manipulation as currently stated. A follow-up report will be given following those discussions with APTA.

Additionally at APTA Annual Conference, Indianapolis, IL, June 15, 2000, the Orthopaedic Section Practice Committee was involved with educational programming on spinal manipulation. Stanley Paris, PT, PhD spoke on the "History and Coming of Age of Spinal Ma-

nipulation in Physical Therapy." This lecture was followed by a panel discussion including Dr. Paris, Helene Fearon, PT, Stephen McDavitt, PT, MS, and Nancy Garland, Esq. The panel, moderated by Justin Moore from Government Affairs APTA, addressed regulatory, legislative, and educational issues as they relate to mobilization/manipulation practiced in physical therapy. This educational process involving the Orthopaedic Section and others was part of the strategic plan initiatives from the APTA Task Force on Manipulation.

*Stephen McDavitt, PT, MS
Helene Fearon, PT
Practice Committee Co-Chairs*

PUBLIC RELATIONS COMMITTEE

The exhibit booth was present at the Physician Assistant's (PA) Conference in Chicago, May 27th. Our booth was used at their meeting for the first time last year and the 5,000 PAs in attendance presented a good opportunity for us to inform them of our services. This year, similar results were noted. Physician Assistants see a wide range of medical problems but according to the American Academy of Physicians Assistants, they saw more than 14 million patients with musculoskeletal problems last year. Most PAs work in primary care settings and therefore have ample opportunity to refer patients to a physical therapist. A special thank you is extended to the following people who helped with the exhibit: Casey Furgeson, Chris Corbo, Dale Schuit, Eric Vickory, Karey Cook, Bob Johnson, and Paul Kirwan.

Next on the road show will be the American College of Nurse Practitioners. This meeting may turn out to be especially fruitful. We have been given complimentary booth space in the exhibit hall in exchange for my presenting a series of musculoskeletal clinics.

On October 27 the booth will be at the Student Conclave. This is always a great opportunity to introduce our Section's benefits to some of the future movers and shakers of our profession.

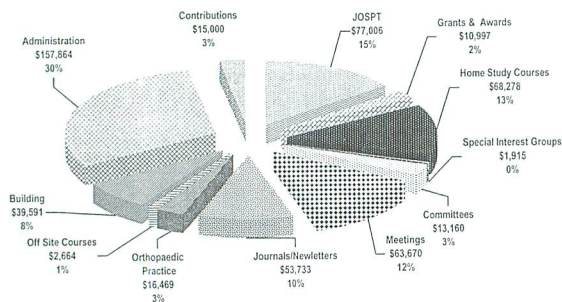
I will be attending the APTA's Advisory Panel on Public Relations. During this meeting the APTA's strategic plan for public relations and advertising will be reviewed.

I notice more and more activity on the web pertaining to physical therapists. If you have been successful in promoting our profession please let the Orthopaedic Section office know.

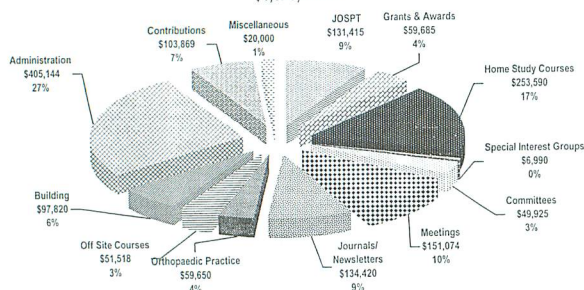
*Terry Randall, PT, MS, OCS, ATC
Public Relations Chair*

ORTHOPAEDIC SECTION, APTA, INC
YEAR TO DATE COMPARED TO ANNUAL BUDGETED EXPENSES
2000

Expenses as of May 31, 2000
\$526,890.00

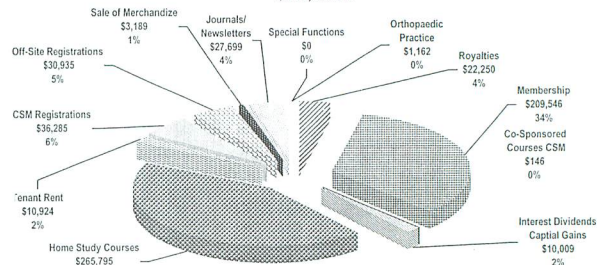


Annual Budgeted Expenses for 2000
\$1,525,040.00

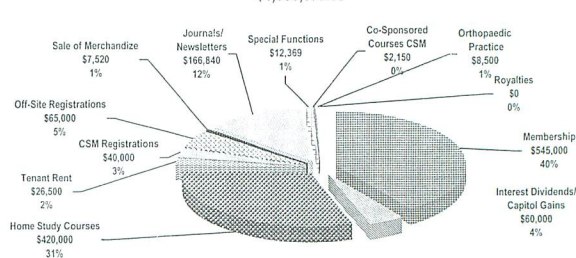


ORTHOPAEDIC SECTION, APTA, INC
YEAR TO DATE COMPARED TO BUDGETED INCOME
2000

Income as of May 31, 2000
\$617,938.00



Annual Budgeted Income for 2000
\$1,353,879.00

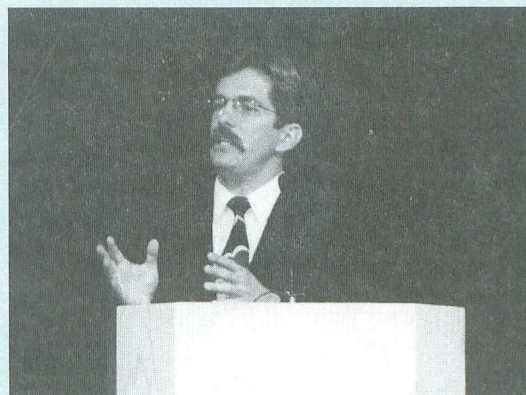


Section Members in the News

Congratulations to Annette Iglarsh and Babette S. Sanders who were recently re-elected to APTA Board positions.

The following Section members received APTA Awards at the Annual Conference in Indianapolis, Indiana:

- | | |
|--------------------|--|
| Karen W. Hayes | Dorothy E. Baethke-Eleanor J. Carlin Award for Excellence in Academic Teaching |
| James W. Matheson | Mary McMillan Scholarship Award |
| Samuel M. Brown | Lucy Blair Service Award |
| Fran Kern | Lucy Blair Service Award |
| Michael J. Mueller | Chattanooga Research Award |
| Sharon Henry | Eugene Michels New Investigator Award |
| David Sinacore | Golden Pen Award |
| | Congratulations! |



Congratulations to Dr. William Boissonnault who was named the 2000 John H.P. Maley Lecturer. His presentation was entitled, Innovations in Clinical Practice - Differential Diagnosis: Taking a Step Backward Before Stepping Forward. His lecture will be printed in a future edition of *PT Magazine*.

Helene Fearon, PT, recently became the first physical therapist ever to be appointed to the American Medical Association's (AMA) Current Procedural Terminology (CPT) Editorial Panel. Fearon will serve on the panel as a representative of the APTA. She is also co-chair of the Practice Committee.

The Orthopaedic Section, APTA, Inc. congratulates all of the following individuals who have recently become Orthopaedic Certified Clinical Specialists as well as those individuals who have recently become recertified.

2000 Orthopaedic Clinical Specialists

Cheryl Adams, PT, OCS
 Donna Adams, PT, MA, OCS
 Bryan Albright, PT, OCS
 Joseph Alejos, PT, OCS
 Michele Altemus, PT, OCS
 Daniel Antonino, PT, OCS
 Gail Apte, PT, OCS
 Michael Baer, PT, MS, OCS
 James Baniewicz, PT, OCS
 Richard Baudry, PT, OCS
 Max Baumgartner, PT, MSc, OCS
 Richard Baxter, PT, OCS
 Trisha Becker, PT, MHS, OCS
 Amy Beckman, PT, OCS
 Vicki Belcher, MPT, OCS
 Ellen Berge, PT, OCS
 Kathleen Berglund, PT, OCS
 Phillip Bevins, PT, OCS
 Keith Blaylock, PT, MS, OCS
 Thomas Blechel, PT, MSPT, OCS
 Sarah Boesel, PT, OCS
 Geoffrey Bonar, PT, OCS
 William Boushie, PT, MS, OCS
 Kristine Boyle-Walker, MPT, OCS
 Lana Breslin, PT, OCS
 Margaret Brill, PT, OCS
 Donald Brown, PT, OCS
 Kitty Brown, PT, OCS
 William Burns, Jr., PT, MS, OCS
 Henry Bussey, III, PT, OCS
 Nikki Butler, MPT, OCS
 Dirk Carson, PT, OCS
 Martin Chadwick, PT, OCS
 Jason Chambers, PT, OCS
 Shingpui Betty Chow, PT, OCS
 Yik Anna Chow, PT, MA, OCS
 Cyrus Choy, MPT, OCS
 Margaret Clark, PT, MHS, OCS
 Erica Clarkson, MPT, OCS
 Tamra Coleman, PT, OCS
 Elizabeth Ullaine Conroy, PT, OCS
 Kathy Culbreth, PT, MS, OCS
 Barbara Curtis, PT, OCS
 Jeffrey Davis, PT, OCS
 Karen Davis, MPT, OCS
 William Darrell Dean, PT, MS, OCS
 Elizabeth DeLuca, PT, OCS
 Anthony DeRosa, PT, OCS
 Michael Devitt, MPT, OCS
 Andrew Dimitro, PT, OCS, OCS
 Diane DiNino, PT, OCS
 Ingrid Dirusso, PT, OCS
 Deborah Doerfler, PT, OCS
 Carolyn Doran, PT, OCS
 Dennis Driver, PT, MS, OCS
 Pamela Duffy, PT, RP, OCS
 Janice Duncker, MPT, OCS
 Susan Eble, PT, OCS
 Christine Eddow, MPT, OCS
 Todd Ellenbecker, PT, MS, SCS, OCS
 Peter Erickson MPT, OCS
 Beth Ernst, PT, MS, OCS
 Joan Essenmacher, PT, MS, SCS, OCS

William Fabrocini, PT, OCS
 Dave Faciana, PT, OCS
 Jo Ann Fasen, MPT, OCS
 Sharon Feldmann, PT, MS, OCS
 Steven Ferdig, MPT, OCS
 Melissa Ferrandino, PT, OCS
 Michelle Ferro, PT, OCS
 Keith Ferry, PT, OCS
 Bridgit Finley, PT, Med, OCS
 Laura Franco, PT, OCS
 Clare Frank, PT, MS, OCS
 Louis Friedman, PT, OCS
 Janet Gangaway, MPT, OCS
 Robert Gentile, Jr., PT, OCS
 George Girolami, PT, OCS
 James Glinn, Jr., PT, MS, OCS
 Kathy Goldberg, PT, MA, OCS
 Cynthia Gonzalez, MSPT, OCS
 Christopher Goodwin, PT, OCS
 Edilberto Gorion, PT, OCS
 James Gose, PT, OCS
 Sylvia Gould, PT, OCS
 Marna Guerra, PT, OCS
 Willis Hall, PT, OCS
 Michael Hansen, PT, MS, OCS
 Kay Harbers, PT, OCS
 Ingrid Hatton, PT, OCS
 Joseph Hayes, Jr., PT, MA, OCS
 Michelle Hertel, PT, OCS
 Judith Hess, PT, MS, OCS
 Laurie Hiatt, PT, OCS
 Patrick Hoban, MSPT, ATC, OCS
 Timothy Holbrook, PT, OCS
 James Holte, PT, OCS
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ORTHOPAEDIC SECTION, APTA, INC. PROPOSED BYLAW AMENDMENT

ARTICLE X. DELEGATE TO THE ASSOCIATION'S HOUSE OF DELEGATES

Section 1: Qualifications

- A. Only Active or Affiliate members who have been members of the Association in any category of membership in good standing for two (2) years immediately preceding may serve as a Section Delegate.
- B. A Section Delegate may not, in the same year, serve as a Chapter or Assembly Delegate.
- C. The Section shall notify Association headquarters of the name of Section Delegate, as required by the Association and the Standing Rules of the House of Delegates.
- D. The Section must be represented in the House of Delegates at least every third year.

MOVE TO AMEND ARTICLE X. DELEGATE TO THE ASSOCIATION'S HOUSE OF DELEGATES, SECTION 1.D. BY DELETING "AT LEAST EVERY THIRD YEAR" AND REPLACING WITH THE WORD ANNUALLY SO THE STATEMENT READS, "THE SECTION MUST BE REPRESENTED IN THE HOUSE OF DELEGATES ANNUALLY."

DON'T "FROGET" TO RENEW...



your Orthopaedic Section membership dues with the renewal of your National and Chapter dues. If your dues aren't paid on time, you will have a lapse in your membership, and miss out on some of the Journals, courses, and conferences that the Section offers.

Failing to renew your membership will result in your name being removed from the mailing list, and processing your renewal could take up to 2 months.

 **APTA**
American Physical Therapy Association

REQUEST FOR PROPOSALS

ORTHOPAEDIC SECTION, APTA, INC.

CLINICAL RESEARCH GRANT PROGRAM

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:

- 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
- The funding period will be 1 year
- Evidence of some pilot work
- 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, 2000. 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, 2001.

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 (FAX)
e-mail: SSNYDER@CENTURYTEL.NET

CHECK OUT SOME OF THE AWARDS OFFERED BY THE ORTHOPAEDIC SECTION!

Listed below are descriptions of various awards offered by the Orthopaedic Section, APTA, Inc. Please contact the Orthopaedic Section office if you would like a detailed description of each award and the criteria for submission.



JAMES A. GOULD EXCELLENCE IN TEACHING ORTHOPAEDIC PHYSICAL THERAPY AWARD

Submission deadline: November 1, 2000

This award is given to recognize and support excellence in instructing OPT principles and techniques through the acknowledgement of an individual with exemplary teaching skills. The instructor nominated for this award must devote the majority of his/her professional career to student education, serving as a mentor and role model with evidence of strong student rapport. The instructor's techniques must be intellectually challenging and promote necessary knowledge and skills.

OUTSTANDING PT & PTA STUDENT AWARD

Submission deadline: November 1, 2000

The purpose of this award is to identify a student physical therapist and a student physical therapist assistant (first professional degree) with exceptional scholastic ability and potential for contribution to orthopaedic physical therapy. The eligible student shall excel in academic performance in both the professional and pre-requisite phases of their educational program, and be involved in professional organizations and activities that provide the potential growth and contributions to the profession and orthopaedic physical therapy.

PARIS DISTINGUISHED SERVICE AWARD

Submission deadline: November 1, 2000

This award is given to acknowledge and honor a most outstanding Orthopaedic Section member whose contributions to the Section are of exceptional and enduring value. The nominee shall have made substantial contributions to the Section in areas such as: professional recognition and respect for the Section's achievements, and advanced public awareness of orthopaedic physical therapy.

ROSE EXCELLENCE IN RESEARCH AWARD

Submission deadline: September 1, 2000

The purpose of this award is to recognize and reward a physical therapist who has made a significant contribution to the literature dealing with the science, theory, or practice of orthopaedic physical therapy. The submitted article must be a report of research but may deal with basic sciences, applied science, or clinical research.

Contact the Orthopaedic Section office for more information pertaining to the above mentioned awards, as well as the other benefits and services offered to Orthopaedic Section members!

Orthopaedic Section, APTA, Inc.
2920 East Ave. South, Suite 200
La Crosse, WI 54601
ATTN: Stefanie Snyder
800/444-3982 * 608/788-3965 (FAX)
www.orthopt.org





OCCUPATIONAL HEALTH
PHYSICAL THERAPISTS
SPECIAL INTEREST GROUP



ORTHOPAEDIC SECTION, APTA, INC.

Fall 2000

Volume 12, Number 3

Cultural Aspects of Rehabilitation of the Injured Worker

Raymond B. Virgil, BSPT, BA Spanish, OCS

This article was presented at the Combined Sections Meeting February 4, 2000 in New Orleans, LA

Individuals involved in workers' compensation claims come from a variety of backgrounds and are from diverse groups of people that include a wide selection of ethnic origins, national backgrounds, and socio-economic situations. Although not all injured workers are blue-collar laborers, they seem to comprise the largest group. This is likely due to lack of advanced education, familial background of blue-collar occupations, and job availability. Many variables are typically included when looking at the demographics of injured workers and a variable that becomes apparent is the one of ethnicity. The minority origins most common in the Southwestern United States are individuals of Hispanic and American Indian descents. These people have a very rich history that predates the Pilgrim's landing at Plymouth Rock. As a result of this lengthy inhabitancy, the people of these origins have acquired mannerisms and behaviors that are unique to the environment in which they live. Such qualities include the spoken and written language, social behaviors, and methods of healing. Skin color and eye pigmentation are also unique to the people but the genetic make up reveals similar inherent parts. Old terminology used to describe these social qualities was "racial differences." Since all humans have more commonalities than differences, particularly in anatomy, then "race" seems to apply to the human race (there being only one) and the differences are attributed to the "groupings of people" with variations in skin color and eye pigmentation. A natural human trait seems for the people to group themselves and develop social and behavior patterns. Behavior patterns that become evident are noted in the development of language, style of dress, preparation of foods, style of music, and social interactions. The American Heritage Dictionary describes culture as, "a. the totality of socially transmitted behavior patterns, arts, beliefs, institutions, and all other products of human work and thought. b. these patterns, traits, and products considered as the expression of a particular period, class, community, or population."

As caregivers to a variety of people groups, the cultural aspects become increasingly visible and affect the progressing of the individual's rehabilitation. The techniques and

skills utilized to treat the pathology are basically up to the physical therapist's choosing. But the approach to the patient of a different culture may create the outcome for a successful or a not so successful trial of therapy and it, then, demands the therapist to be culturally sensitive. Cultural sensitivity is an expression that has been thrown about the past 3 decades and seems to have lost its meaning and impact in the decade of the nineties. "Diversity in the workplace" and "Equal Opportunity" are the most popular terms that have come under fire by individuals who allege this is an act promoting reverse discrimination. However, with the increasing number of minorities in the work place, diversity has a steady unfolding. In Colorado the population of Mexican workers is increasing significantly. The philosophies of Western medicine and the Anglo culture's approach to treating injuries are not necessarily in harmony with each other. Subtle differences that are recognized are:

- A. Values related to hospitality: this will impact the bonding of the therapist with the patient.
- B. Beliefs: this will impact the bonding as well as the patient's confidence in the therapist's ability in managing their recovery.
- C. Boundaries of touch: too little touch will communicate little caring for the patient and too much may invoke a violation of privacy.
- D. Modesty: a key component in allowing the individual privacy in an environment where modesty at times may impede the necessary treatment.
- E. Differentiation of male and female roles will directly impact the success or the failure of the home program designed by the therapist. Requesting a male patient to complete a primary *female role* in the house will likely result in the male patient not completing the exercises, eg, having a male patient with shoulder dysfunction wipe the table in circular motions.
- F. Ideation of self-sacrifice for the family is a strong cultural trait for the Hispanic female. Unfortunately, this individual will delay medical attention during the early stages of the pathology for the purpose of caring for the other family members. This results in the progression of the disease process and a routine cure becomes a very serious medical situation.

A violation of a patient's cultural value or a dismissal of a violation as being insignificant by the provider may form an invisible wall between the caregiver and patient. If the violations continue then the ability to create significant bonds with the patient in an appropriate-caregiving role will not materialize resulting in poor patient compliance, loss of patient confidence in the therapist, and loss of patient motivation. This may result in a less than optimal trial of physical therapy. Written progress summaries often do not reflect the cultural aspects but rather the accomplishments or lack of accomplishments by the patient, ie, goals not being met. The medical record may then place the patient in a less than favorable light to the referring physician or anyone reading the medical record, which may lead to accusations of malingering, symptom magnification, noncompliance, and documentation of abnormal illness behaviors.

Once the individual has been labeled as such it is very difficult for the patient to overcome the affronts and confrontations by caregivers who feel their medical support is being taken advantage of. Medical bias may enter in to the management of the patient's case and may further deepen the cultural violations being felt by the client. At this point the case becomes difficult to manage and direct in the patient's best interest. A proposed method to avoid such an outcome is to be sensitive to the injured worker's cultural needs during this time of recovery. This may be realized by being sensitive to the client's needs by utilizing appropriate verbal and nonverbal communication.

Avoid using slang language in salutations. Respect female and male roles and accept them so that the treatment plan can be successfully implemented. An understanding of "ma-

chismo" is necessary to empathize with the Hispanic male and likewise understanding the "sufrida" - suffering one - as the female's role. Machismo relates to the male's role of being a provider for the family, it does not imply Hollywood's interpretation of male domineering and sexual exploitation of women. The sufrida role is one of endurance for the betterment of the family for the Hispanic woman. It does not imply a poor self image and a bleak outlook on life, but rather her resolve to attempt to endure the pain of the situation. Other methods to lend to a cultural sensitive environment are selecting appropriate office decor, displaying cultural art relevant to the people being treated, playing music with an emphasis to the culture, and maintaining a casual and less "sterile" atmosphere.

Pain management strategies that seem to be successful in the Hispanic culture include instruction in use of a TENS unit and a home program using a Physio ball with consideration that education may not be valued nor goal setting fully appreciated by the individual.

Taking the approach to "seek first to understand and then to be understood" will go a long way in relating to the cultural aspects of the many people physical therapists treat and will most likely result in a more successful outcome.

Mr. Vigil is the owner and president of Body Mechanix Physical Therapy located in Denver, CO. The clinic specializes in treating the Spanish speaking clientele with primarily orthopaedic diagnoses. Mr. Vigil was born and raised in Colorado and his parents are from northern New Mexico, USA. He has been raised in a Spanish-speaking environment, is fluent in the Spanish language, and is intimately familiar with the Hispanic culture.

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MEMBERSHIP

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Performing Arts Special Interest Group • Orthopaedic Section, APTA

PASIG ACTIVITIES BULLETIN!

Your committees are hard at work.

Programming Committee: Preparations are already well underway for PASIG programming for the Combined Sections Meeting 2001 to be held February 14-18 in San Antonio, Texas. Thanks to those of you who offered your programming suggestions.

Student Affiliations: We are in the process of updating the Student Affiliation Site list. Please check your site's listing for any changes or corrections. If your practice is not on the list and you accept student affiliations, WE WANT YOU! We require that your patient population is at least 10% performing artists to qualify for listing. Please contact Donna Ritter at drpt@airmail.net for changes or information regarding student affiliations sites. The Student Affiliation Site List is included in the PASIG Membership Directory, which is available for purchase from the Orthopedic Section Office.

Public Relations/Media: This is where PASIG members have a voice! We would like to publish your articles, stories, or clinical pearls here in our newsletter. Please share your experiences with the PASIG membership. You may submit any ideas for articles of PASIG interest to Jeff Stenback. If you have an idea, but need help, Jeff will be glad to bounce your idea around, help you with editing, etc. If you have suggestions for newsletter content please share them with Jeff Stenback at jsptocs@aol.com or Donna Ritter at drpt@airmail.net. Also please send us your announcements and news regarding your activities and local events in your region that would be of interest to PASIG members. Perhaps your activities and ideas will provide inspiration to your colleagues!

Jennifer Gamboa, PASIG President, along with several volunteer members, manned the PASIG booth at the "Dancing in the Millennium" conference held July 19-23 in Washington, D.C.

Nominating Committee: Are you good leadership material, or do you know another PASIG member who is? Do you feel your interests reflect those of your fellow members? Then perhaps you would like to run for PASIG office! We are looking for self-motivated, and motivating people to fill 3 elected positions to take effect in 2001: Vice-President, Secretary, and Nominating Committee member. Start thinking now about this great opportunity to contribute to PASIG

growth. If you have any interest in nominating yourself or someone else, please contact Amy Wightman at abwrightman@hotmail.com for further information regarding the role and responsibilities of these elected positions.

Upcoming Events

INTERNATIONAL ASSOCIATION OF DANCE
MEDICINE AND SCIENCE
10TH ANNUAL MEETING – OCTOBER 27-29, 2000,
and A DAY FOR TEACHERS – OCTOBER 26, 2000
Miami, Florida — hosted by New World School of
the Arts

For information contact IADMS

website: www.iadms.org

Or: Jan Dunn, M.S.

Executive Director IADMS

2555 Andrew Drive

Superior, CO 80027

Tel/Fax: 1-505-554-8040, e-mail: iadms@aol.com

Membership Notice

Your PASIG membership is not automatically renewed when you renew your Orthopaedic Section Membership. If you wish to renew your PASIG membership, you must do so separately. A membership form follows. There is no extra fee for PASIG membership. Member benefits/privileges are as follows: Members may hold office and vote in PASIG elections, will receive e-mail or mail notices, will be listed in the Membership Directory, and serve as a resource for fellow members. If you have had an address change or have added an e-mail address, be sure to let Jennifer Gamboa know at jenn526@aol.com by November 1, 2000.

Name: _____

Address: _____

City, State, Zip: _____

Home Ph: (____) _____

Business Ph: (____) _____

Email: _____

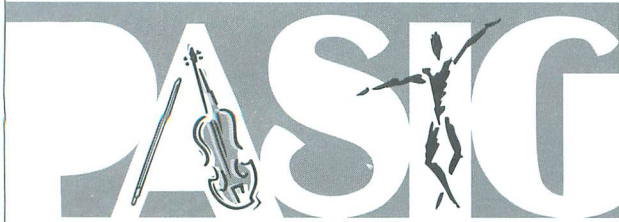
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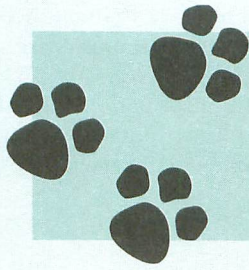


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PR/Media Relations Committee Chair:	Jeff Stenback, PT, OCS see above
Practice Committee Chair:	Jennifer M. Gamboa, MPT see above
Mentorship Task Force Chair:	Donna Ritter, PT see above
Research Committee	Jennifer M. Gamboa, MPT see above



Animal

SPECIAL INTEREST GROUP

Orthopaedic Section, APTA, Inc.



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Stephanie Snyder

Orthopaedic Section Education Chair

Lola Rosenbaum, PT, MHS, OCS

CALENDAR OF EVENTS

The home study course **BASIC SCIENCE FOR ANIMAL PHYSICAL THERAPISTS** is still available. Contact 800-444-3982 or 608-788-3982 for more information.

THE ANIMAL PHYSICAL THERAPY SIG UPDATE

1. Orthopaedic Section member and nonmember lists are available through the Section Office 800-444-3982 Fax: 608-788-3965 or Email: ssnyder@centurytel.net. There is a \$2.00 charge.
2. State Liaisons: To date there are 33 states that have Animal Physical Therapy SIG Liaisons. Contact Siri Hamilton for further information 865-974-2993 e-mail: sirivtpt@utk.edu.

SUMMARY OF PHYSICAL THERAPY AND VETERINARY PRACTICE ACTS AS THEY RELATE TO PROVISION OF PHYSICAL THERAPY SERVICES TO ANIMALS

Both the APTA and the AVMA have position statements or guidelines, which support collaborative relationships between physical therapists and veterinarians for the provision of physical therapy services to animals. However, as physical therapists, we must look to our state Practice Acts *for the rules and regulations that govern our practice.*

The state liaisons of the Animal Physical Therapy Special Interest Group were given the assignment of investigating the Physical Therapy and Veterinary Practice Acts for their states. Specifically, they were asked to find out what each practice act states relative to physical therapists treating animals, how these practice acts are interpreted, and whether treatments performed on animals can be called "physical therapy." Information on 26 states has been gathered, but it is important to note that this is a "work in progress," and information is incomplete at this time. The following is a brief summary of *what has been researched.*

STATES WITH "HUMAN" OR "HUMAN BEINGS" IN PT PRACTICE ACT

Alaska	Alabama	Arkansas	Colorado
Florida	Georgia	Hawaii	Iowa
Kansas	Maine	Missouri	Montana
New York	Oregon	Rhode Island	Utah
Washington	Wyoming	District of Columbia	Virgin Islands
Puerto Rico			

Since these practice acts do not apply to services for animals, any treatment given to animals cannot be called "physical therapy" and the therapist cannot hold himself/herself out as a "physical therapist."

STATES WITH "PERSON(S)" IN PT PRACTICE ACT

California Connecticut Nevada North Carolina

Since these practice acts do not apply to services for animals, any treatment given to animals cannot be called "physical therapy" and the therapist cannot hold himself/herself out as a "physical therapist."

A number of Physical Therapy Practice Acts have "gray" terminology, where further interpretation is necessary. For example, the Kentucky Practice Act refers to treatment of "individuals." The Kentucky State Board of Physical Therapy has interpreted the word "individual" to mean "human being" and thus exclude animals from receiving "physical therapy."

STATES IN WHICH VET PRACTICE ACT ALLOWS TREATMENT BY PHYSICAL THERAPIST

Idaho Kansas Louisiana North Dakota Pennsylvania

These practice acts support collaboration between the professions. Physical therapy services provided must be under the direct supervision of a veterinarian.

STATE	USE of RESTRICTIVE WORDING in PT PRACTICE ACT	OK to PROVIDE PT to ANIMALS UNDER DIRECT VET SUPERVISION?	COMMENTS
California	"person"	no per PT Practice Act	cannot call services "physical therapy" but "physical rehab" is not protected by the practice act
Colorado	"human beings"	no per PT Practice Act	nothing stated in Vet Practice Act regarding rehabilitation
Florida		Yes as an "aide" to vet	cannot hold oneself out as "animal therapist," but if one makes an arrangement with a vet, he/she can perform modalities as an aide; Florida PT Ethics Committee states therapists are not licensed to treat anything but humans, therefore treating animals is illegal and unethical
Georgia	"human"	no per PT Practice Act	
Idaho		yes with vet referral	PT Practice Act was revised to take out the word "human"
Kansas	"human beings"	no per PT Practice Act	can perform "physical rehabilitation" on animals with onsite direct supervision by vet
Kentucky	"individual"	no per PT Practice Act interpretation—see comments	Kentucky State Board of Physical Therapy interprets the word "individual" to mean "human being"; services performed on animals are the exclusive purview of the practice of veterinary medicine and Kentucky law does not recognize the practice of "physical therapy" on non-humans
Louisiana		no per PT Practice Act interpretation—see comments	interpretation of practice act states that animals are not considered within scope of PT/PTA practice therefore cannot call oneself "physical therapist"; vet act allows for provision of services under direct supervision of a vet
Maine	"human beings"	no per PT Practice Act	
Maryland			the practice of animal PT is under the sole jurisdiction of the Maryland Board of Veterinary Examiners, and their Board is authorized to impose requirements for education, training, and supervision; PT must register with the Veterinary Board
Massachusetts			"any specialist in the health or zoological field may be called in for consultation in these fields by a veterinarian..." per Veterinary Practice Act
Missouri			was informed that if PT is working with animals, it is outside the PT Practice Act and therefore cannot be called "physical therapy"
Montana	"human beings"	no per PT Practice Act	
Nevada	"person"	no per PT Practice Act	
New Mexico	none	yes	referral from vet is required and there must be direct supervision by vet
New York	"human"	no per PT Practice Act	vets are receptive to the idea of PT for animals, but practice acts are restrictive
North Carolina	"person"	no per PT Practice Act	NCPT Board interprets that any person treating animals is not performing "physical therapy"
North Dakota		yes as an employee of the vet and under his/her direct supervision	
Ohio	"person"	no per both practice acts	vet practice act states only veterinarian or vet tech can practice on animals
Pennsylvania			vet practice act supports collaboration between the professions. PT Practice Act is "gray" and implies humans only
Rhode Island			state liaison has requested interpretation from state's PT Board
Tennessee		yes	PT Practice Act recently omitted the word "human" but did not include vets as a referral source
Virginia			state liaison has requested interpretation from state's PT Advisory Committee
Wyoming	"human beings"	no per PT Practice Act	veterinarians in the state seem open to collaboration, but PT Practice Act is restrictive

Veterinary Practice Acts have not been obtained by every state liaison, and some Veterinary Practice Acts do not even address rehabilitation services, therefore another "gray" area exists.

If you would like specific information regarding the practice acts for your state, please contact your state liaison. You can find out the name of your liaison by contacting:

Siri Hamilton
(865) 974-2995 (W)
SIRIVTPT@UTK.EDU

If you have information regarding either veterinary or physical therapy practice acts in relation to treatment of animals, please share it with your state liaison.

Animal Physical Therapy Courses Enter Mainstream Curricula

In just this past year, elective courses for animal physical therapy became available in 4 colleges, 2 in physical therapy programs and 2 in veterinary programs.

"Rehabilitation and Physical Therapy in Veterinary Medicine" was offered as an elective course this May in a joint effort between Elon College's Graduate Program in Physical Therapy and North Carolina State University (NCSU) College of Veterinary Medicine. Twelve PT students and 12 veterinary students enrolled in this new course, which was held at the Veterinary College in Raleigh, North Carolina. Denis J. Marcellin-Little, DVM, (NCSU) and Kyndy Boyle, PT, MS, OCS, (Elon) co-coordinated the course and gave several presentations. David Levine, PT, PhD, from the University of Tennessee at Chattanooga was the invited speaker for the week, and gave numerous lectures and labs based on his work at the University of Tennessee, College of Veterinary Medicine. Other faculty from NCSU and Elon College included Bill Andrews, PT, MS, NCS, Karen Muñana, DVM, Natasha Olby, DVM, Lori Hitchen, RVT, Dawn Kaplan, RVT, and Donna Webb, LVT.

Highlights of this week long, 31-hour course included anatomy, tissue healing, handling of dogs, orthopaedic and neurological assessment of dogs, gait analysis, laboratory experiences on physical therapy for dogs including exercise and modalities. The interaction between the professions, and the mutual respect and understanding of the 2 fields that was gained by the week's end was extremely valuable.

Other electives held this spring included "Small Animal Physical Rehabilitation" at the University of Tennessee, College of Veterinary Medicine. Darryl Millis, MS, DVM co-ordinated this course, and faculty included David Levine, PT, PhD, Joseph Weigel, DVM, and Siri Hamilton, PT, LVT. Lectures were held weekly and included topics such as tissue healing, therapeutic exercise and modalities, and how physical therapy can impact postoperative outcomes. All students were required to work in the PT clinic at the Veterinary College several hours per week, and give a presentation on a case at the semester's end. The University of Tennessee at Chattanooga's Graduate Program in Physical Therapy will also offer an elective in "Animal Physical Therapy" in conjunction with the University of Tennessee, College of Veterinary Medicine.

We hope this is just the start of college programs offering official courses in this field. As the interest and knowledge in animal physical therapy continues to increase, having Veterinarians and Physical Therapists trained early on in their career will help to firmly establish this domain.



SPINAL DYSFUNCTION

by Amanda Hemingway (nee Sutton), MCSP, SRP Reprinted with permission from the Canadian Horse and Animal Physical Therapists Association Fall 1997 Newsletter

The increasing interest in the treatment of spinal problems has been accompanied by an upsurge in academic equine-related courses at universities and colleges. The media has also promoted treatment by highlighting the successes of the 1994 Grand National Winner and attributing it to his physiotherapist, Mary Bromiley, while other celebrity horses, such as Desert Orchid, were reportedly regular patients and their great achievements can only highlight the success of such treatments.

As well as these great successes, we have stories of people who have unfortunately experienced less desirable results. In the main, this would have to be attributed to unqualified practitioners who were working without a veterinary diagnosis. The result of some of these treatments have been catastrophic, resulting in fracture and permanent disability but, in the main, the treatments have prolonged the nature of the underlying primary cause of the lameness and caused irreversible damage. It is argued that if the primary nature of the condition had been identified at an earlier stage, the correct treatment could have been implemented.

FOR & AGAINST

To add to this, many veterinary surgeons and professional horse persons find it very difficult to have confidence in this approach, based on incorrect terminology and malpractice. It is also important to look at the other side and appreciate that there are some veterinary surgeons who actually perform such treatments themselves and have great confidence in this approach.

To date, very little research has been conducted to look at the effects of manipulation/mobilization treatments. Professor Leo Jeffcott, now based at Cambridge University, has been involved primarily in research into causes of spinal dysfunction. Much of his work concluded that soft tissue

injuries were a causative factor in performance problems.

At the 1993 British Equine Veterinary Association Conference, a whole session was devoted to the Equine Spine. Veterinary surgeons and other interested professionals discussed diagnosis of spinal dysfunction causing much debate since many of the presenting symptoms are so variable, and difficult to record scientifically. At the same conference, a paper was presented for the first time on research being carried out by a veterinary surgeon and an osteopath on spinal treatments.

The eminence of the presenter in veterinary circles can only help to give valuable credence to this subject.

To understand the nature of spinal dysfunction it is useful to evaluate the causative mechanisms. In its *primary form*, it may be attributable to an athletic injury - normally as a result of a fall. Problems also may arise from becoming cast in the box or slipping or misplacing a limb. Symptoms affecting the cervical spine may occur from a whiplash injury sustained perhaps from pulling back when secured to a fixed tie ring.

SECONDARY SYMPTOM

It is important to realize the significance of spinal dysfunction as a result of secondary symptoms (for example when a horse has been diagnosed as having a degenerative joint disease); he may well develop back pain as a compensatory mechanism. As well as receiving treatment from the veterinary surgeon for the primary problems, the secondary symptoms must also be treated.

Prevention is also very important and an area which is developing rapidly. Continuing research is being conducted into the relevance of pressure points on the spinal muscles and cause of muscle spasm. The role of correct saddle fitting has become important and influential on the outcome of any treatment regime.

There are no strict protocols for treatment of spinal dysfunction. However, in my opinion, manipulation is contraindicated where bone disease or excessive ligament laxity is present. Evidence of new and old fractures may only be determined by radiological examination. Not all the cases presented have had extensive examination eliminating such factors, so the skills of the practitioner are of great significance here.

All cases presented for treatments should also be blood tested for signs of soft tissue damage and metabolic imbalances, as I believe this can influence the outcome in long-term success. Indeed, muscle stimulation must be withheld when there are signs of obvious raised muscle enzymes in the blood, indicating damage. I always use the professional help of an equine nutritionist who will assist in correcting dietary imbalance, which may have exacerbated the problem. The significance of these nutritional imbalances can be assessed in the tone of muscle structure and flexibility of the patient.

EXAMINATION

The physical examination of an equine patient would begin by assessing him in the stable and noting general posture and overall appearance. I then always see them moving on a hard surface at walk and trot. If it is possible, I observe them trotting in hand on a 20-meter circle on a hard surface so that I can check for signs of lameness. They are then lunged in a school and finally ridden. This approach

allows me to see him moving on various terrain with and without *rider influence*. We can also check the correct fitting of any tack and the rider's posture and ability.

The next stage is to assess the horse's normal ranges of movement in all his limbs and his spine. Then I perform the palpation of soft tissue and anatomic structures. Treatment for muscle hypertension and decreased flexibility with associated pain can be varied to suit the individual's requirements. There are no recipes for treatment as every case is individual and dependent on, for example, the competitive commitments of that particular patient at the time. Also such factors as muscle tone, or the presence of atrophy will indicate appropriate treatment regimes. My first choice of spinal treatment technique is the Ellis approach. This primarily works on the manipulation of muscle. This therefore targets the increased hypertension presenting in the muscle bellies and involves no rotational or gliding of the joints themselves. In the hands of a skilled practitioner, 95% of the suitable cases will require this technique only. The key to the high success rate of this method is because you are affecting the muscular imbalance which exerts a powerful directional influence on the skeletal frame. The technique identifies the musculo-tendinous junction and applies a high velocity movement of small amplitude to correct the imbalance. It is a very precise and extensive approach using a reflex response and antagonistic/agonistic muscle reactions to release pain and spasm.

Where muscle adhesions or muscle atrophy and asymmetry are present, a muscle stimulation/mobilization program may be indicated. It is the combined approach that in my opinion prevents the reoccurrence of some spinal dysfunction. In my practice however, many of the cases presented are chronic and complicated by the presence of other conditions and treatment cannot be completely successful. This must be identified and a long-term maintenance program planned.

WORK DIARY

As a horse owner, much can be done to help identify and prevent problems.

- A work diary indicating level of performance will indicate the onset of decreased ability and temperament changes.
- Correct management and exercising whereby the **horse is not confined** for long periods, or excessively exercised suddenly, all help to reduce muscle damage.
- A correct feeding regime and exercise plan with emphasis on symmetrical muscle development and flexibility will go a long way to prevent problems.
- A good relationship with your veterinary surgeon and regular health check-ups to include lameness assessment will help to identify clinical signs, which will prevent chronic conditions from developing. Always coordinate with your veterinary surgeon when requiring a specialist opinion for condition of the spine and remember it is illegal for anyone other than a vet to treat your animal unless referred for physiotherapy.

CASE HISTORY: MONK

by Laurie Edge-Hughes (BScPT) Reprinted with permission from the Canadian Horse and Animal Physical Therapists Association Fall 1997 Newsletter.

ID: Monk is a 7-year-old female Springer Spaniel farm dog.

Hx: Monk's back leg was accidentally stepped on by her owner, after which Monk would not bear weight through the leg. Her owners thought that she was faking her injury because she would not always limp, and would use her affected leg occasionally when running. She was taken to a vet initially that confirmed that nothing was wrong in the stifle joint or any of the bones or musculature. Monk still did not progress. She was examined by a second vet who diagnosed her as having a neuropraxia. Monk had atrophy of hip and stifle musculature and lacked her pedal reflex*. Her owners were given a physiotherapy exercise regime of: a) having Monk walk on her back legs only and b) taping a small stone under her unaffected hind paw to encourage use of her affected leg. The owners tried to maintain this exercise program but found that they did not do so often enough. Eight months went by and Monk deteriorated. She would not get up to go for walks, she did not travel with her owner to do chores and she stayed lying on the porch most of the time. At this time physiotherapy was again consulted to see if something could be done at this stage. Monk lived with me for the next month so that she could receive daily treatment.

O: Monk displayed atrophy of her left hind leg musculature, as well as bilateral hip musculature atrophy. Her pedal reflex* was slow, but improved from 8 months earlier, and her hopping reflex** was normal. She had difficulty getting up from sit to stand and stood with her left hind leg off the ground. She would walk without using the affected leg, but would occasionally use it when running. Monk had full range of motion in all her joints, but displayed pain at end range of flexion and internal rotation for the left hind. Her lumbar spine was generally hypomobile into extension.

Dx: Monk was diagnosed as having neurological atrophy with returned neural functioning, flare up of osteoarthritic hip joints, and hypomobility of her lumbar spine.

Rx: Monks treatment included electrical muscle stimulation 5 pulses per second to her quads, hamstrings and glutes, as well as L/S paraspinals. She was made to walk on her back legs only (by holding her front paws and wheel barreling her forwards and backwards). She was taken on a daily walk. In addition to this she received spinal mobilizations to recover mobility of her lumbar spine.

Outcome: Monk made a full recovery in a month's time. She went home, and her owners were instructed to continue her walking regime to maintain function and optimize her hip condition.

- *The pedal reflex is the dogs ability to immediately right its paw position when it is manually turned under, with the dog in standing (weight bearing position).
- ** The hopping reflex is the dogs ability to hop in a sideways or diagonal direction when all of its weight is put on that leg (by manually holding up the rest of the body), and it is moved (displaced) in that direction.

S-EMG Workshops

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Gabriel E. Sella, M.D., P.T.A., Sc., M.P.H.

Ronald A. Fuller, P.T.A., A.T.R.I.C.

Surface EMG Evaluation & Feedback Training in Physical Therapy: Musculoskeletal Dysfunction

This course will familiarize the participant with sEMG foundations as well as specific assessment procedures and interventions. Applications cover a broad scope of situations including athletic injury, repetitive strain and worker injury due to motor vehicle accident, chronic pain management, and other musculoskeletal problems.

Workshop Locations & Dates

May 20-21, 2000
Anaheim, CA

October 21-22, 2000
Toronto, Canada

December 9-10, 2000
Southfield, MI

Practical Skills and Clinical Decision Making Using Surface Electromyography (sEMG)

This workshop outlines various means & methods to document soft-tissue injuries with a focus on the sEMG modality. This will include surface EMG testing of the head, neck, and trunk as well as the limbs. Biofeedback applications in neuromuscular re-education, sEMG applications, post injury and pain will also be discussed.

Workshop Locations & Dates

June 9-10, 2000
Toronto, Canada

July 28-29, 2000
Braintree, MA

October 13-14, 2000
Philadelphia, PA

Aquatic Rehabilitation and Surface Electromyography (sEMG) Biofeedback

This workshop will focus on the techniques, use, and potential application of aquatic biofeedback in the clinical rehabilitation and sports training setting. The potential for the application of aquatic biofeedback sEMG will be discussed and participants will be taught how to use a waterproof wrap to cover the electrodes of a conventional, hand-held sEMG unit.

Workshop Locations & Dates

May 6, 2000
Birmingham, AL

June 10, 2000
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July 13, 2000
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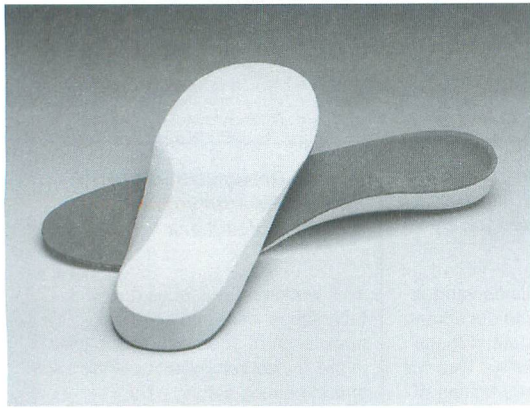
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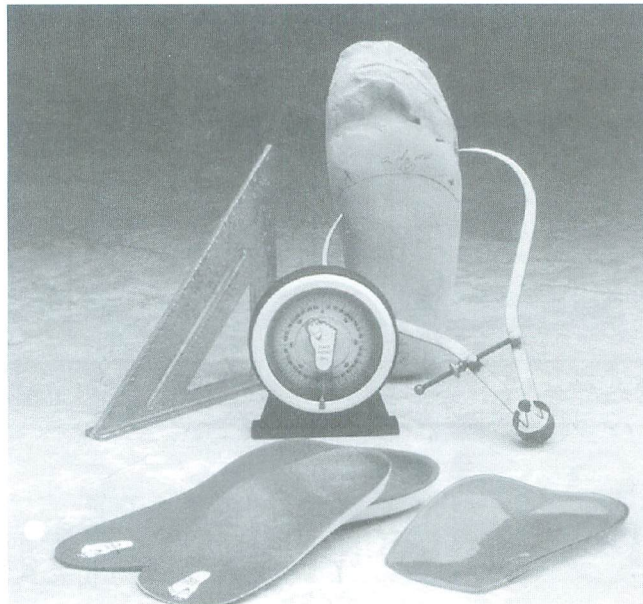
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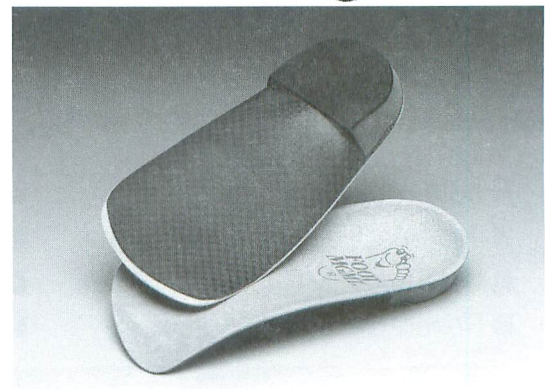




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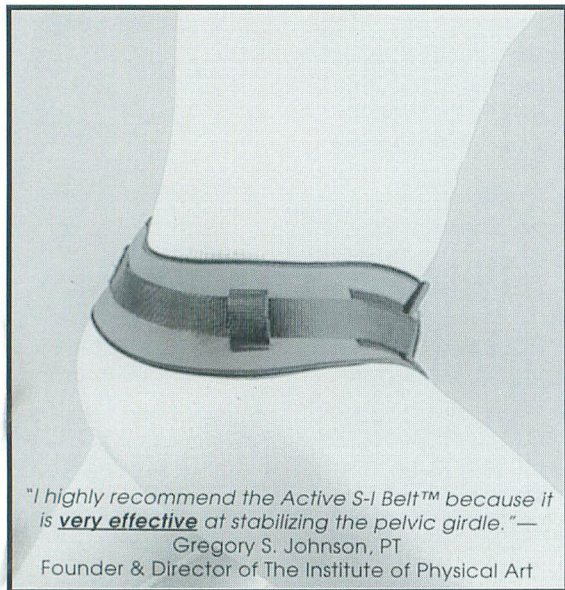
Instructions To Authors

Susan A. Appling, PT, MS, OCS, Editor
Sharon L. Klinski, Managing Editor
800/444-3982, ext. 202

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.
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. Two copies of the manuscripts should be submitted along with a 3½" disk with the document saved as Microsoft word or ascii. They should be double spaced, with one-inch margins on each side. 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.
4. Black and white photographs to accompany the texts should be glossy 5x7. A photo release form must accompany any photographs where patients may be seen. Any tables that might add to the usefulness of the article are also welcome.

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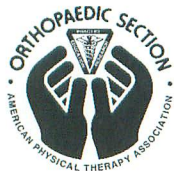
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