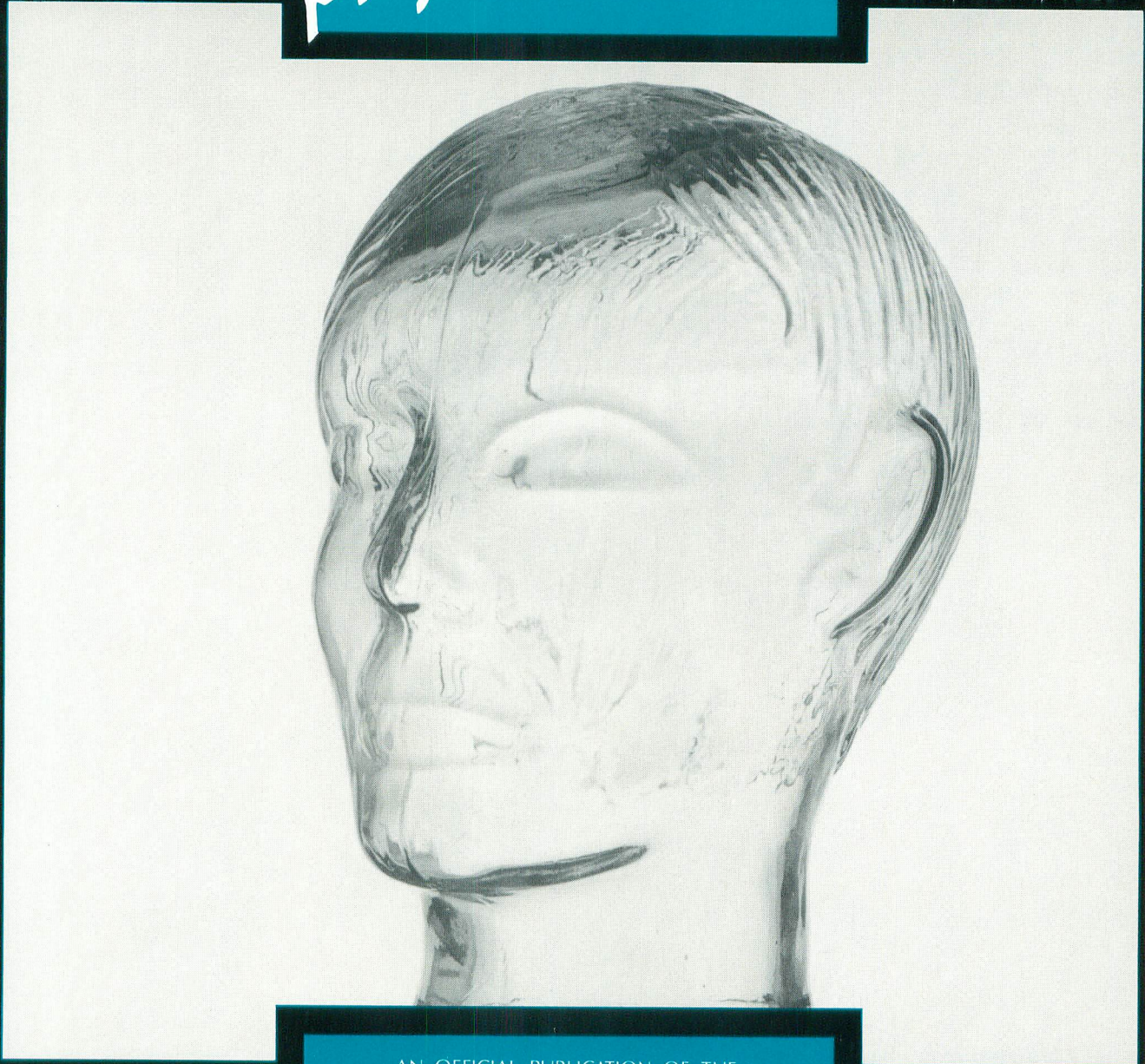


ORTHOPAEDIC

Physical Therapy

PRACTICE

Vol. 1, No. 4, 1989



AN OFFICIAL PUBLICATION OF THE
ORTHOPAEDIC SECTION



AMERICAN PHYSICAL THERAPY ASSOCIATION

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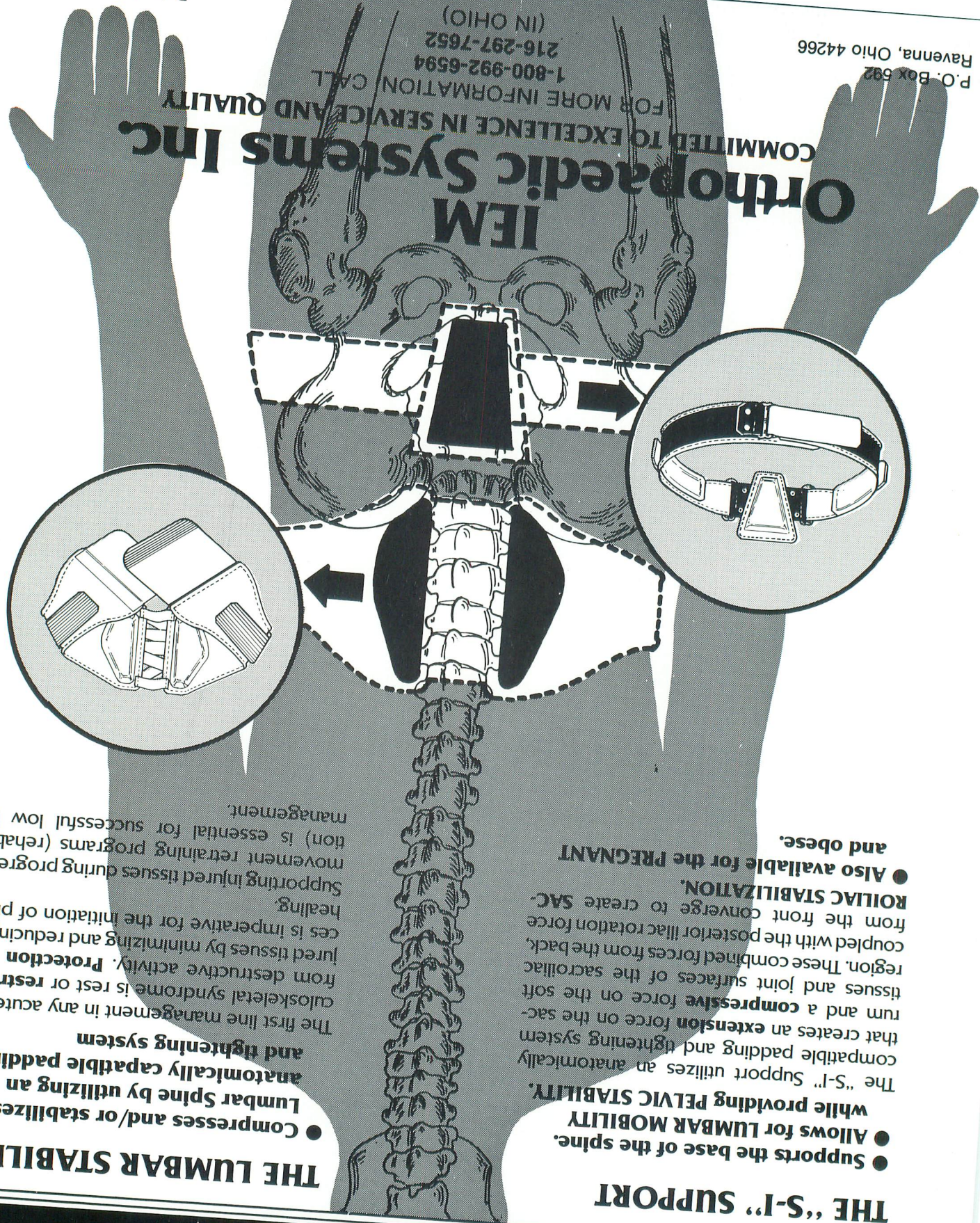
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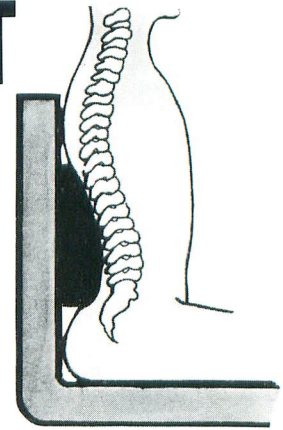
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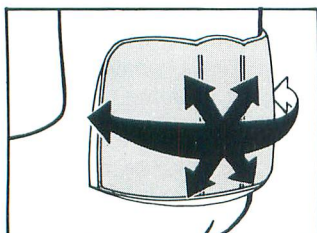


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ABOUT THE COVER

Headaches are a leading cause of discomfort for many people. Dan Sims' article gives our readers techniques which may help in a specific case.

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(See Section President)

EDITORS' VIEWPOINT

CHRISTINE SAUDEK • JAMES GOULD



Andy Servais

We, the editors of *Orthopaedic Physical Therapy Practice* are pleased to have received several positive comments regarding the format and content of the first few issues. It is important that you, the members of the Orthopaedic Section give us input. The profession as a whole is expanding into new areas and there is a lot of information in the field that needs to be made available to all clinicians. One of the new areas is highlighted in this issue's article by Dennis Gyllenhaal regarding the use of computers for communication. As he states "the potential is limitless". With the exponential increase of information in our field the general clinician can no longer know everything in order to effectively treat all patients. Dennis has mentioned several possibilities that would allow clinicians to contact others and discuss patients and treatment plans. Wouldn't this make our profession even more exciting and prevent burnout? Some of the most excit-

ing times professionally are at the meetings when several of us can join and exchange ideas regarding treatment, how clinics are run, new equipment etc. This could become a weekly occurrence without traveling anywhere if we wanted it to.

A new use of some common equipment, an extremity compression unit, is featured in Vince Basile's article. Now you can provide continuous passive movement to the spine as a treatment option without buying any more equipment. We encourage others to send us their ideas like this one.

In the last issue you became familiar with Dan Sims and the Colorado Athletic Conditioning Clinic. In this issue Dan has written up a case study where he outlines his treatment program of functional motion exercises and soft tissue mobilization to resolve referred symptom headaches. His careful explanations and excellent illustrations should generate new ideas for everyone.

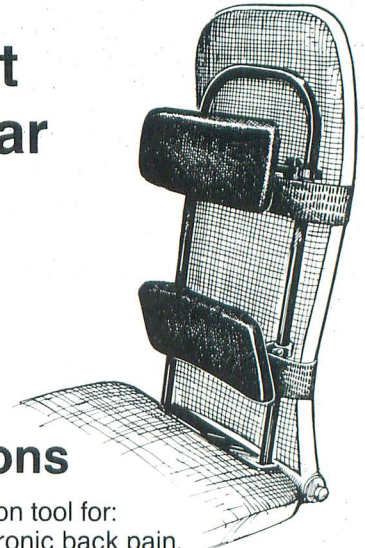
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PRESIDENT'S MESSAGE

Jan K. Richardson, P.T., Ph.D., President

Dear Members:

My first two year term has ended and you have just re-elected me for a second term of three years. I wish to thank you for this support and the encouragement I have received in speaking with many of you over the past year.

Many exciting and productive events have occurred these past two years. The first Orthopaedic specialization exam was given in June at Annual Conference and we will wait in anticipation for the first Board Certified Orthopaedic Physical Therapists to be recognized. The Recognition Ceremony will be held at the Opening Reception of the Combined Sections Meeting in New Orleans. We hope that all of you will join us at this time.

The first Orthopaedic Research Article Award was given to primary author Dr. Donald A. Neumann and co-authors Dr. Gary Soderberg, P.T. and Thomas Cook, P.T. We wish to thank Dr. Joe Threlkeld, P.T. for initiating this award to recognize orthopaedic research and Dr. Annette Iglarsh, P.T. for producing an event worthy of envy.

The Orthopaedic Section issued "The Orthopaedic Challenge" to the Foundation for Physical Therapy for the benefit of Minority Scholarship. The Foundation for Physical Therapy and Minority Affairs Committee raised over \$35,000 this past year from Annual Conference 1988 to Annual Conference 1989. Based on this success the Orthopaedic Section donated an additional \$10,000 to the Foundation.

This year the Orthopaedic Section developed a review course for advanced clinical competencies. The pilot course was given last August in Florida and the first course was given this February in Phoenix, Arizona. The first course attracted 136 participants and the second course which was given August 1989 in Evanston, Illinois attracted approximately 60 participants. The next course is scheduled for March 1990 at Lake Tahoe. Registration will be limited to the first 150

physical therapists. The majority of participants have been section members but members who usually do not attend CSM or Annual Conference. This has given us an opportunity to meet with a larger portion of our membership and the feedback received regarding the section publications and other activities has been very positive.

Thank you again for your vote of confidence and I look forward to serving you over the next three years.
Sincerely,

Jan K. Richardson, Ph.D., P.T.



ORTHOPAEDIC ITEMS

Public Relations and Audiovisual Materials

The items listed below are available for sale/rent through the Orthopaedic Section office:

- _____ Orthopaedic Physical Therapy logo pins. (Section Members \$10.00, non-Section members \$20.00)
- _____ Coffee mugs. \$5.50 each or \$20 per set of four (mugs can be sold in two of each style). Two styles: (indicate which style, "X")
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- _____ Brass paper weight of Section logo. (Section members \$25 each, non-Section members \$40).
- _____ Tape measure with the Section logo (six foot cloth tape), (Section members \$4, non-Section members \$6) (\$3.75 each in quantities of ten (10) or more, for Section members only)
- _____ Orthopaedic Physical Therapy brochures (Section members \$20 per 100 brochures, non-Section members \$35 per 100 brochures)
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- _____ Orthopaedic Physical Therapy competencies. (\$45 Section members, \$65 Educational Institutions, \$95 non-Section members)
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- _____ Display booths (\$50.00 per use plus return shipping). The Section has recently purchased two new, easy to use, table-top model booths.
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- _____ 10-Year Cumulative Index of *The Journal of Orthopaedic and Sports Physical Therapy*. (Section Members \$2.50, non-Section Members \$5.00)
- _____ Body Stamps set of three (1 front, 1 back, 1 right and left profile). (Section Members \$25.00, non-Section members \$30.00)
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SECTION NEWS

ADMINISTRATION

We hope that you enjoyed the last issue of *Orthopaedic Physical Therapy Practice*. Subsequent phone calls from you, the membership, indicate that you appreciate being able to associate faces with the names of our staff.

Autumn at the Section office is typically a slower time of the year which we use as "catch-up" time. This year our major project has been to update the Section's Policies and Procedures Manual. Also, it is time to prepare for the upcoming Fall Executive Committee Meeting here in La Crosse and to finalize plans for the Combined Sections Meeting.

Three Executive Committee meetings are held during the year, each with its own area of emphasis. For example, the Fall Executive Meeting is always held at the Section office and is used as a meeting for future planning, leadership training of new officers and committee chairs, final nominations for APTA position openings and awards, and finalization of plans for the Combined Sections Meeting. The Combined Sections Meeting is a time for us as a Section to honor our own ("Black Tie and Roses"), conduct education courses for members to attend, conduct a Section business meeting, and allow time for the Executive Committee to meet once again. The Annual Conference is centered around APTA activities. Here again, we have a Section business meeting and an Executive Committee meeting, but the emphasis is on APTA.

Among the agenda items for the Fall Executive Committee meeting will be conducting the Myers-Briggs test for those in attendance, and an orientation for new Committee Chairs and Nominating Committee members.

The 1990 Combined Sections Meeting will be one of the most exciting events of the next year. For this year, in lieu of the "Black Tie and Roses" reception, we will celebrate the Section's 15th anniversary. This formal event will be on Saturday, February 3, 1990. This issue of *Orthopaedic Physical Therapy Practice* contains a full page advertisement (pg. 2) for your complete information. We hope to see you there.

EDUCATION - PROGRAM

Dear Members:

The Orthopaedic Section is pleased to announce an outstanding CSM 1990 program. Special events have been planned to meet the varied needs of our membership.

The Orthopaedic Round Table concept provides members who specialize in unique facets of orthopaedic practice with focused lecture opportunities and a forum to share common interests. The first two groups of subspecialties highlighted this year will be Industrial Physical Therapy and Podiatric Physical Therapy. A more formal strategic plan for development of subspecialty groups within the Section will be forthcoming from the Section Executive Committee.

Two multi-section programs have been designed to meet the common interests of many sections related to orthopaedics. These courses will comprehensively

discuss The Whiplash Syndrome and Mobilization/Manipulation. Leaders in these areas will present the most up-to-date topical information and encourage discussion.

Last but not least is the Section's 15th year anniversary. We have elected to celebrate our 15 successful years by giving back to our profession. That is, all proceeds from this evening will be donated to the Minority Scholarship Fund of the Foundation for Physical Therapy. The highlight of the evening will be a performance by the internationally known singer, Nancy Wilson to be complimented by a sumptuous dinner. Past presidents will be recognized and Section accomplishments highlighted. Join us in this memorable Combined Sections Meeting event. See you all there!



Z. Annette Iglarsh

HEADACHE

Successful treatment of a patient with referred symptom headaches utilizing functional motion exercises and soft tissue mobilization

by Daniel Sims, PT

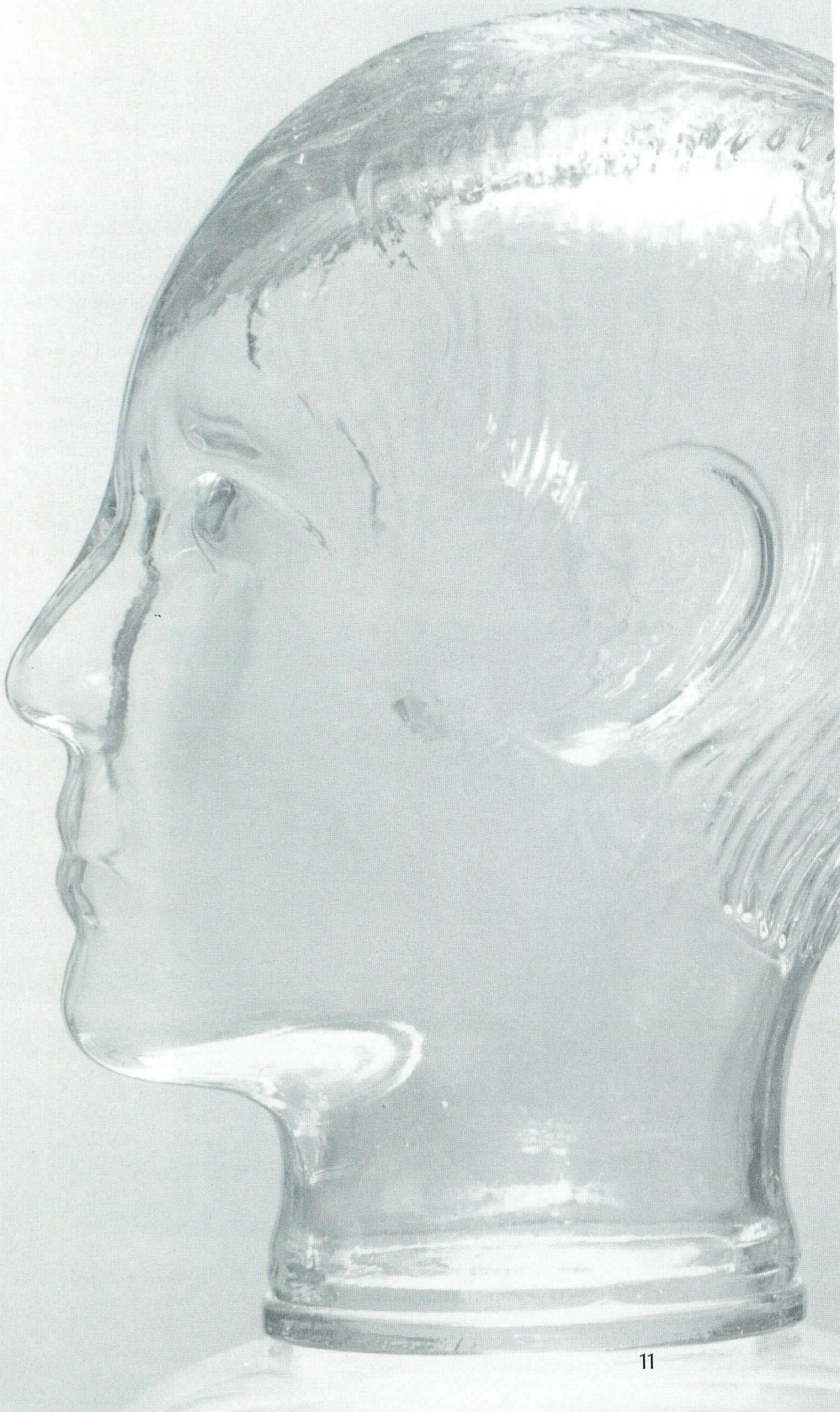
This case study presents the treatment results of a 23-year-old female, (KC), with sub-occipital muscle tightness and radiating symptom headaches that have been persistent for the past 10 years. A thorough musculoskeletal evaluation determined muscle imbalances in the deep sub-occipital muscles which would yield pain along the right side of KC's head and into the right retro-orbital area via the C1, C2 nerve distribution. A treatment regime was developed to reach the goal of decreasing the onset of headache symptoms utilizing soft tissue mobilization and functional exercise. In ten treatments, this goal was accomplished, and the patient was able to discontinue her medications in attempts to combat her long-standing headache symptoms.

In reviewing the current medical literature on recurrent headaches, it is obvious, no specific cause or treatment is prevalent at this time. Some suggested causes of sub-occipital and retro-orbital headaches are transient CNS deficits in young adults as noted by Levy⁶. Other suggested causes are food allergies^{7,8}, stress¹² and cerebral infarction, aneurysm or decreased cerebral blood flow^{3,5,9,11}. Some recommended treatments for these headaches have been acupuncture¹, dietary changes, stress management^{10,12} and exercise for prophylaxis of the migraines⁴. One case study by Brower², describes a patient who began freebasing cocaine to alleviate the pains of the recurring headaches.

Although this case study cannot document the specific cause of the patient's headaches, it does introduce a possible treatment regime to be utilized when confronted by patients whose headaches appear to be associated with sub-occipital deep muscle imbalances.

HISTORY

This 23-year-old female (KC) was initially seen on November 29, 1988 for complaints of right sub-occipital tightness with accompanying headaches that would blur the vision in her right



eye, cause dizziness and sometimes nausea to the point of vomiting. Following the onset of her symptoms, KC would have to lie down and sleep 8-10 hours to be functional at home or at work. She would then have residual pressure headaches for the following 36 to 72 hours.

In an attempt to curb the affects of these massive headaches KC began taking prescription medications at 13 years

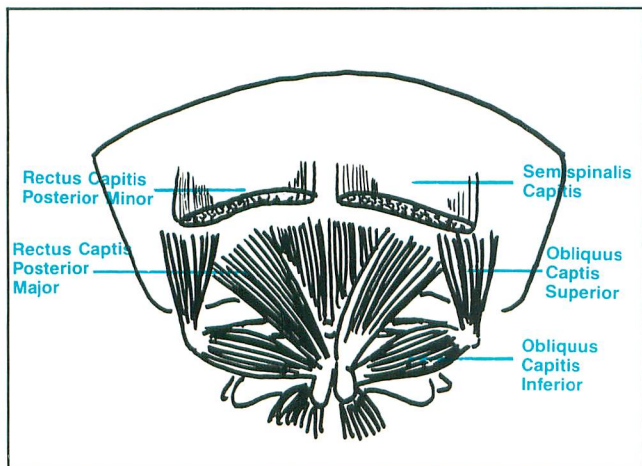


Fig. 1: Deep sub-occipital musculature.

of age. Her grandmother, mother, cousin and younger sister have also taken medications for the same symptoms with unexplainable etiology or pattern of onset with no relief. Prior treatment, other than medications for these symptoms was one month of physical therapy which consisted of ultrasound, moist heat, cervical traction, massage and Acuscope. With this, KC experienced no relief from her symptoms.

A CT scan was performed in mid-1988 with no abnormal findings about the brain. In May, 1988, she was prescribed 100-150 mg of Desyrel for night time use, and Midrin, which was to be taken at the onset of any sub-occipital symptoms. Just prior to her initial physical therapy visit, the patient was taking the maximum dosage of Desyrel as well as 3-8 capsules of Midrin per week.

EVALUATION

After noting her history, KC was given a thorough cervical, thoracic, lumbar, shoulder girdle and upper extremity musculo-skeletal examination. Her active range of motion in all the above areas was within normal limits, though, slight substitution movement with cervical rotation was noted. Manual muscle test, deep tendon reflexes, sensations, pulses, sitting/standing postures, and testing for nerve root irritation all revealed normal functional results. However, with the pa-

tient supine and the therapist testing passive cervical spine range of motion, tightness was noted with right rotation at end range and even greater tightness at mid range with left rotation. Passive left lateral flexion also yielded much tightness. The C0 (occiput), C1, C2 and C3 Segments were limited more than the lower segments of the cervical spine. When applying an over pressure to the tri-planar or functional sequence motion of flexion/left rotation/right lateral flexion, KC experienced radiating pains from her right sub-occiput along the right temple ending in the right retro-orbital area. These pains would subside as the pressure was reduced. With the patient still supine and relaxed, the deep sub-occipital muscles were palpated (Fig. 1). It was noted that the muscle bellies on the right from C0 to C3-4 were tight and guarded

when compared to those on the left. With point palpation over the right C1-C2 nerves, KC experienced excruciating right sub-occipital, temporal and retro-orbital pain which again would subside following release. This same palpation of the left provoked no such symptoms. Following this examination, KC expressed being sore about the right sub-occiput muscles but described a sensation of elongation in the muscles about the right sub-occipital. She also noted an increase in her active and passive range of motion, especially in the functional sequence movement of flexion/left rotation/right lateral flexion.

TREATMENT AND PROGRESS

Following the evaluation, treatment concentrated on functional motion and soft tissue mobilization at the C0, C1 and C2 spinal segments. The first two visits began with moist heat and effleurage massage to the sub-occipital and pericervical muscles. When there was a supple feeling to the superficial muscle bellies, a

two finger longitudinal stretch technique was utilized along the right rectus capitis posterior major and minor beginning at the occiput and progressing to the C1 tubercle and C2 spinous process. The muscle was put on stretch for 10-15 seconds at a time before progressing along the muscle length to its insertion. During this technique, the head was simultaneously moved toward the end range of the functional motion sequence of flexion/left rotation/right lateral flexion increasing the stretch on these muscles as well as the more superficial semispinalis capitis, obliquus capitis inferior and the Trapezius muscles (Fig. 2). After 5-7 minutes of stretch, the deep sub-occipital muscles relaxed and passive cervical rotation was initiated. The occiput (C0) was first rotated left and right while blocking C1 and C2 from rotation. Each time left rotation occurred palpable tightness or muscle guarding in the sub-occipital muscles became evident and a 10 to 15 second stretch was applied. Sometimes this exacerbated the patient's symptoms so the head was returned to the neutral position and the same process started over until full rotation was achieved. The same procedure was then repeated at C1, C2 and C3 segments. Once sufficient motion was obtained, the patient was instructed to sit and actively move through the flexion/left rotation/right lateral flexion and extension/right rotation/right lateral flexion functional movement sequences.

Following each treatment the patient lay supine with crushed ice packs about her cervical spine for 10 minutes.

The third day of treatment began with the patient calling the therapist half way through her work day with complaints of headache symptoms worse than ever and her vision once again blurred. Following 90 minutes of the same treatment



Fig. 2: Stretching technique for right suboccipital muscles in a functional or triplanar motion.

regime, the patient's vision was normal, and her radiating symptoms to the retro-orbital and temple area had regressed to complaints only of muscle soreness about the right sub-occiput. Because of KC's previous progress, the increase in symptoms was treated as an isolated occurrence and the next stage of her program was initiated. This began with three light weight resisted shoulder shrug exercises. The first exercise was done by elevating the shoulders upwardly toward the ears with the chin retracted and holding this position for 5 seconds before returning to a relaxed, shoulder down position (Fig. 3). The second shoulder shrug exercise was done following the same hold and relax sequence as the first exercise, but the shoulders were elevated and scapulae adducted in one smooth motion (Fig. 4). The third exercise was



Fig. 3: Shoulder shrug exercise #1.



Fig. 4: Shoulder shrug exercise #2.

performed with the patient lying prone with shoulders abducted to 90 degrees and then adducting the scapulae. Again utilizing the 5 second hold-relax sequences as the two prior exercises (Fig. 5). All of these exercises were repeated until muscle fatigue was accomplished without an increase in KC's symptoms.

On the fourth treatment day, KC first completed the entire treatment regime as before and in addition, began supine cervical extension exercises with accompanying shoulder bridges (Fig. 6 & 7).

KC was instructed to continue these exercises throughout the day to encourage proper muscle function about the sub-occiput. By her fifth treatment, December 8, 1988, KC experienced some muscle soreness but no headache symptoms. The day's treatment included the same regime as before, but incorporated the final exercise progression. KC layed supine with her head off the end of the treatment table. A manually resisted functional motion sequence was executed and incorporated into the treatment protocol. (Fig. 8a, b). The four functional motion sequences used in a synchronized pattern were a) flexion/left rotation/right lateral flexion and b) extension/right rotation/right lateral flexion as well as c) flexion/right rotation/left lateral flexion and d) extension/left rotation/left lateral flexion. When the patient expressed fatigue or sub-occipital symptoms, gentle massage was initiated until the return to treatment was tolerated.

At the end of the second week of treatment, the patient had decreased her medications by half and was controlling her headaches with the exercise regime. By December 13, 1988 KC required very little manual therapy work and began a general conditioning program of low resistance weight lifting, cycling and rowing. The progression to increase repetitions and weight was allowed when the patient felt it tolerable.

For two weeks during the Christmas holidays KC was absent from physical therapy treatments. She returned to physical therapy on January 3, 1989, and reported experiencing only mild headaches, but no radiating symptoms during this time period. KC was given the

option of physical therapy on a PRN basis, but was asked to update her therapist weekly on her progress. To date, KC has returned to physical therapy only for rehabilitation following arthro-



Fig. 5: Shoulder shrug exercise #3 done in the prone position.

scopic knee surgery. She has had no further complaints of recurrent headaches and she has discontinued her medications. KC states she now feels she has an alternative to drug therapy for controlling her referred symptom headaches, that is, her exercise regime.

DISCUSSION

In the preceding example, the soft tissue evaluation and soft tissue mobilization techniques assisted in the efficient and successful rehabilitation of the case study patient. Since submitting this case study the author has treated three similar cases with the same histories and complaints of referred symptom headaches with sub-occipital muscle pain. These patients were treated with the same treatment progression and achieved the same successful results. These results are limited only to this case study and warrant further research. The author does however, feel this case study, as well as the three cases also mentioned, illustrate the need for further soft tissue evaluation in order to determine if radiating symptoms along the C1, C2 nerve distributions stem from irritation produced by long standing muscle imbalances in the deep sub-occipital muscles.

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Fig. 6: Shoulder bridge exercise with accompanying cervical extension.



Fig. 7: Cervical extension with head supported.



Fig. 8a, b: Position of patient for functional or triplanar hold-relax resisted exercise.

THE FIRST NORTH AMERICAN ORTHOPAEDIC SYMPOSIUM

ANATOMY & FUNCTION JOINT CONCEPTS

MAY 12 & 13, 1990

WESTIN HOTEL, OTTAWA, CANADA

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NATIONAL CAPITAL UNIT, ORTHOPAEDIC DIVISION,
CANADIAN PHYSIOTHERAPY ASSOCIATION

in association with

THE ORTHOPAEDIC SECTION,
AMERICAN PHYSICAL THERAPY ASSOCIATION

OFFICIAL AIRLINE: AIR CANADA



SYMPOSIUM

KEYNOTE SPEAKER:

LANCE TWOMEY, Ph.d.

School of Physiotherapy, Curtin University of Technology
Perth, Australia

Co-Author of *CLINICAL ANATOMY of the LUMBAR SPINE*

TENTATIVE PROGRAM

Wendy Aspinall, M.H.Sc, M.C.P.A.: The Lumbar Facet Syndrome -
Facts and Fiction

Cliff Fowler, M.C.P.A., C.O.M.P.: Ligament Testing in the Lumbar
Spine (Ilio-Lumbar Ligament)

Carol Kennedy, M.C.P.A., C.O.M.P.: Clinical Stress Testing of
Cranio-Vertebral Ligaments

Diane Lee, M.C.P.A., C.O.M.P.: The Clinical Implications of age related
changes in the sacro-iliac joint.

Susan Mercer, M.Sc.: Ligaments of The Cervical Spine (current
research on lower cervical spine)

Dr. M. Panjabi, Ph D.: Functional Anatomy of the Alar Ligaments,
Coupling Patterns in the Lumbar Spine

Erl Pettman, M.C.P.A., C.O.M.P.: Assessment and Treatment of
Segmental Spinal Instabilities

Dr. Gary Schmidt, P.T., Ph D: Current Research on Trunk Muscles,
Title to be confirmed.

Dr. Lance Twomey, Ph D: The Effect of Trauma and of Aging on the
Joints of the Cervical Spine

Ricki Yamada, MacKenzie Institute, C.O.M.P.: The Centralization
Phenomenon: Its use in Assessment and Predicting Outcome

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FOR MORE INFORMATION CONTACT:

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CLINICAL ANATOMY of the
CERVICAL and LUMBAR SPINE
by Lance Twomey

May 10 & 11, 1990

OVERVIEW

- Structures and function of cervical and lumbar spine
- Differences between cervical and lumbar spine
- Current research - biomechanics and pathology
- Effects of aging and severe trauma
- Rationale of physical therapy
- Enrolment: LIMITED

POST-SYMPOSIUM COURSE:

ASSESSMENT AND MANAGEMENT OF THE

CRANIO-VERTEBRAL REGION
May 14, 15, & 16, 1990

by CLIFF FOWLER and
ERL PETTMAN

LOCATION:
The Rehabilitation Centre

ENROLMENT: Limited

PREREQUISITES:

Cdn: E2 V2

USA: Intermediate Level

Manual Therapy

Stanley Paris: S2 S3

Fowler/Pettman:

Level II Spinal

THE FIRST NORTH AMERICAN ORTHOPAEDIC SYMPOSIUM

May 12 & 13, 1990 - Westin Hotel - Ottawa, Canada

REGISTRATION FORM

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LAST FIRST

ADDRESS:

PHONE: (Home) (Office).....

FAX:

PROFESSION: C.P.A./A.P.T.A. Number

MEMBER OF Orthopaedic Division/Section of C.P.A./A.P.T.A. Yes No.

Registration for Symposium

Includes Opening Reception (Evening May 11) and Dinner Dance (May 12, 1990)		
	Until March 5, 1990	After March 5, 1990
Orthopaedic Members	\$235.00	\$260.00
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Students	\$120.00	\$135.00
Please indicate if you will be attending:		
Opening Reception (included in registration fee)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Dinner/Dance (included in registration fee)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Would you like extra tickets to Dinner/Dance	Yes <input type="checkbox"/>	No <input type="checkbox"/>
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C.P.A./A.P.T.A., (non ortho)	\$200.00	
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TRAVEL - Air Canada Convention Hot Line - 1-800-361-7585; Quote Convention File Number

NEW POTENTIAL FOR PERSONAL COMPUTERS IN THE CLINIC

Dennis Gyllenhaal, PT

This article discusses some of the existing applications for personal computers in physical therapy. It goes on to describe the potential of using personal computers to improve communications within the profession and describes a system that is being developed to do this.

Personal computers were first used in physical therapy clinics during the late 1970's and early 1980's. Initially, computers were used for a limited number of tasks including patient billing and monitoring of specialized testing equipment.

As the price of personal computers decreased and the ability to process and store data increased, they became more valuable tools in the clinic. Today therapists have adapted many commercial software packages to help clinical organization, patient management and research. Most clinics will use a word processor to type reports and progress notes. Some clinics will use spread sheets to develop annual budgets. There are also a limited number of software packages developed specifically to help therapists with treatment, documentation and billing. Computers are being used to store and analyze test results on exercise equipment. There are several popular software programs on the market for billing of physical therapy services in a private practice setting.

In spite of the many new uses for personal computers, they are still underutilized in our profession. One area where computers could be more effectively utilized is in the area of communications. As our profession grows and interests become more diverse and specialized, communication between therapists and sharing of ideas and expertise needs to be more immediate and more available. Telecommunications has progressed to the point where communications between personal computers is becoming practical and cost effective. As will be shown later in this article, this type of communications can help manage many problems associated with the explosive demand for physical therapy services we have seen, and will see in the future.

For many clinicians, the idea of using computers in their practice detracts from the image that our profession is "high touch". We are not computer scientists, and the use of this type of "high tech"

equipment seems to detract from the skills we practice with our patients. Many are afraid that they will be unable to learn the skills needed to master the computer. To offset this view, I would suggest that the computer be viewed only as another tool to help in the areas of organization, learning and communication. The key to using this tool in physical therapy is simplicity. If the tool is not easily mastered in a busy clinical situation, it will be discarded.

If this tool can be made easy to use, how can computer-aided communications help manage the problems facing our profession? To illustrate how, let's

The Orthopaedic Section of the APTA and Therasys Inc. have teamed up to build a system. At this time a pilot program is being conducted and volunteers are needed to test the system's "user-friendliness". If you would like to be involved, call Patti at the Orthopaedic Section office, or fill in the following survey and return it to the address below.

look at some potential telecommunications applications and their payoffs. . .

- Electronic mail would allow a more rapid communication between clinicians eliminating the need to play phone tag or wait for mail delivery. Few clinicians have time in their busy schedule to spend on the phone searching for answers to clinical questions or talking to several other therapists to get information on treatment trends in the profession. Electronic mail would allow an individual to speak with one individual, a group, or anyone using the system.
- Electronic bulletin boards allow conferences in which special interest areas (i.e. TMJ, industrial medicine, legislation, etc. . .) could be discussed by individuals across the country without leaving their home or office. Conferences are structured to allow individuals to send public or private

messages to other members of the conference. A conference could also provide the ability for individuals to copy literature to their own computer to be printed. In this way individual members of a conference could send copies of protocols they developed to the system computer which could be copied by others in the conference. In this way treatment protocols and other ideas could be exchanged without having to wait for a conference or course.

- A computerized placement program would allow for more rapid advertising of positions and acquisition of staff. Facilities wishing to place an ad in the computer could have the ad appear immediately, instead of having to wait for a publishing date. The program has a search setting that allows the individual looking for a specific location or type of practice to see only those ads that meet his/her criteria.
- A physical therapy literature search database would allow easier access to pertinent articles in the field without having to use research librarians or travel to look up and copy articles.
- On-line tutorials or test preparation programs would allow individuals to study and prepare for exams without travelling, or even leaving their home or office.

There are many other applications that have been considered and have yet to be imagined. The potential is limitless! The savings in time and travel could easily pay for the installation of a modem in your personal computer.

The next question might be. . . if this is such a great idea, why hasn't someone done it before? Until recently, the cost of the technology needed to do this was too high. Now that software and hardware costs have decreased and technology has improved in the telecommunications area, we have started such a system. The Orthopaedic Section of the APTA and Therasys Inc. have teamed up to build a system. At this time a pilot program is being conducted and volunteers are needed to test the system's "user-friendliness". If you would like to be involved, call Patti at the Orthopaedic Section office, or fill in the following survey and return it to the address below.

TELECOMMUNICATIONS SURVEY

1. Do you, or does your facility own a computer?

- yes
- no

If yes, what kind of computer?

- IBM or clone
- Apple
- Other (please specify) _____

2. Do you have a modem?

- yes
- no

If yes, what type (Hayes, Procomm, etc.)? _____

What is the transmission speed?

- 300 baud
- 1200 baud
- 2400 baud
- 9600 baud

3. What type of data storage do you have?

- 5.25" floppy disk (640K)
- 5.25" high density disk (1.2M)
- 3.5" disk
- hard disk

4. What type of software do you use presently?

5. What would you like to do with your computer?

6. Would you be interested in learning more about the Orthopaedic Section-Therasys system or participating in testing the system during the pilot phase?

- yes
- no

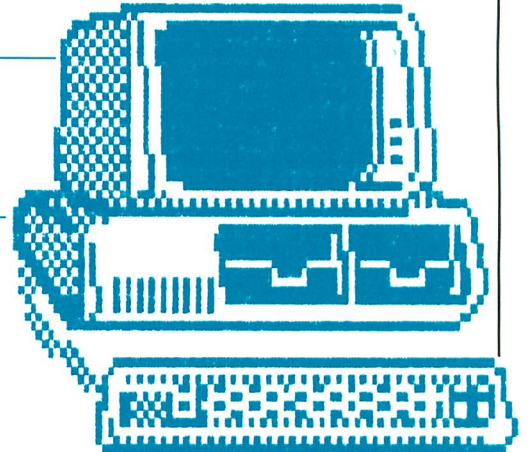
If yes, please fill out the form below:

Name: _____

Representing: _____

Telephone: _____

Best time to reach you: _____



*Please send this survey to:
Orthopaedic Section, APTA
505 King Street, Suite 103
La Crosse, WI 54601
Attn: Patti Sherry

REQUEST FOR RECOMMENDATIONS

The Orthopaedic Section of the APTA needs your input for qualified candidates to run for the below-listed offices. To serve is exciting and an honor. If you wish the opportunity to serve your Section or know of qualified members who would serve, please fill in the requested information. Return this completed form to Anne Campbell, Chair of the Nominating Committee, before January 1, 1990. The Nominating Committee will solicit the consent to run and biographical information from the person you recommend.

(Print full name of recommended nominee)

Address

City

State

Zip

Is recommended as nominee for election to the position of:

(Check the appropriate position)

_____ TREASURER (3 years): Should have demonstrated abilities in finance at the Section, Chapter or National level.

_____ NOMINATING COMMITTEE (3 years): Should have broad exposure to membership to assist in formation of the slate of officers.

Please return by January 1, 1990 to:

ANNE H. CAMPBELL, P.T.

Chair, Nominating Committee Orthopaedic Section, APTA, Inc.

505 King Street, Suite 103

La Crosse, WI 54601

Nominator: _____

Address: _____

City, State, Zip: _____

Phone: _____

With Sincere Thanks from the Nominating Committee,
Anne Campbell, Chair
Helen Price
Scott Hasson

CALL FOR NOMINATIONS SPECIAL AWARDS

Dear Orthopaedic Section Members:

Nominations are now being accepted from individuals or institutions for any of the following awards or scholarships (DEADLINE DECEMBER 1, 1989)

Mary McMillan Scholarship: Honors outstanding physical therapy students.

Dorothy E. Baethke—Eleanor J. Carlin Award for Teaching Excellence: Acknowledges individuals who have made significant contributions to physical therapy.

Award for Excellence in Clinical Teaching: Acknowledges individuals who have made significant contributions to physical therapy clinical education through excellence in clinical teaching.

Catherine Worthingham Fellows of the APTA: Recognizes those persons whose work has resulted in lasting and significant advances in the science, education, and practice of the profession of physical therapy.

Henry O. Kendall and Florence P. Kendall Award for Outstanding Achievement in Clinical Practice: Acknowledges contributions to physical therapy in general (must have engaged in extensive clinical practice at least fifteen years).

Marian Williams Award for Research in Physical Therapy: Given for sustained and outstanding basic, clinical or educational research.

Lucy Blair Service Award: Acknowledges members whose contributions to the Association have been of exceptional value.

Mary McMillan Lecture Award: Honors a member of the Association who has made a distinguished contribution to the profession; through a lecture presented at the Annual Conference.

Minority Achievement Award: Recognizes continuous achievement by an entry-level accredited physical therapy program in the recruitment, admission, retention, and graduation of minority students.

Chapter Award for Minority Enhancement: Acknowledges exceptionally valuable contributions of an APTA chapter to the profession relative to minority representation and participation.

Space limitations do not permit a complete description of awards and scholarships, or the complete criteria. If you desire additional information please contact me through the Section Office.

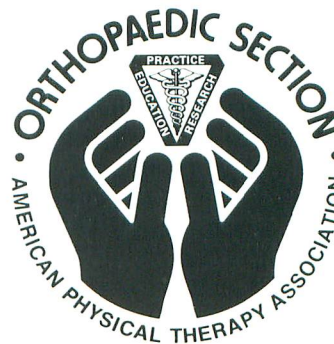
Anne H. Campbell
Chair, Nominating Committee
Orthopaedic Section, APTA

ERRATUM

We apologize for an error we made regarding the references given in Dr. Kahn's article entitled "SUSPECTED HEEL SPUR MANAGEMENT: A CASE STUDY" printed in the August issue, Vol. 1, No. 3, 1989 of Orthopaedic Practice. They should have read as follows:

References

1. Dynatronics Cold Laser, Mod. 820, HeNe 632.8 NM, Salt Lake City, UT.
2. Amrex Low Volt Unit Mod. LVG325, Hawthorne, CA.
3. Birtcher Megason 150, El Monte, CA.
4. Two units used: Neurologix PMS-15, Rego Park, NY
Medtronic Respond II, Minneapolis, MN



ORTHOPAEDIC PHYSICAL THERAPY FACULTY POSITION Available January, 1990

The Massachusetts General Hospital Institute of Health Professions (IHP) is offering two part-time 12 month faculty positions in its graduate program of orthopaedic-sports physical therapy. Due to curriculum expansion, the program is seeking an individual to teach manual therapy courses for the extremities and cervicothoracic region, and a module in orthopaedic physical examination. A second position is available to teach our sports physical therapy curriculum. Additional responsibilities of each position include: student and thesis advising, committee appointments and clinical research.

The program is integrated with the clinical resources, research facilities and personnel of the Massachusetts General Hospital, an institution of international recognition in patient care, education and research.

Qualifications are: seven years of appropriate clinical experience, evidence of teaching competence in the content area, and a graduate degree in physical therapy or a related field. Experience in clinical research is strongly preferred.

Faculty rank and salary are commensurate with experience and academic preparation.

Opportunity exists to combine this faculty appointment with a part-time clinical appointment in an orthopaedic physical therapy practice within the MGH Physical Therapy Department of MGH Physical Therapy Associates.

Please submit a curriculum vitae to:

Daniel A. Dyrek, M.S., P.T.
Search Committee
MGH INSTITUTE OF HEALTH PROFESSIONS
GRADUATE PROGRAM IN PHYSICAL THERAPY
15 River Street
Boston, Massachusetts 02108

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1989 MASTER CALENDAR

ORTHOPAEDIC SECTION APTA

NOVEMBER

- 10 DEADLINE: Editorial materials for January, 1990 issue of *Orthopaedic Practice* due to Section office.
- 10 Holiday: Veterans Day—APTA Headquarters Closed
- 15 *Orthopaedic Practice* mailing date
- 15 Closing Date for information for *Orthopaedic Practice*—January, 1990 issue
- 16 *JOSPT* mailing date—December issue.
- 23-24 Holiday: Thanksgiving—APTA Headquarters and Section office closed.

DECEMBER

- 1 DEADLINE: Kendall Award for Outstanding Achievement in Clinical Practice
- 1 DEADLINE: Marian Williams and Baethke-Carlin Award Nominations due to APTA Headquarters.
- 1 DEADLINE: Mary McMillan Scholarship Award Nominations due to APTA Headquarters.
- 1 DEADLINE: McMillan Lecture Award Nominations due to APTA Headquarters.
- 1 DEADLINE: Lucy Blair Service Award Nominations due to APTA Headquarters.
- 1 DEADLINE: 1990 Honorary Membership and Worthingham Fellows Award due to APTA Headquarters.
- 1 DEADLINE: 1991 Annual Conference Program input for Conference Program Committee due to APTA Headquarters.
- 1 DEADLINE: Excellence in Clinical Teaching Award due to APTA Headquarters.
- 16 DEADLINE: Advertising for January, 1990, *Orthopaedic Practice* due to Section office.
- 18 *JOSPT* mailing date, January, 1990, issue.
- 25-26 Christmas—APTA Headquarters and Section office closed.
- 31 End of Orthopaedic Section fiscal year.

JANUARY (1990)

- 15 *Orthopaedic Practice* mailing date—January issue.
- 15 President submit CSM agenda for Executive Committee Meeting to Section office for distribution to the Executive Committee and Committee Chairs
- 19 DEADLINE: Nominations for Section office vacancies due to Section office
- 22 Section office submit compilation of nominees to Nominating Committee
- 24 DEADLINE: Receipt of proposed bylaw amendments due to APTA
- 31 Orthopaedic Specialty Exam, New Orleans, LA.

FEBRUARY (1990)

- 1-4 CSM, New Orleans, LA.
Feb. 3 Orthopaedic Section 15th Anniversary Celebration
Feb. 4 10:00am-noon Section business meeting

MARCH (1990)

- 5-11 Orthopaedic Physical Therapy Competencies Course, Lake Tahoe, Nevada
- 15 Closing date for *Orthopaedic Practice*—May issue

MAY (1990)

- 10-16 The First North American Orthopaedic Symposium, Ottawa, Canada
- 10-11 Pre-Symposium: Clinical Anatomy of the Cervical and Lumbar Spine
- 12-13 Anatomy and Function: Joint Concepts
- 14-16 Post-Symposium: Assessment and Treatment of the Upper Cervical Spine
- 15 Mailing date *Orthopaedic Practice*—May issue

LETTERS TO THE EDITORS

The article on Suspected Heel Spur Management in Vol. 1, No. 3, 1989 by Mr. Kahn prompts me to write and inquire.

The case report of L.R., a professional photographer, reported painful weight bearing with point tenderness elicited at the distal calcaneal region. Treatment amounted to six (6) modalities concluding with massage and general range of motion at the ankle and foot. Results were reported excellent.

How does the author justify six modalities and which one(s) were effective and responsible for the favorable results? If this was a third party pay patient, did they pay the physical therapist's fee?

Joseph Drake, P.T.
St. Joseph Hospital
Lexington, Kentucky

AUTHOR RESPONSE

Joseph Drake is obviously concerned with my use of multiple modalities in this (and other) cases, and the billing thereof.

For all of my 37 years in practice, I have utilized several modalities in each treatment session for obvious, diverse, physiological effects not available with any single entity. I am not selling equipment, nor am I advocating any particular brand, model or apparatus. (I am still old-fashioned enough to believe it is the PHYSICAL THERAPIST that makes the difference and NOT the equipment!). However, to be more specific:

1. Cold laser was administered primarily for its rapid analgesic effect—providing relief during the treatment session and often, afterwards;
2. Whirlpool bath to increase local circulation;
3. Iontophoresis with 2% acetic acid to serve as a sclerolytic agent with any calcific depositions, visible or otherwise in x-rays;

4. Phonophoresis with hydrocortisone for sustained anti-inflammatory action;
5. Electrical stimulation to maintain muscle tone and retard disuse atrophy.

I do not assign the good results to any one modality, but rather, to the combined contributions of each. If pushed, I would rate iontophoresis as the prime factor in this instance.

To allay Mr. Drake's apprehension regarding 3rd party payments: my office fee is by the visit—not by modality. The fee is the same regardless of how many modalities I utilize. If, and when a 3rd party payer limits reimbursement to only three or more modalities as a maximum, the "loss" is mine, however, the gain is the patient's!

I hope this clarifies my position in the matter.

Joseph Kahn, Ph.D., P.T.

1ST NORTH AMERICAN ORTHOPAEDIC SYMPOSIUM

Organized by the National Capital Unit

Orthopaedic Division Canadian Physiotherapy Association

with the

Orthopaedic Section, APTA

Ottawa, Ontario Canada, May 11-13, 1990

CALL FOR PAPERS Organizers of the 1st North American Orthopaedic Symposium scheduled for May 11-13, 1990 in Ottawa, Ontario, Canada, have issued a second call for papers.

The program will provide opportunities for physiotherapists and other health professionals to present papers of a scientific or theoretical nature.

FOR FURTHER INFORMATION CONTACT:

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strategy

Continuous Passive Movement for the Spine

Vincent J. Basile, PT

Continuous passive movement is well accepted in both post-surgical and conservative extremity rehabilitation programs. A large number of dedicated ex-



Figure 1: Forearm sleeve in position under the lumbar spine.

tremitary CPM devices are now available for post-surgical use, and many isokinetic dynamometers also offer passive movement capabilities. Spinal CPM devices are now beginning to be offered, but tend to be extremely expensive and somewhat limited in versatility. Most physical therapists would be surprised to learn, however, that they already have an effective spinal CPM device in their clinics.

I have used a Jobst Extremity Pump as a spinal CPM device, for the thoracic and lumbar regions, for many years. It allows

localized passive movement in a variety of directions at varying intensities. It is well tolerated and the patient has the ability to terminate the treatment by merely sitting up and moving away from the unit.

In order to use the Jobst unit (or any other extremity compression unit that you might have) for spinal CPM, select a sleeve that meets your needs in size and shape. On our unit the hand sleeve provides a non-tapered cylinder that is well-sized for most patients. The sleeve is placed on the treatment plinth and the patient in-

structed to lie across the sleeve on the side toward which you wish to promote movement. The sleeve is placed at the level at which the movement is to occur. For example, if you wish to promote extension at the lower lumbar region you would have the patient lie supine with the sleeve beneath the low lumbar region. You would promote thoracic side-bending to the left by having the patient lie on the left side with the sleeve beneath the mid-thoracic region.

Turn the pressure control on the unit back to the lowest setting before starting the treatment. The inflation time, deflation time, and pressures used will vary according to the area being treated, the size of the patient, the intensity of the effect desired, and the patient's tolerance. Most of my treatments utilize inflation times of 10-30 seconds, deflation times of 5-10 seconds, and pressures of 30-90 mm. Most treatment sessions last 10-20 minutes.

In most cases, I utilize this treatment following manual therapy techniques. Passive movement through the newly gained ROM seems to improve the chances to hold the improvement from one session to another. If possible, this passive session should be followed by exercises promoting active movement through the range of motion.

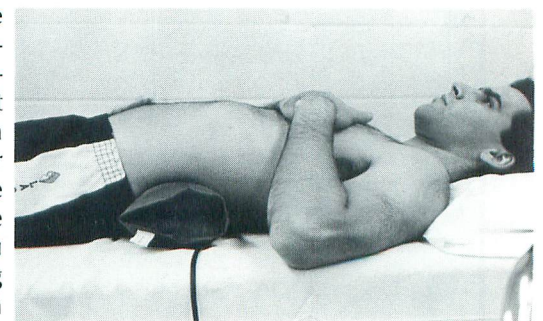


Figure 2: Sleeve inflated creating a passive extension in the lumbar area.

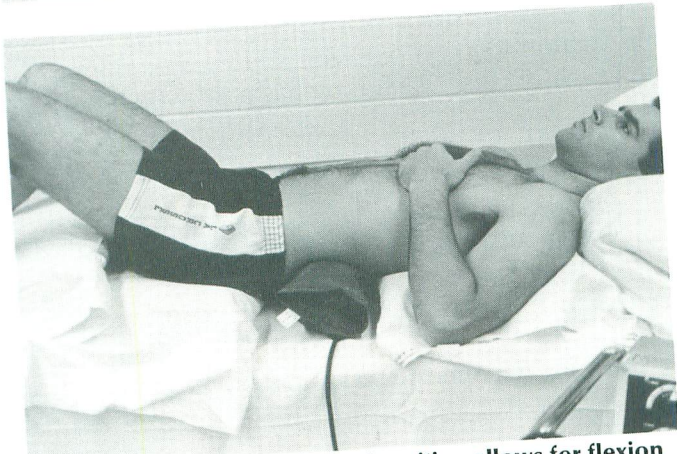
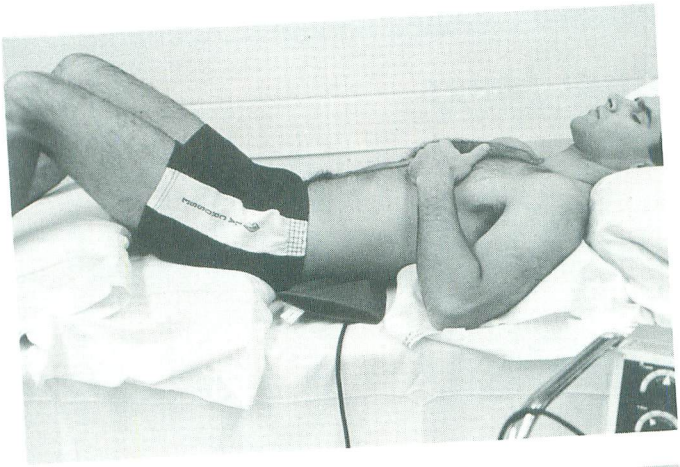


Figure 3A, 3B: A modification of position allows for flexion (A) and extension (B) to occur during continuous passive movement.

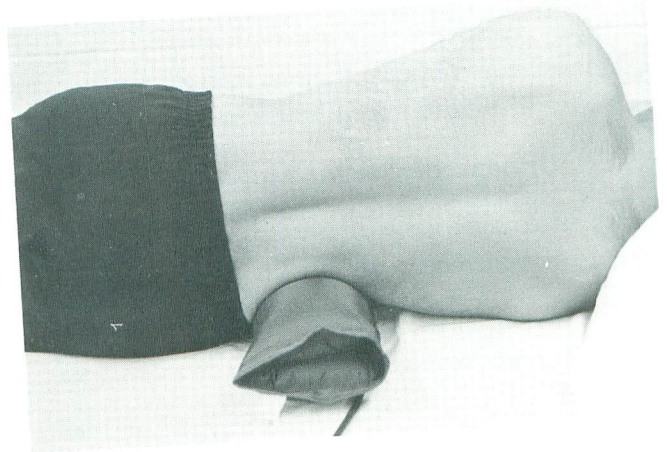
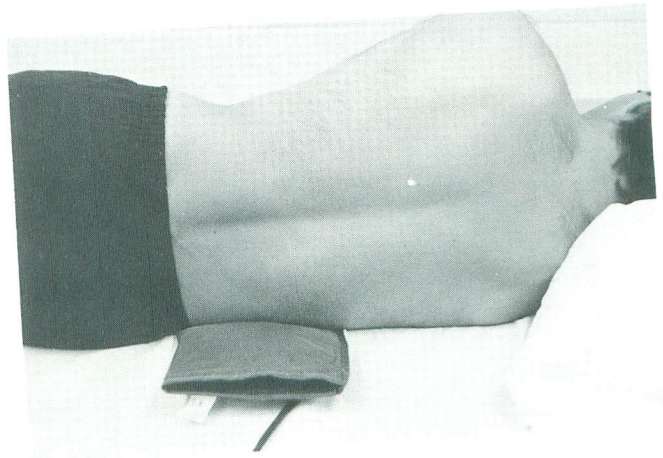


Figure 4A, 4B: another modification allows side lying lateral flexion.

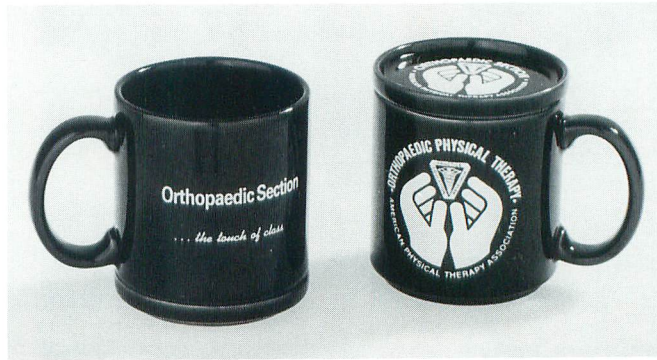
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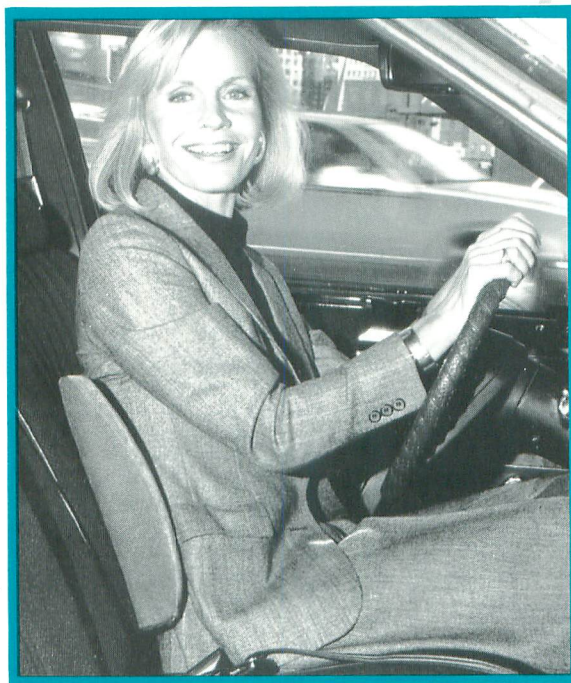
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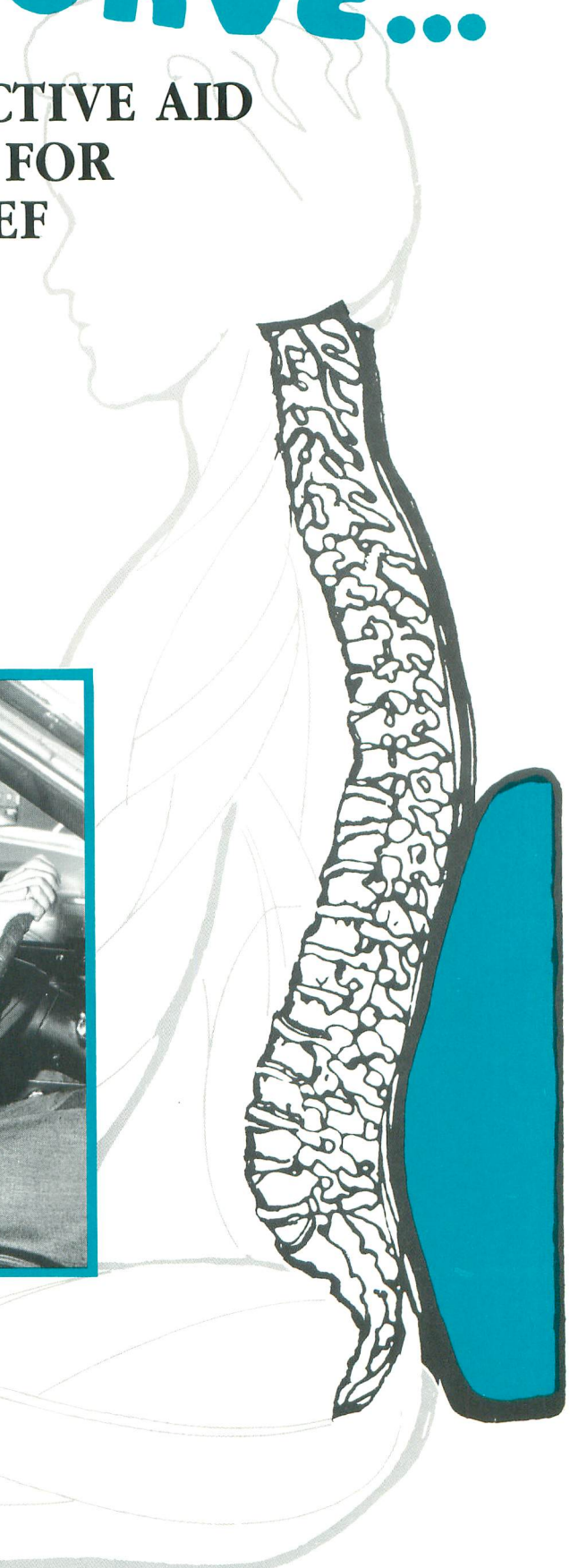


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— ANNOUNCING —



The Orthopaedic Section, APTA, Inc. will celebrate **15 Years of Growth and Service to the Profession** on Saturday, February 3, 1990. This gala event will take place at the Combined Sections Meeting, to be held at the New Orleans Hilton Riverside from 7:00 to 11:00 P.M. The evening will include a reception and sumptuous dinner and feature the internationally known singer, Nancy Wilson, in private concert. Cost for the entire evening is \$100 per person or \$1,000 per table. Corporate sponsorship of \$5,000 includes a table for 10. All proceeds from the evening will be donated to the Minority Scholarship Fund of the Foundation for Physical Therapy.