A Publication of the American Academy of Osteopathy

THE AAO

VOLUME 6 NUMBER 3 FALL 1996

## In this Issue:

Study on OMM in general practice...11 Efficacy of OMM for primary dysmenorrhea in young women...15

# Keep Digging for Nugge of Osteopathic Truth

see page 9...

### Program

#### Friday, November 15, 1996

a many g		
8:00 am	Introduction: Problem-solving somatic dysfunction (SD) starts with a screening exam	
8:30 am	A selection of regional tests: demo, discussion and practice	
9:45 am	Break	
10:00 am	Standardizing a record of SD	
10:30 am	A second practice and record: sample the reliability of positive signs of SD	
12:00 nn	Lunch	
1:00 pm	Introduction: segmental motion dysfunction	
1:30 pm	Percussion scan: spinal regions	
2:15 pm	Segmental motion testing, cervical supine: practice	
3:00 pm	Break	
3:15 pm	Respiratory motion testing: demo and practice	
4:15 pm	Functional manipulation, cervical supine: practice	
5:00pm	Adjourn	

#### Saturday, November 16, 1996

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8:00 am	Concept: afferent reduction
8:30 am	Functional manipulation,
	thoracic: demo and practice
9:15 am	Concept: segmental feedback
	control and the muscle spindle
10:00 am	Break
10:15 am	Position and motion: demo and
	practice, thoraco-lumbar
11:15 am	Functional approach to the
	appendages: demo
12:00 nn	Lunch
1:00 pm	Functional approach to the
	sacro-pelvic region
1:30 pm	Tissue and motion scans in
Sacra Sara	diagnosis: demo and practice
2:45 pm	Break
3:00 pm	Manipulative technique,
	sacro-pelvic: indirect and direct
	applications, demo and practice
4:30 pm	Functional manipulation,
	appendicular: practice
5:00pm	Adjourn
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#### Sunday, November 17, 1996

	we want to be a state of the st
8:00 am	Functional approach to the
	thoracic cage
8:30 am	Tissue and motion scans in
	diagnosis; demo and practice
9:15 am	Rib dysfunction resisting
	exhalation; tx. demo and
	practice
10:00 am	Break
10:15 am	Rib dysfunction resisting
	inhalation; tx. demo and practice
11:15 am	Differentiating somatic and
	visceral inputs in segmental
	dysfunctions
11:30 am	Discussion/Summary
12:00 nn	Adjourn

## "A Functional Orientation for Technique" November 15-17, 1996

Harry Friedman, DO William L. Johnston, DO, FAAO

#### **Course Objective**

This 20-hour course (Category 1-A) presents the principles for applying a functional approach to osteopathic evaluation and treatment. Intensive palpatory skill development focuses on the collection of behavioral data that reflects motor system dysfunction. Using segmental responses to specific motion testing, key dysfunctions are identified and unique treatment designed for their resolution. Emphasis is not on learning a manipulative "technique", but on learning a systematic problem-solving approach from which methods of manipulation naturally follow. Both indirect and direct applications will be presented in a didactic and hands-on format using a one-to-six teacher-to-student ratio. This is an invaluable addition to osteopathic education and clinical skills development.

#### **Conference Location**

Embassy Suites 3912 Vincennes Road Indianapolis, IN 46268-3024 (317) 872-7700

#### Transportation

Indy Connection Airport Limousine Service can be called if you need transportation to and from the airport. Their phone number is (317) 241-7100. Call in advance to make reservations. Charge \$13.00 one-way.

#### **Hotel Reservations**

A block of sleeping rooms is being held at the Embassy Suites North at a rate of \$92.00 single and \$102.00 double. A full breakfast and twohours of afternoon cocktails are included in this charge. To make room reservations, call (317) 872-7700. Registration Form Functional Methods 20-CME Hours – Category 1-A

Name		
Address		
City	State	Zip
Daytime Pho	ne	
AOA #	Col/Y	r Grad

<b>Course Fee: Prior to October</b>	15, 1996
AAO Members	\$595
AAO Non-Members	\$770

Enrollment limited to physicians & residents. (no discounts available)

Course Fee: After October	15, 1996
AAO Member	\$695
AOA Non-Member	\$870

We Accept MasterCard and Visa (circle one)

Card Number

**Expiration** Date

Signature

#### **Refund Policy**

The American Academy of Osteopathy reserves the right to cancel this educational program if insufficient physicians pre-register. Sufficient registrations must be received 30 days prior to the opening of the course. If you are considering registering for this course less than 30 days prior to the opening, contact the Academy office before making travel plans. In the event of course cancellation by the Academy due to lack of registration, all money will be refunded. Cancellation from participants received in writing for other reasons up to 30 days prior to the course opening are subject to withholding of a 15 percent administrative fee. All other cancellations will receive no refund but may transfer 80 percent of the tuition to another AAO educational program held within the next 12 months.

## American **Academy of** Osteopathy

3500 DePauw Boulevard Suite 1080 Indianapolis, IN 46268-1136 (317) 879-1881 FAX (317) 879-0563

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THE AAO JOORNAL A Publication of the American Academy of Osteopathy
The mission of the American Academy of Osteopathy is to teach, explore, advocate, and advance the study and application of the science and art of total health care management, emphasizing osteopathic principles, palpatory diagnosis and osteopathic manipulative treatment.
Instructions for Authors 4
From the Editor (The AAOJ and Peer Review)
Message from the President
Message from the Executive Director
Calendar of Events
From the Archives
Pilot study to establish whether osteopathy reduces general practice consultation rate of musculoskeletal problems based on patient perception of effectiveness of the osteopathic treatment – Part I Mary Bani-Hashem, DO
Letter to A.T. Still
The efficacy of osteopathic treatment for primary dysmenorrhea in young women
AAO Case Study "Common problems in newborns and infants" 19 Henrietta (Hennie) Sholars, DO
Taking Control (editoral)
Muscle energy techniques (book review)

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An Official Publication of The American Academy of Osteopathy The AOA and AOA affiliate organizations and members of the Academy are entitled to a 20% discount on advertising in this Journal.

> Call: The American Academy of Osteopathy (317) 879-1881 for an Advertising Rate Card

> > Subscriptions: \$50.00 per year

## **Instructions for Authors**

The American Academy of Osteopathy (AAO) Journal is intended as a forum for disseminating information on the science and art of osteopathic manipulative medicine. It is directed toward osteopathic physicians, students, interns and residents and particularly toward those physicians with a special interest in osteopathic manipulative treatment.

The AAO Journal welcomes contributions in the following categories:

#### **Original Contributions**

Clinical or applied research, or basic science research related to clinical practice.

#### **Case Reports**

Unusual clinical presentations, newly recognized situations or rarely reported features.

#### **Clinical Practice**

Articles about practical applications for general practitioners or specialists.

#### **Special Communications**

Items related to the art of practice, such as poems, essays and stories.

#### Letters to the Editor

Comments on articles published in *The* AAO Journal or new information on clinical topics. Letters must be signed by the author(s). No letters will be published anonymously, or under pseudonyms or pen names.

#### **Professional News**

News of promotions, awards, appointments and other similar professional activities.

#### **Book Reviews**

Reviews of publications related to osteopathic manipulative medicine and to manipulative medicine in general.

**Note:** Contributions are accepted from members of the AOA, faculty members in osteopathic medical colleges, osteopathic residents and interns and students of osteopathic colleges. Contributions by others are accepted on an individual basis.

#### Submission

Submit all papers to Raymond J. Hruby, DO, FAAO, Editor-in-Chief, MSU-COM, Dept. of Biomechanics, A-439 E. Fee Hall, East Lansing, MI 48824.

#### **Editorial Review**

Papers submitted to *The AAO Journal* may be submitted for review by the Editorial Board. Notification of acceptance or rejection usually is given within three months after receipt of the paper; publication follows as soon as possible thereafter, depending upon the backlog of papers. Some papers may be rejected because of duplication of subject matter or the need to establish priorities on the use of limited space.

## Requirements for manuscript submission:

#### Manuscript

1. Type all text, references and tabular material using upper and lower case, double-spaced with one-inch margins. Number all pages consecutively.

2. Submit original plus one copy. Please retain one copy for your files.

3. Check that all references, tables and figures are cited in the text and in numerical order.

4. Include a cover letter that gives the author's full name and address, telephone number, institution from which work initiated and academic title or position.

5. Manuscripts must be published with the correct name(s) of the author(s). No manuscripts will be published anonymously, or under pseudonyms or pen names.

#### **Computer Disks**

We encourage and welcome computer disks containing the material submitted in hard copy form. Though we prefer Macintosh 3-1/2" disks, MS-DOS formats using either 3-1/2" or 5-1/4" discs are equally acceptable.

#### Illustrations

1. Be sure that illustrations submitted are clearly labeled.

2. Photos should be submitted as 5" x 7" glossy black and white prints with high contrast. On the back of each, clearly indicate the top of the photo. Use a photocopy to indicate the placement of arrows and other markers on the photos. If color is necessary, submit clearly labeled 35 mm slides with the tops marked on the frames. All illustrations will be returned to the authors of published manuscripts.

3. Include a caption for each figure.

#### Permissions

Obtain written permission from the publisher and author to use previously published illustrations and submit these letters with the manuscript. You also must obtain written permission from patients to use their photos if there is a possibility that they might be identified. In the case of children, permission must be obtained from a parent or guardian.

#### References

1. References are required for all material derived from the work of others. Cite all references in numerical order in the text. If there are references used as general source material, but from which no specific information was taken, list them in alphabetical order following the numbered journals.

2. For journals, include the names of all authors, complete title of the article, name of the journal, volume number, date and inclusive page numbers. For books, include the name(s) of the editor(s), name and location of publisher and year of publication. Give page numbers for exact quotations.

#### **Editorial Processing**

All accepted articles are subject to copy editing. Authors are responsible for all statements, including changes made by the manuscript editor. No material may be reprinted from *The AAO Journal* without the written permission of the editor and the author(s).

## From the Editor

by Raymond J. Hruby, DO, FAAO



# **The AAOJ and Peer Review**

Some time ago the AAO Long Range Planning Committee amended the Academy's long range plan to include elevating this journal to that of peer reviewed status. The target date for achieving this is the year 1997. I am pleased to say that after much work and planning we are on target to implement this goal. Since you will most likely be reading this in early September (dangerously close to 1997), I thought it would be appropriate to talk about some of the issues around going to peerreviewed status for the American Academy of Osteopathy Journal (AAOJ).

Ever since we began to publish the Journal we (the editorial staff) have had a desire to make the Journal more and more scientific. There is a need for more venues for the publication of scientific information on osteopathic medicine. At the same time, I wanted the Journal to be a forum where we could represent more than just the science of osteopathy. I wanted authors to also be able to submit manuscripts that related to the art of medicine as well. Thus, we have always been interested in essays, poems, editorials, case studies, personal stories and the like, because all of these reflect the human side of osteopathic medicine.

In order to bring peer review to the Journal and still maintain its personal nature, the "new" Journal will essentially be published with two sections: a scientific section, and a general section. The scientific section will contain peerreviewed items, while the general section will maintain much of the content to which you have become accustomed. Manuscripts submitted for peer review will be reviewed by experts in the field using guidelines selected by the current editorial board and drawn from timetested resources in the scientific world. Items not able to meet the peer review criteria may be published in the general section along with other information of interest to our readership.

Going to peer-reviewed status will accomplish a number of goals: 1) help fulfill the AAO's goal of being the premier resource for manual medicine in the world; 2) provide another forum for the publication of scientific research in osteopathic medicine; 3) perhaps attract more advertisers to our journal; and 4) give the AAOJ an opportunity to be placed in more electronic databases such as MEDLINE. Being a peerreviewed journal will require a bit more work, but it will be well worth it in the long run.

None of this comes without potential problems. There will be times when writers will be asked to make extensive revisions to manuscripts before they are accepted. There will be times when a manuscript will be rejected altogether. These things sometimes do not sit well with some authors. Anyone who has published in peer-reviewed journals knows the frustration associated with putting a great deal of work into an article only to be asked to make a major revision or have it rejected. But, if we are to continue to improve the quality of our publication, we will have to set some standards for scientific content and we will have to show the world that we adhere to those standards. I expect the process to be tough but fair, and I believe authors who submit manuscripts and our readership will be pleased with the outcome.

We have received a lot of nice complements regarding the AAOJ since its inception. I hope that as we continue to grow and develop, our membership will continue to be proud of the information we publish for our readers.



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## Message from the President

by Michael L. Kuchera, DO, FAAO



# Osteopathic Research: Who's Responsibility

### "My objective is to make the osteopath a philosopher and place him on the rock of reason"

Research in the osteopathic profession has been the object of much debate and demand. Nonetheless until personal and organizational priorities change, our professional accomplishments will remain checkered at best. We all agree we need research and we want it to take place; but there is no general agreement on what constitutes "osteopathic research," which questions should be examined and who should conduct the studies.

## What constitutes "osteopathic research?"

This term could be used to describe "the specific research contributions made by osteopathic physicians and/or institutions." An alternative definition might be "the careful study of the unity of man, his self-healing and compensatory mechanisms, and/or the interrelationship of structure and function."<sup>2</sup> The former is easy to compile but is limited by our ability to raise funds; the latter is harder to compile but offers greater opportunities to stride forward with giant steps.

## Contributions by DOs and osteopathic Institutions

I am at this moment compiling and interpreting the sum output of research funded by the AOA, AAO, and The Cranial Academy as well as clinical research from our osteopathic institutions. I assure you, we have accomplished more than people believe but less than we need. The Academy's programming for the 1997 AOA Convention chaired by Claudia McCarty, DO, will feature research contributions and I plan on publishing my synopsis of the past 10 years of osteopathic research as well.

#### Internal funding Sources

The AOA – with its outside and internal resources – can fund research to DOs and osteopathic institutions only to the tune of \$300,000 annually. (Unfortunately, this amount cannot

fund a full "tune" – as a profession, it allows us only to hum a few bars!) AOA funding is possible through two major sources, the A. T. Still Research Fund and the Osteopathic Research Development Fund (ORDF). The corpus of the ORDF grew from a special AOA membership dues assessment. Much more is needed for the ORDF but this special investment in our research future is now due to expire. The Bureau of Research has prioritized its limited funds with more than half annually supporting osteopathic clinical projects. Grant proposals for "OMT Efficacy" and for "OPP/OMT Outcomes" have a top priority with a guarantee of \$95,000 annually.

Research sparked by the specialty colleges is largely limited to efforts by the AAO and the Emergency Medicine College. The Academy through the Robuck fund has restricted monies for osteopathic pediatric research. The Louisa Burns Osteopathic Research (LBORC) also makes a number of nondollar research resources, including consultants, available to AAO members. They are also planning a grant writing CME program in the near future to facilitate acquisition of outside research dollars.

A new program this year will encourage DO residents to apply for Cranial Academy fellowships (\$1,000) to assist in studying any of the five components of the cranial concept. (For more information contact Pat Crampton, Executive Director, at (317) 594-0411.)

#### Where do we go from here?

Several osteopathic groups are carefully examining direction at this point in time. Long the conscience of osteopathic research, I. M. Korr, PhD, as a member of the AOA Bureau of Research has advocated a "needed paradigm shift"<sup>3</sup> and an accounting of the osteopathic meaning of what has been accomplished to date. The Bureau of Research will also receive final recommendations from the Special Outcomes Research Committee (which I chair) in September.

The LBORC has taken a leadership role in encouraging Academy members and other interested DOs to participate in by Stephen J. Noone, CAE

## Financial Viability Begins with Responsible Fiscal Management

In my column in the last issue of *The AAO Journal*, I outlined the Academy's current endowment campaign, TRUST 2000: A Legacy for the Osteopathic Profession. I pointed to the acute need to replenish the Academy's reserves which had been depleted over the past eight years as the leadership sought to increase the image and stature of the Academy within the profession and the overall medical marketplace. At this time, readers might be interested in a report on the Board of Trustee's management of the Academy's financial affairs pursuant to a balanced budget by the 1997-1998 fiscal year.

President **Michael Kuchera** convened the AAO Board of Trustees in Indianapolis last July for its annual Summer meeting. The primary action item was the successful adoption of the 1996-1997 fiscal year budget. Secretary-Treasurer **Anthony Chila** guided the Board to adopt an operational document which would be consistent with the Board's fiscal policy, calling for a balanced budget by the 1997-1998 fiscal year.

After soliciting input from committee chairpersons and making administrative adjustments in both income and expense categories, the revised budget proposal considered by the Board of Trustees contained a projected deficit of \$119,792. However, the maximum allowable deficit according to the Board's 1992 fiscal policy decision was \$56,901. Ultimately, the Board of Trustees arrived at a final budget only by cutting some programs and services for 1996-1997, emphasizing that the Board reserves the right to reinstate these programs and services in coming years. The *major* items trimmed from next year's appropriations were:

<u>Yearbook</u> - In light of the fact that the AAO will publish the both collected works of Viola Frymann, DO, FAAO and a second volume of the writings of Irvin M. Korr, PhD, the Board suspended the Yearbook for this year.

<u>Visiting Scholar program</u> is offered to a maximum of six UAAO chapters annually. In the past several years, not all of these schools have used their dedicated funds. The Board anticipates that the National Osteopathic Foundation will continue to fund the Visiting Clinician Program and expects confirmation by September.

<u>Ad in *The DO* magazine</u> - For the past four years, the Board has funded a line item to underwrite ongoing AAO advertising in *The DO* magazine. The advertising was reduced to one-half page last

year. In the future, advertising for educational seminars will be debited to the promotional budget for each CME program.

<u>UAAO Newsletter</u> - Formerly funded by the NOF, the UAAO Council had agreed to seek advertising revenue to offset publication costs. The Council will now take over the direct costs of publication and shipping the newsletter to UAAO chapters.

<u>Audit</u> - In lieu of a full audit, the Board of Trustees voted to contract with its CPA firm for a "compilation" financial report which is considerably less expensive. However, the intent is to fund a full audit following the close of the 1996-1997 fiscal year.

Liaison to AOA Council on Federal Health Programs - In the past, the AAO has delegated responsibility for attendance at the Council to two ongoing representatives. Four years ago, the Board directed that the AAO President-elect and Executive Director also should attend these meetings. The Board advocated the latter and discontinued the former representation.

Education Committee - After consultation with the chairperson, the Board voted to cut the Committee's appropriation by 20 percent. With meetings held in Indianapolis and several members within driving distance, the cut will be manageable.

Louisa Burns Osteopathic Research Committee - The chairperson had requested funding for a weekend meeting during which the group could develop its second grant request for an outcomes research project. Given the challenge to limit the budget deficit, the Board was unable to approve this request for a new meeting. Fortunately, the AAO leadership was able to secure a grant for the LBORC meeting from the AOA Bureau of Finance during the AOA Board of Trustees meeting later in July.

I can testify to the agony experienced by the AAO Board of Trustees in arriving at a budget which fits within its established parameters. While the task was not an easy one, it appears to be most satisfying in knowing that they are being fiscally responsible in ensuring the long-term viability of the Academy. I encourage you to support your leadership and let them know your appreciation for their management of Academy affairs.

Having experienced the considerable challenge of adopting operational budgets over the past two years, the leadership is fully cognizant of the fact that there is no "fat" in the AAO budget. Hence, for the first time, they had to cut programs and

continued on page 18

# **Calendar of Events**

American Academy of Osteopathy 3500 DePauw Boulevard, Suite 1080 Indianapolis, IN 46268-1136 Phone: (317) 879-1881 or FAX: (317)879-0563

## 1996

## September

#### 26-29

AAO Fall OMT Update Application of Osteopathic Concepts in Clinical Medicine plus Preparation of the OMM Boards Ann Habenicht, DO, FAAO, Program Chair 22 Hours, Category 1A Grand Floridian Hotel, Orlando, FL

#### 27-29

Introductory to Visceral Manipulation Daniel Bensky, DO, Faculty Kenneth Lossing, DO, Faculty John Glover, DO, Program Chairperson 25 Hours, Category 1A Holiday Inn North Indianapolis, IN

## October

#### 7-10

AOA/AAO Convention: OMT in a Busy Family Practice Hours: 26 Category 1A John Hohner, DO, Program Chairperson Las Vegas Hilton Las Vegas, NV

#### 25-27

Myofascial Release 20 Hours, Category 1-A Judith O'Connell, DO, FAAO, Prog. Chair Texas College of Osteopathic Medicine Fort Worth, Texas 76107

### 25-27

Counterstrain 20 Hours, Category 1-A Mark Cantieri, DO, Program Chairperson Texas College of Osteopathic Medicine Fort Worth, Texas 76107

#### 26-27

Facilitated Positional Release 12 Hours, Category 1-A Eileen DiGiovanna, DO, FAAO, Program Chairperson Texas College of Osteopathic Medicine Fort Worth, Texas 76107

## November

14-17

Computer Medicine Tutorial 30 Hours, Category 1-A Thomas A. Naegele, DO Instructor and Program Chairman Embassy Suites North Indianapolis, IN

#### 15-17

A Functional Orientation for Technique 20 Hours, Category 1-A William Johnston, DO, FAAO and Harry Friedman, DO Embassy Suites North Indianapolis, IN

#### 16-17

Basic Percussion Vibrator (Fulford's Method) 15 Hours, Category1-A Robert Fulford, DO and Richard Koss, DO Embassy Suites North Indianapolis, IN



#### January 11-19

Osteopathic Tips and Treatments for Common Problems Occuring in a Family Practice Setting – Cruise/CME San Juan, Puerto Rico and then Sail the Southern Caribbean 20 Hours, Category 1-A

## February

#### 7-8

Basic Percussion Vibrator (Fulford's Method) 15 Hours, Category1-A Robert Fulford, DO and Richard Koss, DO The Westin Hotel at Fountain Square Cincinnati, OH

#### 7-8

Winter OMT Update Application of Osteopathic Concepts in Clinical Medicine plus Preparation of the OMM Boards 18 Hours, Category 1-A The Westin Hotel at Fountain Square Cincinnati, OH

### March

#### 19-22

Annual Convocation Boby, Mind and Spirit American Academy of Osteopathy John M. Jones, III, DO, Program Chair 30 Hours – Category 1-A (tentative) The Broadmoor Hotel Colorado Springs, CO

# From the Archives

## To the President of the American Osteopathic Association in 1915 Portland, Oregon

#### An Appeal to the thinking osteopaths of the profession.

There is an alarm at the door of all osteopathic schools. The enemy has broken through the picket. Shall we permit the osteopathic profession to be enslaved to the medical trust? As the Father of Osteopathy, I am making an international call for all the pure Simon, DOs who are willing to go on the fighting line without being drafted into service. There will be no trenches in which to hide. This battle will not be a peek-a-boo game. I unfurled the osteopathic flag of freedom over forty years ago. For many years, I had to fight the battle alone. For a time, I received hearty support from my friends, which I appreciate, but in my declining years my boys and girls have been on the defense instead of the offense. My physical condition will not permit me to take the General ship, so I make this appeal to my children. Every line of the enemy's defense is full of dynamite, so we must have reinforced support and put ourselves on the offense. We need at least five thousand Generals at the front with their guns loaded with osteopathic wisdom and philosophy, whose truth is stronger than the Rock of Gibraltar. We must weed out the weak spines, drones and misfits, as their support only gets back to us in the way of a boomerang.

Hold up the pure and unadulterated osteopathic flag. Do not allow it to be trampled in the mud by the feet of our enemy. By winning this battle we have established the greatest truth unfolded to suffering humanity. Millions of lives can be saved annually. Osteopathy is yet in its infancy. I have only brought forth the principles and truth, which I have turned over to the profession which has wisdom and enough moral back bone not to offer any compromise with the enemy.

Stand behind all legitimate research institutes. Give them your support. The treatment for insanity and results obtained at Macon in the last year seem to be nothing more than natural. I have always said that twenty five percent of all insane cases could be cured by osteopathic treatment, and I am thankful to be able to live to see this truth demonstrated.

There are other fields of research. May my grand army march on. If we cannot have the pure osteopathic principles taught in our schools, rally around the flag and we will build an International school that will offer no compromise unless it is the golden truth.

D.O. means DIG ON.

A.J. Still

## An Appeal from Dr. Andrew Taylor Still to Thinking Osteopaths

Exhibited at the Chicago Convention among the personal effects of Dr. Andrew Taylor Still was found an original manuscript written by him in 1915. It seemed as pertinent for our consideration in 1948, thirty three years later, as when it was written.

By the kind permission of Dr. Blanche S. Laughlin we are privileged to reproduce it here from a photostatic copy.

It speaks for itself, clearly, and in no uncertain terms. He had established a new theory of approach in combat with disease, and then, as now, there were those who were like the squirrel "trying to climb two trees at once;" those who were getting lost in "no man's land;" between osteopathy and medical practice.

This was a call to all true osteopathic physicians to remain loyal to the basic principles of osteopathy and by constant research keep digging for nuggets of osteopathic truth.

He recognized then, as now, that the greatest danger to the

profession lay in the teaching of false and substitute theories in our colleges.

His message was definite and his call was clear. The Academy in the ten years since the organization was first started, has attempted to carry the banner of osteopathy to the credit of the profession and the honor of its founder.

Let's keep our colleges so different that they will have no appeal to those who want MD degrees.

The Academy of Applied Osteopathy was organized within the American Osteopathic Association to give strength and unity of purpose to those in that Association who really believe in the basic principles of osteopathy and most desire to advance those principles as established by Dr. Still and promote the type of research that he advocated in quest of physiological truth.

[Reprinted from the 1948 Yearbook of the Academy of Applied Osteopathy, pp. 16]

## "Introductory Visceral ManipulationCourse"

Advance Registration Deadline: August 27, 1996

### Program

#### Friday, September 27, 1996

8:00am Registration Course Introduction 8:30am Introduction to Course 8:45am What is visceral manipulation? Where does visceral manipulation come from? How does visceral manipulation fit into Osteopathy? Purpose of the seminar **Basic Concepts:** Different types of motion Basic Concepts: What are we doing? Small Group Discussion 10:30am 11:00am Exercises: Sacral compliance; Liver lift LUNCH 12:00pm Anatomy: Review of topography 1:00pm and general anatomy 1:45pm Practice 3:00pm Small group discussion Stomach 3:30pm

#### Saturday, September 28, 1996

8:00am	Review and questions
8:30am	Practice stomach diagnosis and
treatment	
10:00am	Biliary system
10:30am	Small Group Discussion
11:00am	<b>Biliary System Practice</b>
12:00pm	LUNCH
1:00pm	Sphincter-like areas (SLA)
1:30pm	Practice treatment of SLA's
2:15pm	Duodenum
2:45pm	Small group discussion
3:00pm	Duodenal practice
4:15pm	Jejunoileum

#### Sunday, September 29, 1996

8:00am	Review and Questions
8:30am	Jejunoileum Practice
10:00am	Cecum
10:30am	Cecum Practice
11:30am	Colon
12:30pm	Lunch
1:30pm	Integration of the Viscera into OMT
2:00pm	Colon Practice
3:30pm-	Summary & Conclusion
4:00pm	Adjourn

## September 27-29, 1996

Holiday Inn North

\$625

## **Seminar Fee**

Prior to August 27, 1996:	
AAO Member	\$475
Intern/Resident	\$250
AAO Non-Member	\$525
After August 27, 1996:	
AAO Member	\$575
Intern/Resident	\$350

#### **Refund Policy**

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# **Pilot study** to establish whether osteopathy reduces general practice consultation rate of musculoskeletal problems based on patient perception of effectiveness of the osteopathic treatment Part I

By Mary Banihasem, DO Old Westbury, New York

## Abstract

This pilot study was carried out to show that osteopathic treatment has a beneficial effect on the patients with musculoskeletal problems presenting in the general practice setting. A non-randomized sample was used for the general practice clinic and their response to treatment was monitored throughout the treatment period and after discharge. Results showed that the effect of osteopathic manipulation was of benefit to the patients. It also had reduced the number of future consultations required with the patient's general practitioner.

## **Literature Review**

In recent years there has been a discernible shift in people's attitudes towards "alternative medicine." Originally thought of as a last resort when orthodox medical practice had failed the patient it is now becoming an accepted part of nationwide health services. Indeed, the mainstream medical profession, as represented by the British Medical Association, published a report from its board of science and education in 1986<sup>3</sup> which considered that manipulative treatment of back pain by lay practitioners may provide " a safe and helpful service." This endorsed the Cochrane committee's recommendation that randomized trials of treatment for back pain should include an evaluation of heterodox methods<sup>4</sup> published earlier in 1979.

However these claims were made with little direct evidence for the efficacy of manipulative treatment. Much of the support for alternative therapies originally came from anecdotal accounts and not from organized clinical trials, the gold standard for investigating the effectiveness of one treatment over another. In the last few years this has been addressed by a number of studies with varying degrees of success.

Much of the work has concentrated on the treatment options for neck and back pain. This is understandable when one considers that in Western society back pain is a recurrent problem and is a major cause of absence from work. This, in turn, has serious repercussions for national productivity as well as the financial implication for the health service, especially in the primary care setting. The direct consequence is one of using up consultation time in general practice (and, hence, general practice budget), but also indirectly affecting others by limiting their available consultation time. This is compounded by the recurrent nature of back pain. The implication this has for health promotion was looked at in a recent article by Wilson.

Health promotion has been defined as "all aspects of those activities that seek to improve the health status of individuals and the community.<sup>6</sup> In the primary healthcare setting general practitioners contribute to health promotion mainly by targeting life-style issues such as smoking and alcohol, and also by organizing routine screening tests e.g. for blood pressure, cervical smears. Studies have indicated that the general practice consultation is failing to fulfil its potential in this role.' This may be due to time constraints as practices with smaller lists tend to deliver higher rates of screening," but the evidence for this is patchy at best. To investigate this concept further Wilson and colleagues undertook a controlled trial of 16 general practitioners using 10 minute consultation times with each patient and compared this to their normal consultation time (of around 6 minutes).

The results found that recording of blood pressure, smoking and alcohol consumption and advice about immunization was significantly more frequent in the experimental sessions, and the proportion of consultations in which one or more items of health education were recorded in the medical notes increased by an average of over 6 percent in these sessions.

In addition, patients reported discussion of smoking and alcohol consumption and coverage of previous health problems in the experimental sessions more often than in the controls. This is a point worth noting since if patients remembered the discussion they are more likely to act upon it.

However, there was little change in

... osteopathic treatment carries an additional benefit since the average osteopathic consultation takes 20 minutes, so affording ample opportunity for health promotion.

discussion of exercise, diet, and weight or cervical cytology activity. The results of the trial would appear to be selfexplanatory. If the general practitioner has more time available more topics can be addressed, including those dealing with health promotion. The investigators felt this to be a causal association. It is noteworthy that the actual difference in consultation times between the two groups was just over 1 minute, indicating that health promotion activity does not actually take very long. In this respect, osteopathic treatment carries an additional benefit since the average osteopathic consultation takes 20 minutes, so affording ample opportunity for health promotion. However, one would have to carry out long-term prospective trials to establish whether increases in health promotional activity

actually reduces morbidity and mortality.

Obviously this would have important cost-benefit implications as well as influencing the patients' subsequent quality of life.

This issue has been addressed recently by Robinson and colleagues with regards to the allocation of health resources. The present governments' stated policy in the Health of the Nation White Paper' is to improve primary care facilities and target resources towards disease prevention. A key factor in this policy is auditing of the outcome. To carry out meaningful audit, one requires a reasonably objective measure of the quality of life. Robinson states that currently the best economic evaluation method for allocating health resources is cost-utility analysis. This compares the costs of different procedures with their outcomes measured in "utility-based" units. Utility is the keyword in this situation as it refers to the subjective level of well-being that people experience in different states of health. In recent years the quality adjusted life year (QALY) has been the most widely used utility-based measure in cost-utility analysis. This can be calculated by evaluating the number of additional years of life that are obtained from a particular procedure or treatment and combining this with a measure of the quality of life in each of these years to obtain a composite index of outcome. In this way alternative therapies can be compared based on the marginal cost per QALY gained.

The most difficult part of this method is actually measuring a person's quality of life. Quality is more important than quantity here as most modern health care programs are concerned primarily with improving quality of life rather than adding years to it.

Several quality of life scales have been developed recently. The Nottingham health profile<sup>10</sup> is one such scale, made up of two parts. The first is a measure of health status derived by questioning patients on six dimensions of social functioning; energy, pain, emotional reactions, sleep, social isolation, and physical mobility (in a series of 36 questions) and then producing a score of between 0 and 100 for each dimension having appropriately "weighted" the responses. The second part asks about seven areas of performance that may affect health such as employment, looking after the home, social life, sex life, home life, hobbies, and holidays. After combining these two a health profile is produced which has been used in studies of heart transplantation and rheumatoid arthritis.

Other measures of quality include the sickness impact profile and more recently the SF-36 health survey questionnaire<sup>13</sup>. The latter has been used in the general practice setting with good effect by Brazier and colleagues.

However, these scales have a fundamental weakness. They work well in assessing the outcomes of interventions in the case of particular diseases or disabilities, for instance in comparing analgesics versus manipulation for low back pain; but they are unable to compare outcomes between different programs. Hence, the Rosser index is a valuable alternative.<sup>14</sup>

This is a single, generalizable measure of quality developed by Rosser and colleagues viewing health status in terms of two dimensions: disability and distress. Eight categories of disability and four of distress were described giving a possible 32 different states of health. By interviewing 70 different respondents (made up of medical staff, patients and healthy volunteers) and obtaining their views about the severity of each state relative to every other state, using psychometric techniques, Rosser was then able to compile a valuation matrix where each state of health had a numerical value from 0 to 1, where 1 was no disability and no distress, and 0 for the other end of the scale where the patient was in a coma or dead.

The beauty of this classification is that a quality of life score can be assigned to any state of health as long as it is placed in an appropriate disability or distress category. Despite some early controversy, the index is now considered to be able to categorize patients in a reliable accurate and quick manner.<sup>10</sup>

Hence, if one now has a measure of the life years gained by a procedure and also the quality of life in each of these years a QALY value can be obtained. QALYs have been used in the economic evaluation of treatment options in angina<sup>15</sup> and suggested that coronary artery bypass grafting produced an average gain of between 1.5 to 3.5 QALYs for angina patients as compared to medical management. The cost of each intervention can then be applied to give a cost-utility analysis.

Similar studies have enabled the Department of Health to draw up a OALY league table in the United Kingdom. However, it has not yet been utilized for its ultimate use: to guide resource allocation decisions. In other words, it would theoretically be able to shift resources away from activities that are costly in terms of health benefits they generate and towards activities that are of relatively low cost. This could be applied to the management of hospital waiting lists as at Guys Hospital, London in a preliminary study ranking the top 22 surgical conditions according to cost versus QALY gains.

At present the U.K. government is reluctant to use QALY tables in this manner. Mason et.al,<sup>17</sup> cite that problems do exist with this approach in that studies are carried out at different times and therapies in medicine change rapidly. Also the result of individual cost-utility studies will often be locally specific and not appropriate to be applied elsewhere.

In relation to osteopathic techniques

versus conventional therapy, it would be interesting to apply cost-utility analysis to, for example, the treatment of low back pain. The low cost of manipulation as opposed to drug therapy in primary healthcare would favor the former but net QALY gain (or indeed loss) has to be quantified. As yet there are no studies which have addressed this issue, and it is likely to be some time before they do as OALYs are not yet universally accepted. Mason et.al. alluded to this by stating that any costutility analysis based on OALYs should be interpreted with "the appropriate caution, care and intelligence."

At the present time most studies investigating manipulation therapy compared to medical treatment have concentrated on trying to show a significant benefit. However, in the last 20 years these have been few and far between and have yielded conflicting results. The reason for this may lie in the fact most studies have featured back pain, a notoriously difficult condition to treat, and also plagued by the lack of an independent, objective measure of severity or measure of benefit accrued from treatment.

Before embarking on a review of the pertinent trials it would be prudent to discuss some of the potential pitfalls facing investigators in this sphere.

The natural history of back trouble is unpredictable. For instance, an acute attack of lumbago has a statistically observed good prognosis, even if the development in each individual case is impossible to foresee. This may be reflected in individual trials as demonstrating an apparently successful treatment, whereas the true situation is one of natural disease progression.

Chronic cases present more of a problem which was discussed in a review article by Wood and Badley.<sup>18</sup> They separated cases of back pain into three classes (based on temporal features)

continued on page 23

# Letter to A.T. Still

#### Dear Dr. Still:

Sometimes I think we tend to make everything too complex. Maybe that's just part of human nature: we like to explore, do research and learn more details about things, but occasionally some things are just very simple and perhaps should be looked at that way. Maybe we do this with our desire to know more and more about the nature of osteopathic medicine. When this topic gets too complex for me, I like to read Chapter XIX of your book, Philosophy of Osteopathy. This chapter seems to simplify the whole of osteopathic theory and philosophy.

It seems so simple. All tissues of the body need to have adequate blood supply in order to bring oxygen, nutrients and immune system components to them. These same tissues need to have waste products removed from their environment through properly functioning venous and lymphatic systems. The structural components of the body, especially the fascial system, need to be in proper alignment for these processes to take place. We, as osteopathic physicians are trained to make this happen.

In this chapter you talked about how important the lymphatic system and the fascia are in maintaining health. For example, you said, "I have long since been of the opinion that if we could keep all impurities from accumulating in the lymphatics, and never allow them to become overloaded, we would have no such diseases as bilious fever, typhoid, mountain fever, malaria, pneumonia, flux, heart disease, brain disease, fits, insanity and on to the whole list of climatic troubles, and the troubles with the changes of winter and summer."

You also talked about how the lymphatics and the fascia seem to get filled with impure and unhealthy fluids long before any signs or symptoms of disease appear. Indeed, this is where disease begins, according to your philosophy. We can prevent and treat disease by assisting nature in its natural ability to wash these fluids out of the body before the accumulation of disease-producing substances. As you said, "Let the lymphatics always receive and discharge naturally. If so, we have no substance detained long enough to produce fermentation, fever, sickness and death."

We would all do well to read Chapter XIX of your book when we get confused about the real nature of osteopathy. You have explained it so well.

> Your ongoing student, Raymond J. Hruby, DO, FAAO



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14/AAO Journal

# The efficacy of osteopathic treatment for primary dysmenorrhea in young women

by Kirsten Chadwick, S.App.Sc.Osteo and Averille Morgan, B.App.Sc.Osteo

### Abstract

Primary dysmenorrhea is estimated to effect up to 50 percent of menstruating women. This controlled single-subject, time-series design pilot study (N=16 subjects) was aimed to investigate the efficacy of osteopathic treatment for primary dysmenorrhea in young women (18-25 years).

Using a modified McGill Pain Questionnaire (MPQ) to objectify pain intensity, each subject was monitored during menstruation for two cycles prior to osteopathic treatment and again with each menstruation over four cycles.

Each subject received a full medical, neurological and osteopathic examination prior to a series of six osteopathic treatments. Osteopathic treatment given included the following techniques: mobilization with impulse (MWI), muscle energy technique (MET), visceral, Jones Counterstrain and Osteopathy in the cranial field. Treatment was directed by individual subject findings as found with the full Osteopathic examination.

Seventy-five percent of subjects recorded a statistically significant reduction in menstrual pain intensity (p <0.01). It was found that 100 percent of subjects had a sacral torsion, 75 percent a spinal somatic dysfunction at L5 and 62.5 percent at one or more levels T10-11-12.

This pilot study supports the claim that osteopathic manipulative treatment reduces the intensity of pain felt in primary dysmenorrhea.

#### Introduction

Primary dysmenorrhea is considered the most common gynecological complaint in women patients and is estimated to affect up to 50 percent of women of child-bearing age.<sup>1,2</sup> Of these women, 10 percent experience incapacitating pain for 1-3 days every month<sup>2</sup>.

Primary dysmenorrhea has been defined as "short episodes of acute cramp-like abdominal pain or prolonged dull aching pain occurring one day prior to or at the onset of menstruation."<sup>1.2</sup> Pelvic pain may present as continuous or intermittent in the supra-pubic area with radiation to the back and thighs, and associated symptoms of nausea, irritable bowel and/or abdominal distension may be present.<sup>3,6,8</sup> The onset of primary dysmenorrhea starts 6-12 months post menarche and is consistent with each menstruation.<sup>2,7</sup>

Secondary dysmenorrhea is associated with pain arising during menstruation in the presence of gross pelvic pathology such as endometriosis and intramural fibroids.<sup>1</sup>

The etiology of primary dysmenorrhea is debatable and the subsequent use of suggested treatment modalities has variable results. Previous manipulative studies for primary dysmenorrhea have revealed fewer episodes of pain posttreatment, however, osteopathic literature lacks scientifically-based research to indicate menstrual pain changes as a result of osteopathic treatment.

This controlled single-subject, timeseries design pilot study aims to investigate the efficacy of osteopathic treatment for menstrual pain intensity change pre- and posttreatment using a modified McGill Pain Questionnaire (MPO). Previous use of the MPO for determination of pain intensity during menstruation in static research format has been significant for the correlation between perceived and actual pain intensity." The authors were unable to locate comparable literature for pre- and post-manipulative treatment results using the MPQ format.

### Materials and Method

#### **Subjects**

Sixteen (N=16) female subjects aged between 18-25 years (average 21 years) participated in this research. All 16 consenting subjects were examined and treated in the Royal Melbourne Institute of Technology student osteopathic clinics by senior students in the B. App. Sc. (Osteopathy) degree. Volunteer subjects were obtained by advertising in local universities. All subjects were students and six<sup>6</sup> held part-time jobs.

#### **Prerequisites**

All subjects were required to be nulliparous, aged between 18-25 years, have a history of dysmenorrhea since menarche, regular cycles (+/- three days.), consistent pain with each cycle, be nonsmokers, not currently taking the

 $\rightarrow$ 

contraceptive pill/or not to have taken it over the past six months, have no previous history of genitourinary disease or current infection and exercise no greater than seven hours per week.

#### Design

The MPQ was chosen as a reliable index of pain evaluation between the type and intensity of pain and provided a reproducible method to quantify subjective results.<sup>17</sup> Subjects were required to select word descriptors from the MPQ which best described their menstrual pain felt before, during, and after treatment. These words were ranked according to the pain rating indices obtained by Melzack and Torgerson.<sup>17</sup>

Subjects were required to select of one set of word descriptors from either group A (continuous, steady constant), group B (rhythmic, periodic, intermittent) or group C (brief, momentary, transient) to describe their menstrual pain felt on the first day of menses.

The present pain intensity (PPI) listed word descriptors; mild, discomforting, distressing, horrible, excruciating (in order of increasing intensity) and subjects were required to choose only one of these word descriptors to describe the pain felt on menstruation both pre- and posttreatment.

The four categories of word descriptors used to determine pain rating indices (PRI) included the sensory category words from subgroup 1-10, the affective category words from subgroup 11-15, the evaluative category subgroup 16 and the miscellaneous category from subgroup 17-20. Only one word descriptor per subgroup column could be selected to describe menstrual pain felt at the time of the MPQ completion, and not all word columns were required to be chosen i.e. only words which best described the menstrual pain was noted. Subjects were unaware of rank value scaling for each word descriptor.

The number of words chosen (NWC) from each subgroup was used to quantify the subjective change in pain intensity pre- and posttreatment.

#### Procedure

The prospective subjects were monitored over two cycles using a modified MPQ to establish a baseline control for each individual before treatment commenced.

The initial visit consisted of a complete medical history, urinalysis and full

**CME** Calendar

osteopathic examination. The medical history also aided in the screening procedure to detect pathology. Each subject underwent a physical, neurological and musculoskeletal assessment.

Osteopathic screening and segmental facilitation diagnosis was determined on the first visit. Osteopathic treatment (including spinal manipulation and visceral technique) was applied according to the individual patient findings. Predetermined practitioner format was not employed for diagnosis or treatment.

Subjects received a total of six treatments over four cycles. The subjects were required to complete the modified MPQ on the worst day of pain (day predetermined by individual baseline pretreatment) during their menstrual cycle and once again with menses after the completion of the sixth osteopathic treatment.

No other treatment modalities were utilized in this study. The subjects were advised to abstain from medication use on the worst day of menstruation pain pre- and posttreatment, and to receive manipulative treatment only by the Osteopathic research team for the duration of the research.

#### October 11-13

Continuing Studies Course "The Lower Extremity" Sutherland Cranial Teaching Foundation Location: UNECOM Hours: 20 Category 1A Contact: Judy Staser, Executive Secretary SCTF (817) 735-2498

#### October 26

Fall CME Conference Rocky Mountain Academy of Osteopathy The Broadmoor Hotel Colorado Springs, Colorado Contact: Charles B. Schaap, DO (303) 771-3102

#### November 2-3

Integrated Myofascial and Craniosacral Approach for the Body Guest Speaker: Anthony Chila, DO, FAAO Location: San Francisco Hours: 16 Category 1A Contact: David Crotty, DO (707) 544-4334

#### December 7

Clinical Review This one-day course is designed to assist recent osteopathic medical graduates to pass the licensing exam for the State of California. Physicians needing 1-A hours may also register. Hours: 35 Category 1-A Contact: OPSC (916) 447-2004

#### January 11-12, 1997

Entrapment Neuropathy The Cranial Academy Santa Monica, CA Hours: 12 Category 1A Contact: Patricia Crampton, Exec. Director (317) 594-0411

#### February 13-17

Mid-Winter Basic Course The Cranial Academy Old Westbury, New York Hours: 40 Category 1A Contact: Patricia Crampton, Exec. Director (317) 594-0411

#### Results

In this study (N=16) 100 percent of subjects complained of the worst pain on the first day of menstruation and 31 percent on the first and second days. On the first day of pain 56 percent complained of the heaviest menstrual flow and 19 percent of these experienced heaviest flow into the second day. The pain rating indices PRI (R), based on the rank value of subgroup descriptor words (i.e. words of lesser pain intensity ranked a value of one and correlated with the first word in each column; words of greatest pain intensity were ranked with a value of 5). The PRI (R) values were correlated pre and posttreatment (r=0. 44, p <0.01).

TABLE1: Comparison of PPI percentage scores pre- and post-treatment (r=0, 512, p < 0.01).

Word descriptors

Treatment	mild	discomforting	distressing	horrible	excrutiating
pre	0%	0%	6%	31%	63%
post	13%	19%	31%	19%	18%

The MPQ revealed 69 percent of subjects chose group A words (continuous, steady, constant) to describe the menstrual pain prior to osteopathic treatment, 25 percent chose group B (rhythmic, periodic, intermittent) and 6 percent chose group C (brief, momentary, transient) during treatment.

The (PPI) was obtained directly from the MPQ, as completed on the worst day of pain during menstruation, and results compared pre- and posttreatment in table 1.

Each word in Table 1 (mildexcruciating) is numbered 1-5 respectively with increasing intensity. In this case, 63 percent chose words ranked 5 and 31 percent chose words ranked 4 pretreatment. After osteopathic treatment 18 percent chose rank 5 words and 19 percent chose rank 4 words. A 32 percent distribution of word descriptors of lesser ranking (mild and discomforting) was noted posttreatment.

The pain rating indices, based on the mean scale value of words obtained by Melzack and Torgerson<sup>17</sup> were designated PRI (S) and correlated for each of the four categories of word descriptors (sensory, affective, evaluative and miscellaneous) pre- and posttreatment with significance (r=0. 465, p <0.01).

Pre- and posttreatment mean figures for PPI, PRI (R) and the (NWC) values were correlated with significance (see Table 2) and these results were used to compare changes in pain intensity with treatment. The posttreatment total number of words chosen (mean=6 words) reduced from pretreatment findings (mean=9 words) suggests a more definitive isolation of word descriptors selected by subjects over time. This is also noted in the mean PRI (R) *sensory* results with an increased utilization of these word descriptors. However, the significance of the reduction in NWC and mean PRI (R) total is objectified by the increase in the posttreatment usage of lower-ranked word descriptors.

The mean NWC values posttreatment were correlated with the mean PRI (R) posttreatment scores with significance: sensory, 0.69; affective, 0.70; evaluative, 0.60; miscellaneous, 0.60; and total, 0.88 (p<0.01).

All subgroups were utilized in the MPQ with the *sensory* group more frequently chosen than the 'affective' group per subject.

The *evaluative* group was chosen by 11 percent of subjects and the

Table 2: Mean word scores for total NWC and PRI (R) pre- and post- treatment comparisons (p < 0.01).

	TUDY N Mean Age		Mean PPI		Mean NWC		Mean PRI (R)	
	_	(years)	PRE	POST	PRE	POST	PRE	POST
Chadwick							S=3.2	S=8.9
							A=2.6	A=0.9
&							E=3.3	E=1.8
				1.0	100	- 1	M=3.8	M=2.7
Morgan	16	21	2.8	2.4	8.8	6.1	T=22.9	T=14.3

Key: S=sensory, A=affective, E=evaluative, M=miscellaneous, T=total word descriptors.

As noted from Table 2, a decrease in mean PPI score posttreatment which suggests a reduction in pain intensity in terms of subject observation, however, more significant is the reduction in the number of subgroup descriptor words chosen posttreatment to describe the change in menstrual pain intensity i.e. a 37.6 percent reduction of total mean PRI (R) word selection to describe the menstrual pain after six osteopathic treatments. miscellaneous group by 20 percent of subjects pre- and posttreatment. These two groups contributed to the PRI (R) and NWC scores and, although unaltered with treatment, may account for score variance.

Consistency of subgroup descriptors is noted by the 94 percent frequency of subgroups (5,9,11,16 & 20) chosen preand posttreatment. The subgroups chosen in this study correspond to previous static studies using the MPQ for dysmenorrhea

continued on page 29

## Message from the President continued from page 6

research. Now completing a funded outcomes grant, the LBORC will be presenting a summary of their successful outreach programs at the September Osteopathic Medical Education Leadership Conference in Chicago and will be establishing protocols for multicenter OMT outcomes research at the AOA Convention in October. (Those interested in the design process should contact Stephen Noone at the AAO office and consider arriving in Las Vegas the weekend before the AOA Convention.)

The AAO has set a number of long range plan research goals (see adjacent box) and its component society, particularly The Cranial Academy, are assisting in reaching these. This year the AAO proposed introduction of two research related resolutions to the AOA House of Delegates. One, introduction of specific research mechanisms within osteopathic postdoctoral training institutes (OPTI), was referred to COPT. The second, seeks to promote development of research leaders within the profession through an annual Postdoctoral Research Leadership Fellowship program. This will be discussed at the OME Leadership Conference in September by Barbara Ross-Lee, DO, who spearheaded the successful health policy fellowship in whose image the research fellowship could be structured, and this resolution was referred for recommendations for implementation to the Bureau of Research.

#### What can you do?

Where the profession goes from here is not up to the AOA Bureau of Research, the Academy, or the colleges. Ultimately, it is up to each one of us. If you are a clinician, volunteer to participate in a multicenter study or refer patients to a colleague's study. If you are on a college faculty, advocate for your department or college to set an osteopathic research agenda and then actively facilitate its success. If you are involved in a residency program, work to develop a support system encouraging quality research and research education. Students. . . become knowledgeable in research design and be critical readers. As individuals your time, money, patient referrals and voice may seem insignificant, but the osteopathic profession acting in unison can make a difference. The direction of research is in your hands.

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## Message from the Executive Director continued from page 7

services for 1996-1997. The final step looms ahead, the adoption of a balanced budget for 1997-1998. If there truly is no "fat" on the expense side, then the only alternative to more cuts in programs and services is to substantially increase the Academy's revenues. All AAO members can assist the leadership in generating additional revenues by any or all of the following:

- Recruit colleagues to Academy membership
- Bring along colleagues to AAO educational programs
- Make a generous contribution to the Golden Ram Society
- Identify patients who might contribute to TRUST 2000: A Legacy for the Osteopathic Profession
- Consider your own pledge to TRUST 2000

I invite the active participation of all Academy members in the effort to increase revenues. Once osteopathic physicians experience the quality of AAO membership and educational programs, surely they will become committed to the AAO Mission and serve as loyal ambassadors to others in the profession. Dig on!!!

#### AAO Goal:

To develop, implement and evaluate a program to promote ongoing research on the efficacy of osteopathy.

• To publish the results of two outcomes studies on OMM. (7/31/97)

• To continue a cooperative relationship with the AOA Bureau of Research and other research funding agencies. (7/31/97)

• To recognize and disseminate research in OMM through annual presentations at Convocation. (7/31/97)

• To maintain and increase national leadership roles in promoting research in OMM. (7/31/97)

• To develop and promote a mechanism for integration of ongoing research on the efficacy of osteopathy in Osteopathic Post-doctoral Training Institutes. (7/31/97)

• To publish the results of ten outcomes studies on OMM. (7/31/00)

• To establish an international leadership role in promoting research on OMM. (7/31/00)

# **AAO Case History:**

## **Common problems in newborns and infants**

by Henrietta (Hennie) Sholars, DO San Franciso, California

## Identification

Samantha K. is a white female who was 23 days old at the time of her first office visit with me.

## **Chief Complaint**

Samantha was brought to see me because of what her mother perceived as abnormalities in her sleeping pattern, crying, signs of distress and colic.

## **History of Present Illness**

Her mother stated that Samantha cried during her sleep and it sounded like wailing. This has occurred two to three times per day since her birth. She is a restless sleeper. Her mother stated she was not able to go to sleep without soothing, that it was necessary for either she or her husband to give her a finger in her mouth to suck on. Her mother said she was sleeping at the most 2 to 3 hours at a time before awakening. She also said she cries after feeding.

Samantha is the firstborn to her parents. Her mother states the pregnancy was easy. Birth was not so easy. Samantha had been facing backwards and head down in the uterus. The midwife was able to turn the baby in early stages of the labor. The labor was rather uneventful until 5 cm. of dilation. From that point on until the birth, the labor was very hard and mom became very exhausted. The length of time from being dilated 5 cm. to birth was two hours. Her mother received no episiotomy nor did she tear. When Samantha's head was partially over the perineum, mom was exhausted and stopped pushing momentarily. After her birth, Samantha seemed edgy and was crying. Within two hours she took to feeding quite easily. She has been breast-fed since that time.

## Past Medical History

Unremarkable.

## **Physical Exam**

While Samantha's mother and I were talking, Samantha had been resting easily in her mother's arms, awake. She appeared in no acute distress. Her skin was a healthy pink color; cranial nerves appeared intact. Her neck and head were able to turn in all directions. She moved both arms and legs when she was wiggling.

When she opened her mouth, I was able to observe a symmetrical mediumlyarched palate. Her sucking was strong; she had normal rotation and movement in both hips.

Osteopathic structural and cranial exam was most striking in the fact that there was virtually no CRI palpable. I noted the sense of tension throughout her entire body. Her sacrum was compressed; the vector of this compression was largely vertical with a small component of lateral compression. Her ilia were symmetrical with a component of horizontal compression through her ilia, sacroiliac joints and sacrum. There was symmetric sidebending in her lumbar spine. Her clavicles were symmetrical. The fascia from her clavicles up to under her jaw and the base of her head was tight.

Exam of her head and cranium revealed a flattening and a relative external rotation of her frontal, with orbits symmetrical. There was a strong component of compression from her frontal to her occiput via dura, especially the falx. The basiocciput was jammed anteriorly into the facets of C1. There was a narrowing across the jugular foramen area bilaterally and a medial compression of the occiput. The temporals were pulled bilaterally into the jugular notch area. The occipitomastoid suture area was compressed bilaterally. The anterior fontanelle was soft and palpable. Her parietal area was in a relatively externally rotated pattern which goes along with the external rotation of her frontal.

## Assessment and Treatment Plan

My assessment was that this young infant had colic and irritability secondary to birth trauma. I recommended that Samantha receive osteopathic manipulative treatment using direct action fascial release and direct action cranial concept treatment. Treatment was initiated during the first office visit.

#### **Course of Treatment**

The main focus during the initial treatment session was decompression of the sacrum, decompression of the condylar parts of the occiput and decompression of the frontal and occipital areas. During decompression of the condylar parts of her occiput, Samantha began to cry lustily, her face turned bright red. Her mother and I both soothed her and her mother briefly held her. After this initial release was completed and the CRI had established itself throughout Samantha's body, she became quiet and relaxed. On the followup visit 10 days later, Samantha's mother stated that she was sleeping more deeply and that her sleep periods were approximately four hours compared to the prior two to three hours in length. She was awakening with crying much less frequently, perhaps once every three days as opposed to two to three times per

day. Regarding the postprandial upset or the colic, Samantha's mother said this had dramatically decreased as well. There were some occasions on which she fussed after eating. In general, Samantha was more active during the past 10 days than she had previously been. Structural exam on this second office visit revealed some lingering sacral compression, free and symmetrical motion in her ilia. T8, 9, and 10 were compressed and tight. Her diaphragm, particularly the left hemidiaphragm, were contracted and tied into this T8, 9 and 10 area. Upon exam of the cranium, it was noted that the vault was now free. Cranial rhythmic impulse was present in good velocity and amplitude. Compression was noted in the cranial base. The left condyle of the occiput was jammed anteriorly into Cl. There was tension in the left tentorium cerebelli. Internal and external rotation were present in both temporals, however, the amplitude was reduced in the left, which was relatively externally rotated. During treatment, Samantha cried, turned red, then calmed down. When she left the office, she was awake and quiet. Her mother phoned me two days later to report that Samantha was sleeping even more deeply and for longer periods and that she had slept a large part of the day following treatment. Follow up is as needed, or in 7 to 9 months.

#### Discussion

This is a case history of an infant who had developed colic, restless sleep, and mild irritability after a difficult delivery. The use of direct action osteopathic manipulative techniques, combined with patient and loving parenting, enabled Samantha to rest better and longer and to digest her food more easily. I chose to present the case of this infant girl because the general type of problems she presented are relatively common in newborns and infants.

### Editorial

# **Physicians control over medical care**

Physician control over medical care has been waning over the last decade with the result being a decrease in quality of health care and an increase in the cost of health care.

Physicians have been at a loss as to how to solve this increasing dilemma. Every way one turns, more and more control is lost and it seems that our medical societies and groups are not helping the community physician.

That is until now. It seems the AAO has taken a courageous step that may well ring a bell heard around the world. The AAO has launched upon a project to By Thomas A. Naegele, DO

define medicine for all of primary care including its major initiative of Osteopathic Manipulative Medicine.

Be it called protocols, clinical paths, clinical practice guidelines, foresighted practice guidelines or whatever, it will be defined and it will be implemented. The major push is for *osteopathic outcomes research*. We all know that osteopathy is a true solution, however, through the years, osteopathic research has never gotten the necessary data nor clout needed to bring the osteopathic solution to the forefront. In my opinion, this project is a solution and it will work.

However, it will need your help. It appears to be costly up front, but there is discussion on getting the research to fund and repay those that initially bought (lent time and money) into the project.

Those that feel that they can help, should go ahead and invest the money and time and build a data base of medicine for the AAO. And those that can use this data base of medicine at the point of care, please implement this project into your practice and help the AAO to collect *outcomes research data* to prove on a massive scale for the world that *osteopathy is a solution.* 

## Errata Slip: An osteopathic approach to HIV/AIDS

by Terrence Mulligan, MS-III Kirksville College of Osteopathic Medicine

Editor's Note: Our apologies goes to 9. student doctor Mulligan for inadvertently leaving out some of the references to his article published in the summer 1996 issue of the AAO's Journal. Below please find a complete list.

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John P. Sevastos, DO, of Cleveland, Ohio, (right) recites oath of office as president of the American Osteopathic Association during the organization's Inaugural Luncheon as part of the 1996 House of Delegates' meeting at the Opryland Hotel in Nashville, Tennessee. Howard L. Neer, DO (left) administers the oath of office as the immediate past president of the AOA.

The members of the American Academy of Osteopathy extend their congratulations to fellow AAO member, Dr. Sevastos.

Fall 1996

#### Advance Registration Deadline: September 25, 1996

#### SEMINAR FEE:

Prior to September 25, 1996:	
AAO Member	\$525
Intern/Resident/Student	\$250
AAO Non-Member	\$625
After September 25, 1996:	
AAO Member	\$625
Intern/Resident/Student	\$350
AAO Non-Member	\$725

#### Who May Attend

Fully licensed physicians, residents, interns and students.

#### **Refund Policy**

The American Academy of Osteopathy reserves the right to cancel this educational program if insufficient physicians pre-register. Sufficient registrations must be received 30 days prior to the opening of the course. If you are considering registering for this course less than 30 days prior to the opening, contact the Academy office before making travel plans. In the event of course cancellation by the Academy due to lack of registration, all money will be refunded.

Cancellation from participants received in writing for other reasons up to 30 days prior to the course opening are subject to withholding of a 15 percent administrative fee. All other cancellations will receive no refund but may transfer 80 percent of the tuition to another AAO educational program held within the next 12 months.

Make Hotel Reservations by calling the hotel directly by September 24, 1996:

LaQuinta Inn, 825 North Watson Road Arlington, Texas 76011, (817) 640-4142

\$65.00 Room Rate: includes an upgraded continental breakfast and free transportation from D/FW Airport; Also available is an on-site lounge; room service and a fitness center. Within walking distance of 10 restaurants and across the street from Six Flags Over Texas. Complimentary transportation will be provided by AAO to TCOM.

## Counterstrain October 25-27, 1996

University of North Texas Health Science Center at Fort Worth/Texas College of Osteopathic Medicine Fort Worth, Texas

COURSE OBJECTIVE: This weekend course is designed for both beginners and those with advanced training in counterstrain. The course will emphasize classic strain/counterstrain tender point treatment and also show how this treatment approach can be used to treat myofascial trigger points as well. The course will conclude with a discussion of how your counterstrain findings can help direct the rehabilitation scheme for your patient. The faculty has extensive experience in the utilization of strain-counterstrain in both academic and clinical settings.

#### Friday, October 25, 1996

8:00 am Introduction to Counterstrain
9:00 am Posterior Cervical Spine Anterior Cervical Spine
10:00 am Thoracic Spine Anterior; Posterior
11:00 am Lumbar Spine Iliopsoas; Review
12:00 nn Lunch
1:00 pm Posterior Lumbar Spine
2:00 pm Sacrum
3:00 pm The Hip
4:00 pm Review

#### Saturday, October 26, 1996

8:00 am The Lower Extremity
9:00 am The Knee
10:00 am Foot & Ankle
11:00 am The Shoulder
12:00 nn Lunch
1:00 pm Continued Shoulder
2:00 pm Upper Extremities/elbow
3:00 pm Forearm, Wrist & Hand
4:00 pm Review

#### Sunday, October 27, 1996 8:00 am The Rib Cage

9:30 am Cranium & Jaw 11:00 am Putting it all together 12:00 nn Adjourn

#### Faculty

Mark S. Cantieri, DO, CSPOMM, Program Chairperson John C. Glover, DO, CSPOMM John M. Jones, III, DO, CSPOMM Richard W. Koss, DO, CSPOMM Daniel P. Conte, DO

Conference R	egistration
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## Pilot study on the benefits of OMM in . . . by Mary Banihasem

#### continued from page 13

namely transient, acute and chronic. They also raised the question of whether chronic cases are such from the beginning, or do they progress from unsatisfactory resolution of an acute back? Clearly the choice of patient will then critically affect the results of trials.

In addition, because of the recurring nature of back pain one needs to decide the length of one's observation period. Ideally, one should be interested in both the immediate effect of a treatment method and the duration of its effect. These will differ depending on the type of treatment but for manipulation, assessments at intervals of a few weeks and then months would seem to be sensible but the optimum times are not known.<sup>19</sup> For drug therapy, smaller time scales are probably more appropriate.

Bloch published a critical appraisal of the methodology of clinical back pain trials which addressed some important issues.<sup>20</sup>

He reiterated the point that much of the work conducted on the treatment for back pain was methodologically unsound. Only eight articles were published in 1985 using randomized control trials, the benchmark of experimental design.

Confounding variables are the bane of most experimentalists. These limit the generalizability of results. The two main confounders are statistically noise and bias.

The first of these terms refers to errors introduced by the inherent variability of nature. If one fails to recognize, and hence, control for these variables then results could unintentionally be affected. For instance, one should accommodate for patients' occupations in trials of back pain as a high population of manual workers could skew results.

In general the confounding effect of statistical noise can be lessened by using a large sample population. This is especially important when small differences in outcome are being looked for as noise can smear out experimental results, hence missing small but significant effects.

The second confounder is bias. This introduces a unilateral shift of results that cannot be accommodated by using a larger sample population. This is more likely to be a problem if the confounder tends to shift the results in a favorable manner for the trial designers who are then more likely to ignore it. Hence, the need for careful and meticulous trial design.

> Ideally, one should be interested in both the immediate effect of a treatment method and the duration of its effect.

One of the first elements of good trial design is to have a control group of patients to compare the treatment group with. Older studies tended to use case reports which simply described the way one individual was treated and the outcome. Case series looked at a group of patients. Cohort studies look at prospective or retrospective outcomes with groups of patients receiving different treatments. However, these suffer from the fact that the choice of specific treatment is not based on random allocation, but conclusions can be suggested on the basis of such trials.

The double blind (or triple blind) randomized controlled trial allows a quantitative estimate for the soundness of any hypotheses being put forward. The double blind version ensures that the patient and the therapist are unaware of which treatment is being carried out (and in the triple blind the assessor is also unaware). These types of design are the most resistant to bias but are very difficult to carry out, especially where manipulation is involved as the therapist obviously knows what treatment is being given.

The study population is also an area which needs to be clearly defined as age, sex, ethnicity and occupation can dramatically affect outcome. Subtler confounding variables can arise if the population is drawn from those suffering chronic problems (which are often the easiest to recruit for clinical trials). Using a sampling frame (the universe of patients from which the experimental subjects are drawn) can help by identifying patients representative of a more generalizable population. It is then possible to describe the general makeup of the population from which the study population originates.

Having defined the sampling frame, a sampling method has to be used which eliminates bias, hence using subjects referred to a certain physician will have unpredictable effects. Using a random selection of all eligible subjects is an appropriate sample as then the only bias is that determined by the characteristics of the sampling frame.

The next important step in trial design is to define exactly the clinical intervention such that it is easily reproducible by others. This allows for confirmation or refusion of results. Allied to this is the situation where the intervention includes management strategies. Here the therapeutic algorithm must be defined explicitly. Patient characteristics that determine choice of treatment should be clearly stated and allocation to different treatments should be random if the objective of the study is to compare two treatments. If this is not the case then any difference in outcome

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may result from the criteria that determined treatment allocation, rather than the treatments themselves.

Another bias to be aware of is that of attention bias. Here the clinician administering the therapy is highly enthusiastic towards it and may contaminate results. This can be minimized by having the same therapy provided by several clinicians, which then allows distinguishing between the specific efficacy of the method tested and the enthusiasm of the clinician.

Assessing the outcome of treatment can also produce problems of bias and noise. Sackett and Gent<sup>21</sup> described how inadequate follow-up study or failure to include all subjects in the analysis is often overlooked as a serious source of bias. The length of follow-up must be appropriate for the natural history of the disease. This is difficult in a variable condition such as back pain. In an ideal situation 100 percent follow-up should be attempted since treated and control patients may be lost to follow-up at different rates. As this is often impossible worst-case analysis should be done to determine whether the conclusions of the trial still remain valid if the worst outcome is assumed for subjects lost in the group with better results, and vice versa.

Another problem with results in manipulative therapy is that they are often based on patient response. This is unavoidably subjective. A clear, objective definition of outcome criteria would reduce meaningless variation. Also by blinding the assessor to treatment allocation reduces bias. If the assessors can be someone other than the treating physician, then the element of personal and professional pride is removed.<sup>22</sup> Similarly patients in trials often want to please their treating physician and exaggerate good results while playing down failure.<sup>23</sup>

Statistical interpretation of results is also important and the help of a

statistician to advise about the number of patients required to produce a significant result is vital as well as aiding in the prophylactic limitation of noise and bias.

One of the first large scale trials carried out to establish whether manipulation treatment is of any benefit was carried out by Doran and Newell.<sup>24</sup>

Four hundred and fifty-six selected patients with low back pain were randomly allocated to one of four treatments - manipulation, definitive physiotherapy, corset or analgesic tablets. A multicenter approach was used to gain a higher sample population and the trial was held under the auspices of the British Association of Rheumatology and Rehabilitation.

Cases were selected between 20-50 years of age with painful limitation of movement in the lumbar spine and exclusion criteria were clearly defined. Allocation of patients was stated to be random, although coordinated by the trial physiotherapist, and stratified by hospital and also by time. The nature of the back pain was very heterogeneous with first attacks and also patients with attacks going on for greater than five years.

The trials' biggest drawback is that the investigators did not explicitly specify the details of each treatment. Indeed, they state for manipulation therapy that "the technique used was at the discretion of the manipulator." In addition, treatment lengths varied between groups and in each group. Patients were not blinded but assessors were.

The results demonstrated that none of the methods of treating low back pain compared in this trial showed any great superiority. Patients treated with analgesics alone fared marginally worse than those on the other three treatments. This was the case at three weeks, six weeks (determined by clinical examination and patient response) and also at three months and one year after commencing treatment. Hence, Doran and Newell concluded that in the longterm the corset was as effective as other treatments and easily the most costeffective. They also felt that if manipulation did not work within a few weeks there was little point in continuing, and there was no way of identifying those who would benefit.

Sims-Williams and colleagues<sup>25</sup> went further a few years later by using a doubleblind controlled trial to compare mobilization and manipulation with placebo physiotherapy. Ninety-four patients were entered into the trial. They were diagnosed as having nonspecific lumbar pain which caused them to see their general practitioner. Exclusion criteria were stated, allocation was random, and treatments were specifically described. The point was made that patients were drawn from the general practice setting and patients attending hospital rheumatological and orthopaedic clinics represented a different group of sufferers with more severe symptoms.

The results again suggested that most patients with back pain obtained relief without any specific treatment. They concluded that mobilization and manipulation may hasten this improvement but made no difference to the long-term prognosis. No factor was demonstrated to lead to an improved prognosis other than a short history. This is a point worth noting since if a prognostic marker could be found then it would allow one to manage the patient more appropriately and cost-effectively.

In 1985 osteopathic manipulation and short wave diathermy treatment were compared to placebo in a controlled trial by Gibson et.al.<sup>26</sup> Again the subjects were 109 patients with low back pain but this time hospital outpatients with less than 12 months duration of pain. The authors highlighted the prevalence of backpain and the implication that its successful treatment would have for the working population. Interestingly, this study was the first controlled evaluation of manipulation as carried out by an osteopath rather than a physiotherapist.

Their results indicated a high placebo effect with more than 50 percent of patients reporting a beneficial effect immediately from all 3 treatments. This benefit was sustained at 2 weeks and 12 weeks into treatment but there was no significant difference between the 3 groups.

The authors concluded that there was no evidence for the beneficial effect of osteopathy compared to placebo. Any wish by the medical profession to learn more about heterodox practice was misplaced they suggested and the article did end by stressing how big a placebo response can be achieved when "harmless" treatments are applied with conviction. This alludes to the "attention bias" factor mentioned earlier.

These trials and others prompted Ottenbacher and Difabio<sup>27</sup> to carry out a meta-analysis of the efficacy of spinal manipulation/mobilization therapy. One could fault the technique of meta-analysis (or quantitative review) since it can basically compound any errors or questionable findings in the primary trials. However, it does provide a way of looking at a much larger sample of patients and so amplifying the chance of finding small but significant results.

The investigators found only 9 trials that met the pre-specified criteria for inclusion in the meta-analysis. The first important conclusion was that studies not employing random assignment were more likely to produce results supporting the use of manipulation/mobilization therapies. Also, the effects in favor of manipulation and mobilization were greater when manual therapy was provided in conjunction with other forms of treatment and were also greater when the treatment effects were measured immediately following therapy. Their final conclusion provided more questions than answers in that their results indicated only limited empirical support for spinal mobilization and manipulation when used to treat pain, flexibility limitations, and impairment in physical activity. They specified the need for further trials and then metaanalysis of these trials.

The idea that additional therapy in conjunction with manipulation can produce greater effects was studied by Ongley and colleagues.<sup>28</sup> They used chronic low back pain (of average duration 10 years) and randomized patients into two groups: the first employing forceful spinal manipulation and injections of a "proliferant" solution into deep tissue structures; the second having less forceful manipulation and saline injections. The trial was double blinded. The results were quite impressive showing significant improvements in terms of disability at one, three and six months from the end of treatment in the experimental group. Similarly, visual anagram pain scores showed advantages for the experimental regimen.

This study is different from most others in that it used an additional therapy with manipulation as well as patients with chronic back pain. Problems arise in that the individual contributions of each treatment cannot be quantified. The authors concluded that further studies to elucidate this were required but in the meantime their experimental regimen was "a safe and effective treatment for chronic low back pain that had not responded to other conservative forms of treatment."

MacDonald and Bell<sup>29</sup> carried out an open controlled assessment of osteopathic manipulation in nonspecific low back pain. The trial was an open design in that the therapy was not blinded and assessment of patients was carried in an open manner.

A twice weekly back pain clinic was set up in a group general practice in an outer suburban area of London. Exclusion criteria were applied and eligible patients were offered the chance to be seen in the back pain clinic. Allocation was random to either the osteopathic manipulation group or the control group. The latter consisted of advice on posture, exercise, and avoidance of occupational stresses as appropriate to their situation. The treatment group were given this and manipulation. Patient progress was assessed by the filling in of a disability self-assessment questionnaire.

The findings demonstrated that osteopathic manipulation was effective in some patients presenting with pain durations of 14 to 28 days but no response was demonstrated in those with shorter episodes at presentation. The advantage to manipulated patients was maximal between 1-2 weeks after commencing treatment, but was not discernible after 4 weeks.

The authors concluded that their results were significant as they closely matched those seen by Hadler et.al.<sup>30</sup> from North Carolina. They used a stratified controlled trial of manipulation in acute low back pain, minimizing bias and contamination by confounders. Thus, their significant results are more likely to be a real beneficial effect of osteopathic manipulation. However, MacDonald and Bell did stress the need for further comparative trials.

This was taken up by Meade and colleagues in a controversial study in 1990. They used a randomized clinical trial to compare chiropractic and hospital outpatient treatment for managing low back pain of mechanical origin. Seven hundred and forty-one patients were entered into the trial ranging in age from 18-65. Outcome was measured by changes in score on the Oswestry pain disability questionnaire and in the results of straight leg raising and lumbar flexion. The results indicated that chiropractic treatment was more effective than hospital outpatient management principally in chronic or severe back pain. However, the actual benefit of the Oswestry scale at 2 years was only about 7 percent points. Their date showed that the benefit of chiropractic treatment became more evident throughout the follow-up period. From this, Meade concluded that "for patients with low back pain in whom manipulation is not contra-indicated chiropractic almost certainly confers worthwhile, long-term benefit in comparison with hospital outpatient management. The benefit is seen mainly in those with chronic or severe pain. Introducing chiropractic into NHS practice should be considered." The findings of this trial were taken in some quarters to be the best evidence yet that manipulative therapy was of definite benefit in musculoskeletal problems. However, several workers then questioned the validity of Meade's results.

Assendelft and colleagues<sup>31</sup> reviewed Meade's trial and found some major inadequacies. Firstly, there was no difference between the 2 treatment groups during the first 6 weeks. This is contradictory to most trials which found that manipulation conferred its greatest advantage (if any) early on and any benefits had disappeared on longer term follow-up. Meade et al proposed that the maximum was seen 2 years.

Secondly, the 2-year results were obtained from the responses of only 194 patients, compared to the 745 patients in the trial. In other words only 26 percent of subjects returned their questionnaires. There also seems to be a problem in that results were presented and conclusions drawn despite the fact that the majority of patients had not yet been able to complete the entire follow-up period. It also emerged that the late starters had done less well with manipulation and may have negated the significant results published.

Thirdly, no data was published regarding the reason for dropouts, hence the concept of selective dropout must be considered. It may be that dropouts did not improve or deteriorated with the assigned therapy so overestimating the effectiveness of the therapy. Worst-case analysis would have proved the solution.

Fourthly, the difference found of 7 percent points on the Oswestry scale is not very impressive and should have lead to a much more cautious reception for the stated results in terms of significance.

Fifthly, Meade et al failed to describe any co-interventions the subject may have seeked during the 2 years follow-up, just stating that some patients did have "further treatment."

Lastly, the most beneficial and lasting results were seen in those patients who were "chiropractic referrals." That is, they originally sought treatment at a chiropractic clinic. This obviously may influence self-assessment by the patients and give a falsely high effectiveness for chiropractic manipulation.

It is clear then that Meades' results need to be duplicated before any strong conclusions can be drawn.

A series of Dutch studies have been published recently.<sup>32, 33, 34</sup> Koes et.al.<sup>32</sup> undertook a computer aided review of 35 randomized clinical trials comparing spinal manipulation with other treatments. They found that most trials were of poor quality with questionable methodology, study population, interventions, measurement of effect and data presentation and analysis. The results were varied and the better trials showed no real benefit for manipulation against reference treatment.

Koes and coworkers<sup>33</sup> presented the results of their own trial in 1992 comparing the effectiveness of manipulative therapy, physiotherapy, treatment by the general practitioner, and placebo therapy in patients with persistent nonspecific back and neck complaints.

Results showed that manipulative

therapy improved the patient's main complaint compared to physiotherapy and also larger improvements in physical functioning. However, these were not statistically significant. The investigators concluded that manipulative therapy and physiotherapy were better than general practice and placebo treatment, and manipulative therapy was slightly better than physiotherapy after 12 months.

Further subgroup analysis suggested that manual therapy gave better results compared to physiotherapy in chronic patients and in patients younger than 40years-old.<sup>34</sup>

From all the trials mentioned it emerges that most of the work done in this field of research suffers from methodological problems. Results may show a slight benefit of manipulative or osteopathic therapy over other more conventional treatments. All trials end by suggesting that further trials are needed to elaborate on their findings.

In the present study osteopathic manipulation is used to see if the number of musculoskeletal complaints suffered by patients in the family practice setting can be reduced. This will have implications for the role of osteopathy in the NHS, and in health promotion activities, and in the long-term for reducing working days lost through back pain.

[Part II will be published in the Winter issue of the AAOJ, December 1996.]

#### **Editor's Note:**

Mary Banihasem, DO, currently is on the teaching faculty of the OMM Department of the New York College of Osteopathic Medicine. She earned her Masters of Science degree from Health Promotion in London, England and her Doctor of Osteopathy degree from the British School of Osteopathy.

Dr. Banihasem is an associate member of the American Academy of Osteopathy.

## Program

Eileen DiGiovanna, DO, FAAO Program Chairperson

#### Friday, October 25, 1996

	A
8:00 am	Registration
8:30 am	Introduction to Facilitated
	Positional Release (FPR)
	Eileen DiGiovanna, DO, FAAO
8:45 am	Physiologic Basis for FPR
	Dennis Dowling, DO,
9:15 am	Basic Principles for FPR
	Stanley Schiowitz, DO, FAAO
9:30 am	Technique for Quick Diagnosis
	of Cervical Spine
	Stanley Schiowitz, DO, FAAO
10:00 am	Break
10:30 am	Treatment of Cervical Spine
	with FPR: Soft tissues, C2-C7,
	Occipito-Atlantal, Discogenic
	Pain
	Eileen DiGiovanna, DO, FAAO
12:00 nn	Lunch
1:30 pm	Quick Diagnosis of Thoracic
	and Lumbar Dysfunction
	Stanley Schiowitz, DO, FAAO
2:00 pm	Treatment of Thoracic Spine
	with FPR; Soft Tissues, Seated
	Technique, Upper Thoracic,
	Lower Thoracic, Prone
	Technique
	Dennis Dowling, DO
4:00 pm	Questions and Answers; Review
	Faculty
4:30 pm	Adjourn

#### Saturday, October 26, 1996

8:30 am	Registration
9:00 am	Treatment of Ribs 2-12
	Anterior, Posterior
	Dennis Dowling, DO
9:45 am	Treatment of First Rib
	Eileen DiGiovanna, DO, FAAO
10:15 am	Break
10:30 am	Treatment of Lumbar Spine
	with FPR; Soft Tissue, Flexion
	Dysfunctions, Extension
	Dysfunctions, Discogenic Pain
	Stanley Schiowitz, DO, FAAO
12:00 nn	Lunch
1:00 pm	Treatment of Sacrum
	Eileen DiGiovanna, DO, FAAO
1:45 pm	Treatment of Gluteal
	Tender Points
	Dennis Dowling, DO
2:15 pm	Treatment of Anterior Hip
	Eileen DiGiovanna, DO, FAAO
2:30 pm	Treatment of Extremities
	Knee, Foot and Ankle, Shoulder
	Elbow, wrist and hand
4:30 pm	Questions and Answers; Recap
	Faculty
5:00 pm	Adjourn

## Facilitated Positional Release October 25-26, 1996

University of North Texas Health Science Center at Fort Worth/Texas College of Osteopathic Medicine Fort Worth, Texas

#### Advance Registration Deadline: September 25, 1996

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Prior to September 25, 19	96:
AAO Member	\$350
Intern/Resident/Student	\$350
AAO Non-Member	\$450
After September 25, 1996	
AAO Member	\$450
Intern/Resident/Student	\$450
AAO Non-Member	\$550

#### Who May Attend

Fully licensed physicians, residents, interns and students.

#### **Refund Policy**

The American Academy of Osteopathy reserves the right to cancel this educational program if insufficient physicians pre-register. Sufficient registrations must be received 30 days prior to the opening of the course. If you are considering registering for this course less than 30 days prior to the opening, contact the Academy office before making travel plans. In the event of course cancellation by the Academy due to lack of registration, all money will be refunded.

Cancellation from participants received in writing for other reasons up to 30 days prior to the course opening are subject to withholding of a 15 percent administrative fee. All other cancellations will receive no refund but may transfer 80 percent of the tuition to another AAO educational program held within the next 12 months.

> Hotel Reservations? call the hotel directly by September 24, 1996:

LaQuinta Inn 825 North Watson Road Arlington, Texas 76011 (817) 640-4142

Facilita Oc	ference Regis ated Positiona tober 25-26, HSC at Fort TCOM	al Release 1996
Name for	Badge (please p	rint clearly)
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We Acce	pt MasterCa	rd & VISA
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Card Nun	1ber	
Expiration	n Date	
Signature		
Hours	: 12.5-Categ	gory 1-A

\$65.00 Room Rate: includes an upgraded continental breakfast and free transportation from Dallas/Fort Worth Airport; Also available is an on-site lounge; room service and a fitness center. Within walking distance of 10 restaurants and across the street from Six Flags Over Texas. Complimentary transportation will be provided by AAO to TCOM.

## **Myofascial Release**

## October 25-27, 1996

University of North Texas Health Science Center at Fort Worth/ Texas College of Osteopathic Medicine, Fort Worth, Texas

Judith O'Connell, DO, FAAO, Program Chairperson and Presenter

### Program

#### Friday, October 25, 1996

#### AM

- 8:00 Introduction: Our roots in the fascia.
- 9:00 Fascia, specialized connective tissue,
- properties and function. 10:00 Enlightening Properties, piezoelectric considerations
- 11:00 Anatomy 1: relationships to muscle, dura, lymph, nerves, blood.

#### 11:45 Lunch

#### <u>PM</u>

- 1:00 LAB: exercises in postural relationships.
- 2:00 Anatomy 2: Horizontal diaphragms.
- 3:00 LAB: diaphragms.
- 5:00 Adjourn

### Saturday, October 26, 1996

#### AM

- 8:00 Anatomy 3: longitudinal cables.
- 9:00 LAB: the holographic system, cables and diaphragms.

#### <u>PM</u>

12:00 Lunch.

- 1:00 Anatomy 4: dura and the reciprocal tension membrane.
- 2:00 LAB: putting it all together
- 5:00 Adjourn

## Sunday, October 27, 1996

AM 8:00 Trauma: fascia first! Following patterns through the fascia.

- 9:00 LAB: trauma patterns
- PM
- 12:00 Adjourn

Appropriate Dress: Loose fitting sports attire.

Make Hotel Reservations by calling the hotel directly by September 24, 1996.:

### Advance Registration Deadline: September 25, 1996

#### **SEMINAR FEE:**

#### Prior to September 25, 1996:

AAO Member\$525Intern/Resident\$525AAO Non-Member\$625

#### After September 25, 1996:

AAO Member	\$625
Intern/Resident	\$625
AAO Non-Member	\$725

#### Who May Attend

Fully licensed physicians, residents and interns. *Students will not be able to attend this course.* 

#### **Refund Policy**

The American Academy of Osteopathy reserves the right to cancel this educational program if insufficient physicians pre-register. Sufficient registrations must be received 30 days prior to the opening of the course. If you are considering registering for this course less than 30 days prior to the opening, contact the Academy office before making travel plans. In the event of course cancellation by the Academy due to lack of registration, all money will be refunded.

Cancellation from participants received in writing for other reasons up to 30 days prior to the course opening are subject to withholding of a 15 percent administrative fee. All other cancellations will receive no refund but may transfer 80 percent of the tuition to another AAO educational program held within the next 12 months.



Hours: 20-Category 1-A

<u>Conference Registration</u> Myofascial Release Course October 25-27, 1996 UNTHSC at Fort Worth/ TCOM

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Signature		
	Rate: includes an	

the street from Six Flags Over Texas. Compli-

mentary transportation will be provided by

AAO to TCOM.

## ... dysmenorrhea in young women continued from page 17

for dysmenorrhea intensity, and the group A category words continuous, steady, constant (seen in Table 3) were more consistently chosen to describe the pain Questionnaire (MPQ) used in this research to quantify pain intensity changes pre- and posttreatment is reproducible and objectifies pain descriptors chosen by the subjects. Other medically accepted pain or menstrual questionnaires have been used for the

TABLE 3: The most common sub-group choices from group A pre- and posttreatment and the average percentage use at each menstruation.

	GP - A pre-treatment	GP - A post-treatment
Subgroup		
5	Cramping (58%)	Cramping (55%)
9	Aching (38%)	Aching (50%)
11	Tiring (62%)	Tiring (85%)
16	Annoying (22%)	Annoying (33%)
20	Nauseating (50%)	Nauseating (57%)

of primary dysmenorrhea.<sup>17,19</sup>

Noted from Table 3 a greater proportion of lower-rank value descriptors chosen from all subgroup word descriptors posttreatment and this resulted in a reduction in the PRI (R) scores overall.

Osteopathic palpatory findings on the initial visit revealed somatic dysfunction at one or more spinal segmental levels T10-11-12 (62.5 percent), L5 (75 percent) and a sacral torsion (100 percent). These findings are comparable with other studies relating spinal segmental dysfunction and primary dysmenorrhea.

#### Discussion

In this controlled pilot study 75 percent of subjects recorded a significant reduction in menstrual pain intensity over four cycles, following osteopathic treatment. This supports previous claims that spinal manipulation reduces the pain felt with menstruation.

The modified McGill Pain

study of dysmenorrhea.<sup>2,21,22</sup> The accuracy of the MPQ results is guarded due to variation of category interpretation and limitation of subgroup word descriptors.

The MPQ results indicated a tendency for subjects prior to osteopathic treatment to describe menstrual pain on the worst day as "continuous, steady and constant." The selection of these words is consistent with previous primary dysmenorrhea studies.

The PRI (R) results indicated a larger selection of words chosen to describe pain of higher intensity during pretreatment menstrual cycles compared with the posttreatment decline in pain intensity both in terms of number of words chosen and the mean rank value of the words chosen.

The high selection of *sensory* word descriptors posttreatment may suggest that subjects still considered the menstrual pain as *distressing* although the descriptor word ranking scale quantified a reduction in overall pain felt. The *evaluative* category score changes suggests an emotional response to the word descriptors chosen and this, in part, may have influenced the *sensory* scores. The inter-subject variance may be influenced by factors such as individual differences in interpretation of the word descriptors or intensity of the pain felt. A multiple baseline for each individual was established pretreatment using the MPQ to reduce the variance in results with respect to expectation and placebo response.<sup>20</sup>

It may be suggested from these results that the osteopathic treatment aided in reducing the pain felt by the subjects, however, due to patient expectation and a limited time duration of this study, the long term effect on changing uterine dysfunction in these women is unknown and further study is required.

Many etiologies for primary dysmenorrhea have been theorized, including the association between musculoskeletal alignment and visceral function.<sup>15</sup> It is suggested that osteopathic treatment for dysmenorrhea is directed toward normalization of musculoskeletal function and restoration of normal physiology through spinal and autonomic reflex mechanisms.<sup>4</sup> These reflex responses may be facilitated at spinal segments by disturbance of afferent pathways to the cord from either musculoskeletal or visceral structures.<sup>23,24</sup>

Uterine sympathetic and sensory pathways arise from spinal segments T10 through L2 (controlling uterine contraction and vasoconstriction) while the parasympathetic innervation arises from S2-3-4 (controlling uterine inhibition and vasodilation).<sup>25</sup> Facilitation of segments at these levels may cause tissue response related to that area (specifically lumbar erector spinae musculature) and including the pelvic viscera.<sup>4</sup>

Facilitation may influence neurons in the interomediolateral cell columns of the thoraco-lumbar cord with a resulting increase in the sympathetic nervous system outflow to viscera and blood vessels supplied by those nerves. Concomitant metabolic and circulatory changes eventually lead to changes in structural and functional capacity of those viscera.

Segmental facilitation is attributed to proprioceptors i.e. stretch, tension and pressure receptors at segmental spinal musculature and connective tissue, and including receptors in the body of the uterus and broad ligament. The branches of the uterine nerves accompany myometrial and endometrial blood vessels and autonomic influence stimulates vasoconstriction and vasodilation.

Although endocrinologic, nutritional and psychogenic aspects of primary dysmenorrhea are important etiologies to consider, pain mechanisms may be related to hypercontractility of the uterine musculature and angiospasm of uterine circulation.<sup>27</sup> Prostaglandins PGE2 and PGF2a that are produced and secreted from the endometrium are largely responsible for this hypercontractility and angiospasm. Thus it is hypothesized that through balancing of the ANS and reduction of spinal segmental facilitation, the prostaglandin levels may be reduced. Whether somatovisceral or viscerosomatic reflex in origin, general Osteopathic treatment is holistic in conception and application, and hence directed not only toward spinal manipulation of related spinal and sacral somatic dysfunction, but also the application of direct technique for visceral and autonomic ganglia (superior and inferior mesenteric ganglia) inhibition.

Osteopathic treatment to restore bony alignment and improve sympathetic and parasympathetic balance is foremost in the reduction of venous and lymphatic congestion in the pelvic organs.<sup>25</sup> We suggest that the potential to alter viscerosomatic hyperexcitability, associated with primary dysmenorrhea, by incorporation of manual visceral technique, is an essential key to reducing the viscero-somatic reflex.

#### Conclusion

This pilot study, at a statistically significant level, has suggested the efficacy of Osteopathic treatment in reducing the pain of primary dysmenorrhea in the young women studied. Thus osteopathic treatment is indicated in the prevention and treatment of Primary Dysmenorrhea. The results of this study encourage further research by the Osteopathic physicians to scale pain changes in the clinical setting. Suggestions for further study in this area include a larger number of subjects studied over a longer duration of time with the MPO and the monitoring of prostaglandin levels pre- and posttreatment.

#### Acknowledgments

Many thanks to Drs. M. Matthews, C. Tucker, P. Munoz, and P. Ebrall. Also to R.M.I.T. for the use of osteopathic treatment and research facilities, A. Mathur for statistical results and Mrs. J. Morgan for typing. Special thanks to the Women's Department at R.M.I.T. for supporting this research project.

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## **Book Review**

23. Korr, I.M., Andrew Taylor Still memorial lecture. Research and practice – a century later, J.A.O.A. 73 (1974) 362-369.

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# Muscle energy techniques

Reviewed by Raymond J. Hruby, D.O., F.A.A.O., Chairperson Dept. of OMM, MSUCOM Authored by Leon Chaitow, N.D., D.O.

Editor's Note: Available from Churchill Livingstone, 1-3 Baxter's Place, Leith Walk, Edinburgh EH1 3AF, United Kingdom. Telephone: 44 (0) 131-556-2424. Fax: 44 (0) 131-558-1278. ISBN: 0 443 05297 2. Price: £ 23.50.

The cover of this book states that the text "...provides a comprehensive and up-to-date presentation of muscle energy techniques, providing students, therapists and practitioners with all the background information they need in a reference and study guide." This reviewer would have to disagree with that statement. While the book presents much that is valuable, there are some things missing that make it less than a comprehensive reference.

Dr. Chaitow is a naturopath and British trained osteopath who has written several books on various aspects of manual treatment. He is a Senior Lecturer in London, and continues to be an active practitioner.

On the positive side, this book presents a great deal of useful information on muscle energy technique (MET) and its applications. There is appropriate reference to the development of muscle energy technique within the American osteopathic profession. Proper credit is given to Fred Mitchell, Sr., DO, FAAO, as the recognized developer of MET. Because of the recent publication date, the author would not have been able to cite the muscle energy text written by Fred Mithcell, Jr., DO, FAAO. There is also reference to current American experts in the field, such as Greenman and Stiles. There is also mention of the resistive duction technique of T. J. Ruddy, DO, as the precursor of Mitchell's efforts in this area. There is some discussion of other related methods such as peripheral neuromuscular facilitation (PNF) and Travell trigger point and soft tissue methods. The similarities and differences between MET and these other methods are noted.

The book also contains a great deal of discussion of the principles of MET and the neurophysiological evidence to support the use of this technique. The author has done a commendable job in synthesizing the research of Korr, Patterson, Janda and others on muscle function and dysfunction into a very readable discussion. Those of you who are interested in the physiologic basis for muscle imbalance and somatic dysfunction will find this information most valuable. It is well written, well illustrated and well documented with scientific references.

The book is generally well orchestrated. The layout is attractive, and the text is easy to read. The illustrations are professionally done and are extremely useful. There is a good list of references at the end of each chapter. Osteopathic literature is frequently cited.

As mentioned above there are a couple

of things that seem to be missing from the book. First, although the author makes reference at times to Type I and Type II segmental dysfunctions, there is no section in the book that specifically discusses the laws of spinal motion as put forth by Fryette. This information is generally taught as part of MET courses and it seems odd not to include it here. This is especially curious since the author includes a chapter on the mobilization of joints using MET. One would need to know about joint motion characteristics in order to use this technique to mobilize joints.

Second, although there is an excellent and extensive presentation of iliosacral dysfunctions and their treatment, there is no such discussion of sacroiliac mechanics or sacroiliac dysfunctions as commonly included in the teaching of MET. This would be a valuable (and expected) part of any text of this nature.

Finally, there is a discrepancy as to the overall characterization of MET. The author refers to its ability to be used in both a direct and indirect fashion, and the techniques described and illustrated in the text are direct techniques. However, the foreword (written by Laurie Hartman) seems to characterize MET as an indirect approach.

Despite these criticisms the book is extremely well done. It would be a valuable addition to the library of any practitioner of manual medicine.  $\Box$