

THE AAO

JOURNAL



A Publication of the American Academy of Osteopathy

VOLUME 6 NUMBER 2 SUMMER 1996

**An Osteopathic Approach
to HIV/AIDS**

see page 9...

Fifth Annual OMT Update

Application of Osteopathic Concepts in Clinical Medicine
plus Preparation for OMM Boards

September 26-29, 1996

Grand Floridian Hotel, Orlando Florida

Registration Form

September 26-29, 1996
Grand Floridian Hotel

Name for Badge (please print clearly)

Street Address

City State Zip

Daytime Phone Number

AOA Number

College and Year Graduated

We Accept



(Circle One)



Card Holder's Name

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.

FEES:

PRIOR TO AUGUST 25, 1996

AAO MEMBERS DO/MD	\$475.00
AAO NON-MEMBERS	\$575.00
RESIDENTS/INTERNS	\$250.00

AFTER AUGUST 25, 1996

AAO MEMBERS DO/MD	\$575.00
AAO NON-MEMBERS	\$675.00
RESIDENTS/INTERNS	\$350.00

CME HOURS:

4 days; 22 hours; AOA Category 1-A
21 hours; AAFP Approved
(Intermediate level)

Program Chairperson:

Ann Habenicht, DO, FAAO

PROGRAM

THURSDAY, SEPTEMBER 26

Opening Reception
Overview of the Course; "Applications of osteopathic concepts in clinical medicine... What to use: When and Why"
"Cranial Osteopathy"
"Counterstrain"
"Myofascial Release"
"Visceral Manipulation"
"Muscle Energy"
"High Velocity/Low Amplitude"
"Exercise Prescription"

FRIDAY, SEPTEMBER 27

Breakfast Lecture Coding Update - Getting Paid for What You Do
"Thoracic Trouble-shooting" (to include various modalities approach - HVLA, ME, counterstrain, indirect-MFR & cranial) Skills Session: Thoracic
"Cervical/Suboccipital Troubleshooting"
Skills Session: Cervical/Suboccipital - Wrap-Up Session: (Summary)

SATURDAY, SEPTEMBER 28

Breakfast Lecture Coding Update -- Part II
"Upper Extremity Troubleshooting"
Skills Session: Upper Extremity
Lumbar/Pelvis Troubleshooting"
Skills Session: Lumbar/Pelvis
Wrap-Up Session: (Summary)

SUNDAY, SEPTEMBER 29

Breakfast Lecture-Coding Update Part III
Lower Extremity Troubleshooting"
Skills Session: Lower Extremity
Preparation for Manipulative Boards - Case Study Preparation - "How to write them"
Written Exam Prep - "What to expect"
Oral Prep - "What to expect & how to do it"
Individual Troubleshooting
**** Alternate Program ****
Sports Medicine - Extremity Review

ADJOURN

LODGING: GRAND FLORIDIAN HOTEL WALT DISNEY WORLD®

Participants will receive a rate of \$154 single/double occupancy. Additional Person (18 years or older): \$15.00 per person. This is prime season in Orlando, so please call early and make your hotel reservations.

Make hotel reservations by August 25, 1996

because it is the reservation cutoff date and you cannot be guaranteed a room after that date or at that price. Call 1 (800) 327-2990 for reservations and be sure and tell them you are with the American Academy of Osteopathy's group.

American Academy of Osteopathy

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

1996-1997 BOARD OF TRUSTEES

President
Michael L. Kuchera, DO, FAAO

President Elect
Ann L. Habenicht, DO, FAAO

Immediate Past President
Boyd R. Buser, DO

Secretary-Treasurer
Anthony G. Chila, DO, FAAO

Trustee
Mark S. Cantieri, DO

Trustee
John C. Glover, DO

Trustee
John M. Jones, DO, III

Trustee
Judith A. O'Connell, DO, FAAO

Trustee
Karen M. Steele, DO, FAAO

Trustee
Melicien A. Tettambel, DO, FAAO

Executive Director
Stephen J. Noone, CAE

Editorial Staff

Editor-in-Chief Raymond J. Hruby, DO, FAAO

Supervising Editor Stephen J. Noone, CAE

Editorial Board Barbara J. Briner, DO
Anthony G. Chila, DO, FAAO
James M. Norton, PhD
Frank H. Willard, PhD

Managing Editor Diana L. Finley

THE AAO JOURNAL

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	5
<i>by Raymond J. Hruby, DO, FAAO</i>	
Message from the President	6
<i>by Michael L. Kuchera, DO, FAAO</i>	
Message from the Executive Director	7
<i>by Stephen J. Noone, CAE</i>	
AAO Calendar of Events	8
An Osteopathic Approach to HIV/AIDS	9
<i>by Terrence Mulligan, MS-III</i>	
The Effects of Somatic Dysfunction on the Spinal Accessory Nerve (CN XI) with Subsequent Distal Dysfunctions	13
<i>by Sherman Gorbis, DO, FAAO</i>	
From the AOBSPOMM Files: Recurrent Otitis Media	16
<i>by Bonnie R. Gintis, DO</i>	
Outcome Research on Health Care in Ambulatory Care Practice	18
<i>by Deborah M. Heath, DO and Albert F. Kelso, PhD</i>	
Book Review: The Muscle Energy Manual, Volume One	26
<i>Authored by Fred L. Mitchell, Jr., DO, FAAO and P. Kai Galen Mitchell, BA</i>	
<i>Reviewed by Raymond J. Hruby, DO, FAAO</i>	
Letter to A.T. Still	28
CME Calendar	28
Classifieds	31
Supporters of the 1996 Annual Convocation	31
From the Archives	33
<i>by Warren B. Mack, DO</i>	

Advertising Rates for the AAO Journal

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: \$25.00 per year

The AAO Journal is the official quarterly publication of the American Academy of Osteopathy (3500 DePauw Blvd., Suite 1080, Indianapolis, Indiana, 46268-1136). Third-class postage paid at Carmel, IN. Postmaster: Send address changes to American Academy of Osteopathy 3500 DePauw Blvd., Suite 1080, Indianapolis, IN., 46268-1136

The AAO Journal is not itself responsible for statements made by any contributor. Although all advertising is expected to conform to ethical medical standards, acceptance does not imply endorsement by this journal.

Opinions expressed in The AAO Journal are those of authors or speakers and do not necessarily reflect viewpoints of the editors or official policy of the American Academy of Osteopathy or the institutions with which the authors are affiliated, unless specified.

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



Time, Medallions, and Passings

On April 26, I flew from my home in Lansing, Michigan to Indianapolis. The purpose of my trip was to go the AAO headquarters where, as Chair of AOBSPOMM, I presided over the certification examination given that weekend. As Steve Noone, our Executive Director, was driving me and several board members from the airport to the AAO office, he informed us that Lawrence H. Jones, DO, FAAO, had passed away earlier that week on April 22, a Tuesday.

Dr. Jones' memorial service was being held even as we trekked our way to the Pyramids. I have thought about Larry Jones since hearing the news of his passing. I came to realize just how much time has passed since I first met him. Some 17 years ago, I traveled to Ontario, Oregon, where Larry practiced for many years, to be a student in one of his tutorials on strain/counterstrain, the osteopathic technique he discovered and developed. In those days, Larry would accept six people into a tutorial, and these folks would spend five days in his office, being taught the fundamentals of his technique. We also got hands-on practice treating Larry's patients who would graciously allow those of us learning this new method to try it out on them. The tutorial, itself, was wonderful, but even more wonderful was the experience of meeting a man who became for me, a friend and colleague. It was always a pleasure seeing Larry at Convocation every year, and having the opportunity to learn more from him each time we had a chance to speak together.

When I was a faculty member at the University of New England College of Osteopathic Medicine, an introductory course in counterstrain became part of the curriculum. Larry came to campus annually to deliver the major portion of the course. Larry Jones was a kind, gentle, and unassuming man. He had boundless energy and great devotion to his profession. I can still recall being in his office for that tutorial, listening to him describe how he discovered and developed the counterstrain technique that has since been embraced by thousands of practitioners. I can remember dinner at his home in the evening, and, I remember, many dinners and conversations with Larry during his yearly visits to New England. He was a gentleman always, and his sense of humor was unsurpassed. This year at the AAO Convocation Larry was one of three people to receive the A. T. Still Medallion of Honor, the highest award given by the Academy. Needless to say he richly deserved that award, as did his colleagues who were also honored at that time. He will be remembered as one of the truly great innovators within the profession. The death of a friend and colleague should make all of us stop and think. Time passes so rapidly, and there never seems to be enough hours in the day to accomplish all that we want to do. Despite his tireless efforts to develop and teach his technique, Larry Jones seemed to strike the right balance between work, family, and personal life. He knew how to work hard, but he also knew how and when to stop and smell

the roses. We can all learn a lesson from his long and illustrious life. When someone close to us dies, it helps those of us who remain behind to console ourselves with these kinds of thoughts. It helps us to think that our departed friend and colleague has gone on to an eternal reward commensurate with his lifetime efforts to do good and make the world a better place.

Perhaps this is a good time to remember the words of A. T. Still, who said: "What is death but a birth, from the second placenta to which life has been attached." We will all miss you, Larry. Take care. □

ENCOURAGE YOUR COLLEAGUES
TO BECOME
OMM CERTIFIED!

DATES TO REMEMBER

July 16

AOBSPOMM

Case History deadline

November 16-17

AOBSPOMM Examinations

 **American
Academy of
Osteopathy**

3500 DePauw Blvd., Suite 1080,
Indianapolis, IN 46268-1136
Phone: (317) 879-1881 or FAX: (317) 879-0563

Message from the President

by Michael L. Kuchera, DO, FAAO



Children of the Philosophy 1996 AAO INAUGURAL SPEECH

There is a Unity in the osteopathic philosophy which our Academy embraces.

- Unity drives our long range plan.
- Unity challenges us to be “missionaries” for our “Mission.”
- Unity inspires us to embrace those who share our goals, hopes, and aspirations.

There is a Totality in the osteopathic philosophy which our Academy embraces.

- This Totality provides a foundation of strength, power, and stability.
- It extends into our professional, familial, and personal lives.
- It permits integration with our physical, mental, and spiritual pursuits.

There is a Freedom in the osteopathic philosophy which our Academy embraces.

- Freedom to grow.
- Freedom to learn.
- Freedom to heal.

The osteopathic philosophy which our Academy embraces encourages an inquiring mind and spirit.

- I pledge to promote osteopathic research and to expand both research and educational opportunities during my presidency.

The osteopathic philosophy which our Academy embraces requires nurturing; it exists to be practiced.

- I pledge to uphold the Academy mission statement, advance and Long Range Plan, and do all in my power to support the Academy and its parent organization, the AOA.

Finally, the osteopathic philosophy which our Academy embraces commands respect.

- I pledge to cherish our philosophy, to defend and provide stewardship for it, and to respectfully place it at the center of the Academy’s deliberations.

I am a child of the osteopathic philosophy. I stand before you born and raised in a household permeated with the osteopathic philosophy. The philosophy was:

- Not preached as much as practiced;
- Not worshipped as much as respected;
- Not implied as much as applied.

I am a child of the mission of the Academy. I went to a college where osteopathic tenets were integrated. There I joined the Undergraduate Academy. Attending the Convocation annually as a student provided an atmosphere of nurture and example. I was embraced by names of legend — Becker, Frymann, Kimberly, Lay, Magoun, Heilig, Stookey and Zink.

I am a child of the Academy...

We are the Academy, you and I:

- Each student; each teacher.
- Each physician; each patient.
- Each colleague; each family member.

We are the Academy, you and I:

- At times facilitating; at time orchestrating.
- At times leading; at times enabling.
- Frequently a conscience, always a life force.

We are the Academy, you and I:

- Preserving and promoting the science, art, and philosophy of osteopathy.
- Proud of our heritage.
- Practicing what we preach.

Yes, I am a child of the Academy. I will remain one until the day I die. Proud to be a part of this family, I will strive to carry its banner and bring it the honor that it is due. □

Message from the Executive Director

by Stephen J. Noone, CAE



Trust 2000: A Legacy for the Osteopathic Profession

Is this just another fund raising program competing for your charitable contribution or is there truly a need for Trust 2000? I would like to provide my perspective as the CEO of this vibrant, growing organization which many have justifiably called the *keeper of the flame*.

The need to replenish the Academy's reserve funds is a reality. The facts are that, for the past eight years, the AAO has operated on deficit budgets as reflected by the following data from annual audit reports:

<u>Audit date</u>	<u>Deficit</u>
July 1989	58,364
July 1990	99,371
July 1991	159,352
July 1992	92,136 **
July 1993	241,569
July 1994	113,568
July 1995	123,359
July 1996	113,801 ##
July 1997	56,901 ##
July 1998	-0- ##

** reduced by a bequest of \$159,549

deficit budget cap set by Board of Trustees

Secretary-Treasurer Anthony Chila has been diligent in his regular financial reports to communicate the decision by the Board of Trustees in the Fall 1992 to cap the budget deficit and implement a plan to reduce the deficit by 25 percent annually. The plan ultimately will balance the budget by the 1997-1998 fiscal year. Fortunately, the Board of Trustees has not had to cut any membership services to meet its financial targets.

The reader will immediately recognize that this deficit spending, while increasing the image and stature of the Academy within the osteopathic profession and the overall medical marketplace, will have expended over \$1 million of

the AAO reserves. There is simply no alternative to the Board's plan to balance the budget if the Academy is to remain a viable organization. I am not concerned about the immediate future as there are sufficient reserves to offset the projected deficits for the next two years. However, the long term future will require that AAO leadership replenish these reserves to ensure continued viability.

The AAO Board of Governors adopted a Long Range Plan for the Academy in 1992, including one goal "To develop, implement and evaluate a long range fund raising program to generate at least \$10 million to supplement the operations of the Academy." The early strategy was to reinstate the Golden Ram Society as an annual campaign to support the development of new educational programs. The Golden Ram campaign has been highly successful, generating over \$30,000 annually for the past two years.

In March 1996, the Governors approved the establishment of Trust 2000: A Legacy for the Osteopathic Profession. As you will read on page 19 of this journal, the Governors intend to fund this endowment through the generous planned giving of Academy members. The AAO leadership asks if you believe in the Academy and its Mission? Do you want to give a lasting gift to this special organization in return for the *treasure of osteopathy* you have received over the years from the AAO mentors and legends who preceded you?

While the decision to make a contribution is yours, the Governors have recommended the purchase of life insurance as the preferred vehicle for this endowment campaign. I encourage you to seriously consider making a substantial gift at this time to *Trust 2000* in addition to your annual contribution to the Golden Ram Society. Please fill in the requested information on page 19 and return the form to receive more information. You can share in this living *Legacy to the Osteopathic Profession* and ensure the continued viability of the American Academy of Osteopathy. □

AAO Calendar of Events

June

28-30

*Osteopathic Considerations
in Systemic Dysfunction*

25 Hours, Category 1A CME

Michael Kuchera, DO, FAAO,

Instructor and Program Chairperson
Chicago College of Osteopathic Medicine

26-30

Intermediate/Advanced Visceral

Jean- Pierre Barral, DO, MROF

John Glover, DO, Program Chairperson

40 Hours, Category 1A CME

Loews Ventana Canyon, Tucson, AZ

27-28

*Concept and Technique
of the Levitor Orthotic Device*

Michael Kuchera, DO, FAAO,

Instructor and Program Chairperson

16 Hours, Category 1A CME

Loews Ventana Canyon, Tucson, AZ

August

22-25

Computer Medicine Tutorial

Thomas A. Naegele, DO,

Instructor and Program Chairperson

30 Hours, Category 1A CME

AAO Headquarters Building

Indianapolis, IN

September

26-29

AAO Fall OMT Update

*Application of Osteopathic Concepts
in Clinical Medicine plus*

Preparation of the OMM Boards

Ann Habenicht, DO, Program Chairperson

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

Same CME as AOA

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

15-17

A Functional Orientation for Technique

20 Hours, Category 1-A

William Johnston, DO, FAAO and

Harry Friedman, DO

Hotel TBA

Indianapolis, IN

16-17

Basic Percussion Vibrator

(Fulford's Method)

15 Hours, Category 1-A

Robert Fulford, DO and Richard Koss, DO

Hotel TBA

Indianapolis, IN

January 1997

12-19

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

For information on AAO courses:

Contact: Diana Finley

(317) 879-1881



CONTACT
LENS
UPTO
75% DISCOUNT

SPONSORED BY: **American
Academy of
Osteopathy**

For a \$15 enrollment fee
you and your family members
can receive
replacement contact lens
at up to 75% discount!

Call the AAO
for an enrollment
form today!
(317) 879-1881

An Osteopathic Approach to HIV/AIDS

by Terrence Mulligan, MS-III
Michigan State University – College of Osteopathic Medicine

Introduction

Look upon the human body as an organized brotherhood of laborers. The business of the operator is to keep peace and harmony throughout the whole brotherhood. He is a worthy osteopath who realized the great importance of this truth, and practices it.

A. T. Still¹

AIDS is a global, holistic disease: holistic in that it affects nearly every aspect of a person's health, anatomy and psychology, and global in that this pandemic virus influences medicine, economics,² politics, culture, and philosophy.² Rarely before has one disease so illuminated our accolades and so highlighted our faults as physicians and care-givers. The way our society approaches AIDS can be seen simultaneously as a valiant attack on a devastating illness as it affects the body, and as an embodiment of our prejudices and fears as it affects our society. To reduce the effects of HIV on our patients and on our community, we must embrace those unspoken tenets of our osteopathic philosophy that have separated it from the medical world and which have elevated us to a higher level of understanding: we must realize that to defeat a holistic disease we need a holistic approach, and no other scientific belief is more amenable to innovation and change than osteopathy. "If osteopathy is to stand foremost in the ranks of the healing art it must comprehend more than the physical. Osteopathy must see

the power or force that is back of and underlying the Physical body. Osteopathy must recognize Mind as that force. As soon as osteopathy recognizes Mind as the force that molds and shapes the atoms of matter, either into normal or abnormal states, that moment osteopathy commands as a MASTER the entire realm of the Physical."³

Etiology

Modern medicine is still dominated by the notion that disease is caused by objective agents. A sophisticated analysis shows that this is only partly true. A disease cannot take hold without a host who accepts it, hence the current attempts to understand our immune system.

Deepak Chopra⁴

AIDS exhibits a spectrum of clinical manifestations, including an asymptomatic state with only laboratory evidence of immunodeficiency; a prodromal state manifested by fever, weight loss, and lymphadenopathy; and the classic picture of opportunistic infections and Kaposi's sarcoma.⁵ HIV causes primarily a self-limited primary infection syndrome, characterized by rash, fever, and arthralgias with or without meningitis or encephalitis. The human immunodeficiency virus (HIV) is far more devastating to the immune system than to anything else, causing severe numerical depletion and dysfunction of CD4⁺ T-helper-inducer cells. Furthermore, HIV infects and damages

macrophages as measured by diminished capacity of these cells to present antigens to T-cells, by decreased production of IL-1 in response to potent stimuli, and by inability of cells to migrate to a chemotactic stimulus. HIV preferentially infects the CD4⁺ lymphocyte, but may also infect other CD4-antigenbearing cells of the GI tract, uterine cervical cells, and neuroglial cells.⁷ In the CNS, it has been demonstrated that the main cells infected with HIV are monocyte-macrophages. The retrovirus directly infects the CNS and produces a variety of primary neurologic conditions, including polyneuropathy, transverse myelopathy, and, most commonly, a subacute encephalopathy resulting in dementia.⁸ Clinical manifestations of this dementia are found in at least two-thirds of patients with AIDS, and pathologic evidence of the disorder is found in about 90 percent of patients.⁹ AIDS can be seen to symbolize both the ultimate foreign assailant to our self-preservation mechanisms, and the ultimate opportunist, attacking our sense of science and health in precisely the area in which we are least competent.

Epidemiology

There is a right way and a wrong way to get this disease.

HIV+ patient¹⁰

More than one and a half million individuals in the United States are thought to harbor symptomatic HIV

→

infection, and it is believed that more than 40,000 adults and 1,500 to 2,000 newborns will become newly infected with HIV each year.

The average survival rate for women is 6 years after diagnosis of HIV+, and 8-10 years for males.¹¹ Data suggest that AIDS will develop in 54 percent of those infected with HIV within 10 years and that AIDS will eventually develop in virtually all remaining HIV-infected persons who do not succumb to some other disease process first.¹²

Sixty-two percent of all reported cases have occurred in five states—New York, California, Florida, New Jersey, and Texas—states that have large populations in high-risk groups.¹³ In the U.S. and in Western European countries, HIV is primarily confined to definable risk groups: homosexual and bisexual men, intravenous drug abusers, hemophiliacs and blood products recipients, and sexual partners of these groups. Heterosexuals in their late teenage years and in their yearly twenties are at greatest risk for infection.¹⁴ However, several recent treatment projects are beginning to show positive changes from these data, and are focusing on more holistic approaches to the management of people with HIV.¹⁵

Pathophysiology

The fundamental basis for all behavior and for the emergence of mind is animal and species morphology (anatomy) and how it functions.

Gerald Edelman¹⁶

In order to more accurately define the many and varied symptoms of HIV infection, a classification was arrived at by the CDC that consists of four mutually exclusive groups based solely on the clinical symptoms of and the duration of infection.¹⁷ These infections and their symptoms are so varied as to encompass nearly the full range of human pathology, and diagnosis must be made clinically

due to the many possible presentations of this disease.

While AIDS typically represents the simultaneous presentation of fulminant opportunistic infections and physical degeneration due to loss of neural control of the CNS and of the immune system in general, several common patterns exist. Among the most prevalent are fever, lymphadenopathy, pulmonary problems, GI disorders, cutaneous lesions including Kaposi's sarcoma, headache, seizures, and dementia.¹⁸ Since the pathophysiology of AIDS potentially involves many if not all of the body's systems, the osteopathic holistic approach is well suited for addressing dysfunctions of the soma, autonomic nervous system and lymphatics.

Somatic System

Morphology—the shape of cells, tissues, organs, and finally the whole animal—is the largest single basis for behavior.

Gerald Edelman¹⁹

Since so many organs are affected by AIDS, somatic dysfunction is expected in these patients. Among the most common visceral symptoms are lymphadenopathy, pneumonia, GI complications, and cutaneous lesions. Acute and chronic inflammation caused by opportunistic infections can lead to facilitated segments and paraspinal tenderness all along the spine. Cervical and thoracic inlet lymphadenopathy is common, and would be expected to reduce vascular, nervous and lymphatic flow through the cervical region.²⁰ The hallmark condition of pneumonia in AIDS can lead to facilitations along the thoracic segments T₁-T₁₂, with concurrent paraspinal tenderness and anterior/posterior Chapman's tender points.²¹

GI disorders include dysphagia, dyspepsia, diarrhea, tenesmus and septic infection, which can also refer their

inflamed status to the lumbar spine and its paraspinal tissues and the sacrum.²² Generalized hyperactivity of the autonomic nervous system could dictate full-length paraspinal tenderness, splanchnic pain, sub-occipital tenderness and corresponding cranial dysfunction, sacral dysfunction and tenderness, and Chapman's points at nearly any position. AIDS involves the possibility of infection of nearly any organ of the body; these infections can refer this status to tissues both near and distant. Osteopathic diagnosis and treatment of the paraspinal referral component of systemic infection, along with treatment of Chapman's points, OA/AA and vagal manifestations would help the ailing patient's homeostatic mechanisms to overcome the obstacles to its proper functioning.

Sympathetics

The brain might be said to be in touch more with itself than with anything else.

Gerald Edelman²³

Recognition of the role of the sympathetic nervous system in the etiology of AIDS is paramount to osteopathic treatment of this disease. The design of the sympathetic nervous system is homeostatic in its nature, as it allows the body to accommodate to any immediate stressors quickly and efficiently. However, in the case of inflammation and infection, the sympathetics often work against the patient.

In a lecture to the Kirksville College of Osteopathic Medicine, Dr. Frank Willard of UNECOM described the mechanism for the deleterious effects of hypersympathacotonia associated with chronic inflammation. Infection and inflammation are microscopic, biochemical processes that are highly regulated by nervous and endocrine influences. The ideal state of inflammation would allow nutrients, immune cells and fluids to reach the

organ easily and quickly, and would allow waste materials and blood to escape the area. However, the compromised immune system of the AIDS patient subtracts from the ability to fight infection, and the inflammatory process becomes caught in a feed-forward mechanism whereby the stimulus for inflammation cannot be removed. This smoldering status is relayed to the CNS by what Dr. Willard describes as the β -afferent nervous system. Coursing along the arterial network, these nerves transmit afferent information regarding the status of the tissues to the spinal cord and to the brain. These impulses are treated by the body as an auto-feedback system, whereby the CNS gains awareness of the presence of noxious stimuli in the body. In contrast to the fast, highly myelinated α -afferent system which relays discriminate touch and proprioception, the slower and thinner β -afferents relay dull, achy sensations of discomfort, distention and pain. These fibers have the ability to regulate themselves through interneurons in the dorsolateral horns of the spinal cord, which are further regulated by efferents from the brain. As Dr. Willard states, "This β -afferent system is emerging as actually the nervous system for homeostasis in that it can regulate how tissues are working, and when it becomes alarmed it can adjust homeostasis in a defensive manner. It is the source of the general adaptive response."²⁴ This system innervates the viscera and reports back to the thoracolumbar segments of the spinal cord, out of which courses the sympathetic nervous system.

With this understanding, it becomes clear that the information coming from the status of the viscera regulates the sympathetic response, which can overreact to perpetuate states of inflammation. While this homeostatic mechanism is very helpful for the short term, it can itself become a stressor if prolonged and uncontrolled.²⁵ In addition

to the immediate control of the β -afferent system over interneurons which regulate sympathetic tone, this system also has direct feedback into the brain. Fibers travel up the dorsolateral tracts, through the reticular formation to the hypothalamus. This small bundle of nervous tissue is the orchestrator of homeostasis in the body.²⁶ It runs the autonomic nervous system and runs the endocrine system. Fibers from all over the brain feed into it, carrying auditory, visual, emotional, somatic and visceral information. One of its responses is to change the output to the pituitary and to

*In contrast to the fast,
highly myelinated
 α -afferent system which
relays discriminate touch
and proprioception, the
slower and thinner
 β -afferents relay dull, achy
sensations of discomfort,
distention and pain.*

the brain stem. The hypothalamus also drives the *locus ceruleus*, which has a wide range of axons that project all over the cortex, thalamus, brain stem and spinal cord. The hyperactivity of the cerulean complex produces epinephrine, and alerts the brain to noxious stimuli. It is part of a warning mechanism. This hypersensitive state, along with direct input from the hypothalamus influences the pituitary release of corticotropin releasing hormone (CRH), which regulates ACTH. CRH can be brought out by emotional, somatic and visceral stressors working through these β -afferent/hypothalamic/cerulean pathways and causes excess release of ACTH. In short, the prolonged hyperactivity of the β -afferent system stimulates the brain to secrete ACTH. It

is this aspect of the sympathetic general adaptive response that is so detrimental to the homeostatic mechanisms of patients with disease. The effects of this increased amount of ACTH as a response to β -afferent descriptions of inflammation are extreme.

The eventual shift to glucocorticoids caused by chronic states of inflammation actually exacerbates the inflammatory process, initiating a feed-forward mechanism of inflammation, hypersympathacotonia and increased glucocorticoids. ACTH can be quite healing for some tissues by stimulating fibroblasts and healing processes, but its down-regulation of the immune system proves to be particularly devastating to AIDS patients. Indeed, "Glucocorticoids are the biggest offenders [of homeostasis for people with AIDS]," replies one physician.²⁷ One of the functions of these adrenal steroids is to block the communicating molecules between the lymphocytes.²⁸ The immune system is slowed, shifted towards homeostasis and away from differentiation. This can be helpful if a person is in dire need of nutrients, etc., in order to escape an acute, life-threatening stressor, but it is most harmful if the stressor is of a chronic nature, such as an infection. The effects of increased steroids are detrimental in several ways: dampened aggression of the immune system through blockage of hematopoietic leukotriens, hypersympathacotonia which vasoconstricts the blood and lymphatic supply to all organs including the spleen, thereby altering the movement of lymphocytes through the tissues and glands, and, most important, gradual depletion of cortisol receptors in the hippocampus which normally act to buffer the general adaptive response. This increased output of ACTH, and subsequently, cortisol is normally dampened by cortisol receptors in the hippocampus; however, prolonged increased levels of cortisol eventually

continued on page 20

The Concept and Technique of the Levitor Orthotic Device

July 26-28, 1996

Loews Ventana Canyon, Tucson, Arizona

Levitor Course Registration Form

July 26-28, 1996
Loews Ventana Canyon
Tucson, Arizona

Program

Michael L. Kuchera, DO, FAAO
Program Faculty

CME Hours

16 Category 1-A

July 26, 1996

- 1:30 Registration desk opens
- 2:00 Introductions and tutorial goals
- 2:30 History of the Levitor and gravitational strain pathophysiology
- 3:00 Biomechanical principles
- 4:00 Patient selection
- 5:00 Case history #1
- 6:00 Course dismissed for the day

July 27, 1996

- 8:00 Constructing the Levitor Orthotic Device
- 8:30 Lab: Levitor construction (partners)
- 10:00 The art of tailor-fitting, bending and pressure adjustment
- 10:30 Lab: Levitor pressure adjustment
- 12:00 Lunch
- 1:30 Radiographic measurement of postural Decomensation & documented results
- 2:00 Lab: Radiologic postural measurement
- 3:00 Spondylolisthesis
- 3:45 Case histories
- 4:30 Regional Levitor Center start-up and expectations
- 5:00 Question & answer session (or case history)
- 5:30 Course dismissed for the day

July 28, 1996

- 8:00 Patient follow-up
- 8:30 Lab: Pressure recheck: modifying size and shape of the Levitor
- 9:30 Lumbopelvic OMT (important diagnostic and treatment considerations)
- 10:30 Lab: OMT hands-on laboratory
- 12:00 Certificates distributed (course dismissed)

Course Description

Goal: Participants in the Levitor Tutorial will qualify to be directors of certified regional Levitor Orthotic Centers with all the prerequisite knowledge and skills necessary to choose, fit, and monitor patients benefiting from the Levitor Treatment protocol. Physicians with unlimited license will be able to enroll in this program. Coding and reimbursement issues will be discussed.

Fees

Prior to June 26, 1996

AAO Member	\$400.00
AAO Non-member	\$500.00
(no discounts available)	

After June 26, 1996

AAO Member	\$500.00
AAO Non-member	\$600.00

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.

Attire

This course will involved actual construction of a Levitor on a partner and the opportunity to be fitted with this pelvic orthotic. There will also be hands-on OMT laboratories. For these reasons, dress should be loose fitting and informal.

Name for Badge (please print clearly)

Street Address

City State Zip

Daytime Phone Number

AOA Number

College and Year Graduated

We Accept



(Circle One)

Card Holder's Name

Card Number

Expiration Date

Signature

Make Hotel Reservations by calling directly to:

Loews Ventana Canyon
7000 North Resort Drive
Tucson, Arizona
Phone: (602) 299-2020

Single/Double Occupancy	\$95.00
Hospitality Suite	\$110.00

Ask to be included in the room block held by the American Academy of Osteopathy

American Academy of Osteopathy

3500 DePauw Blvd., Suite 1080
Indianapolis, IN 46268-1136
Phone (317) 879-1881
FAX: (317) 879-0563

The Effects of Somatic Dysfunction on the Spinal Accessory Nerve (CN XI) with Subsequent Distal Dysfunctions

by Sherman Gorbis, DO, FAAO

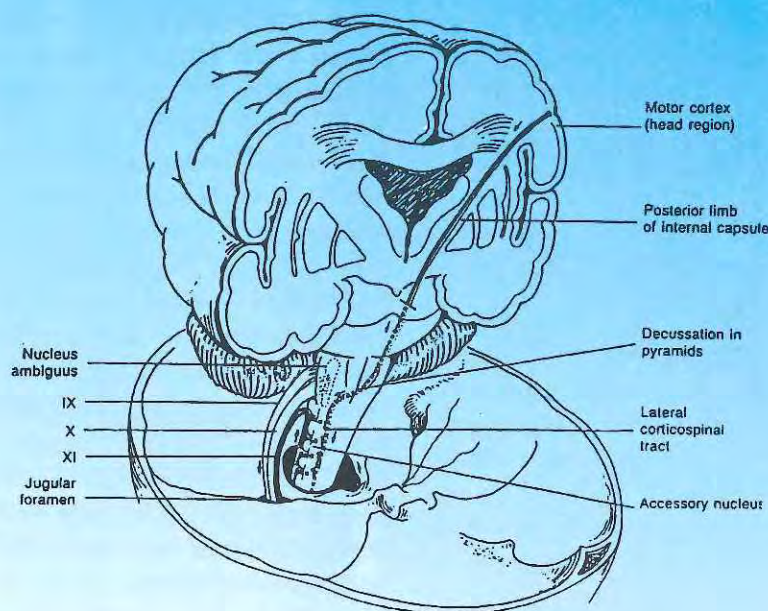


Figure XI-1 Branchial Motor Component of Accessory Nerve (Elevated Brain Stem)

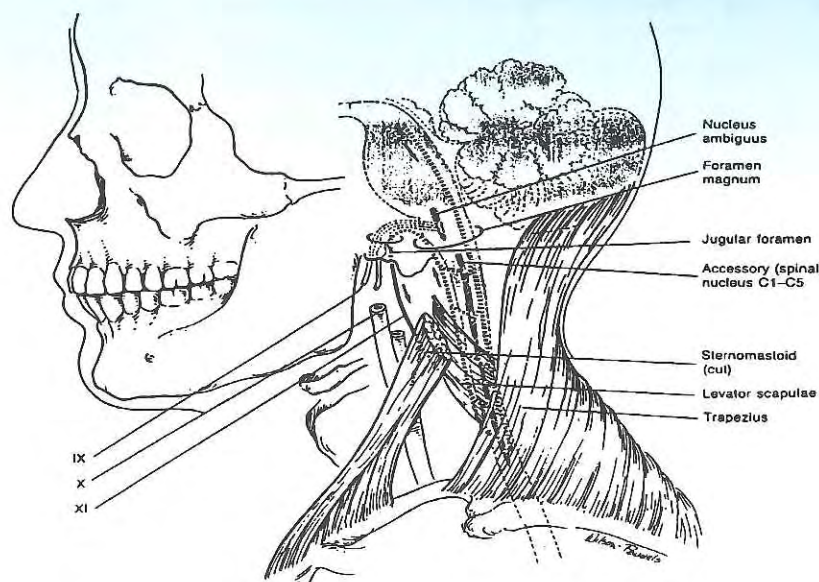


Figure XI-2 Branchial Motor Component of Accessory Nerve

Abstract

This paper will explore how bony and soft tissue dysfunctions, at various locations, can affect The Spinal Accessory Nerve (CN XI). The resultant possible neuromusculoskeletal abnormalities will be discussed, including specific descriptions of the dysfunctions, along with various types of osteopathic manipulative medicine (OMM) as treatment measures.

The Spinal Root of CN XI is derived from motor cells in the lateral ventral columns of the gray matter of the first five or six segments of the spinal cord (1-Page 944). They are approximately in line with nucleus ambiguus. These cells are called the spinal nuclei of the accessory nerve (2-Page 105). Laterally, the motor roots exit the spinal cord about midway between the dorsal and ventral roots. Each inferior root joins with the one above until a trunk is formed that extends superiorly and laterally through the foramen magnum posterior to the vertebral artery, bilaterally (XI in Figure XI-1). The Cranial Root of CN XI consists of a few axons whose cell bodies reside in the caudal part of nucleus ambiguus (3-Page 144). These join to form the cranial accessory trunk which enters the jugular foramen with the spinal trunk. Within the foramen, the trunks exchange fibers (Figure XI-2). Upon exiting the jugular foramen, the trunks separate. The cranial accessory trunk blends with the vagus nerve (CN X) and supplies the same target musculature as CN X (uvula

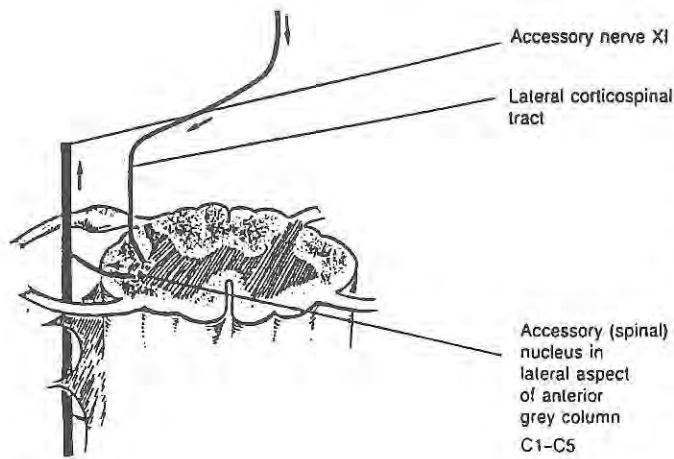
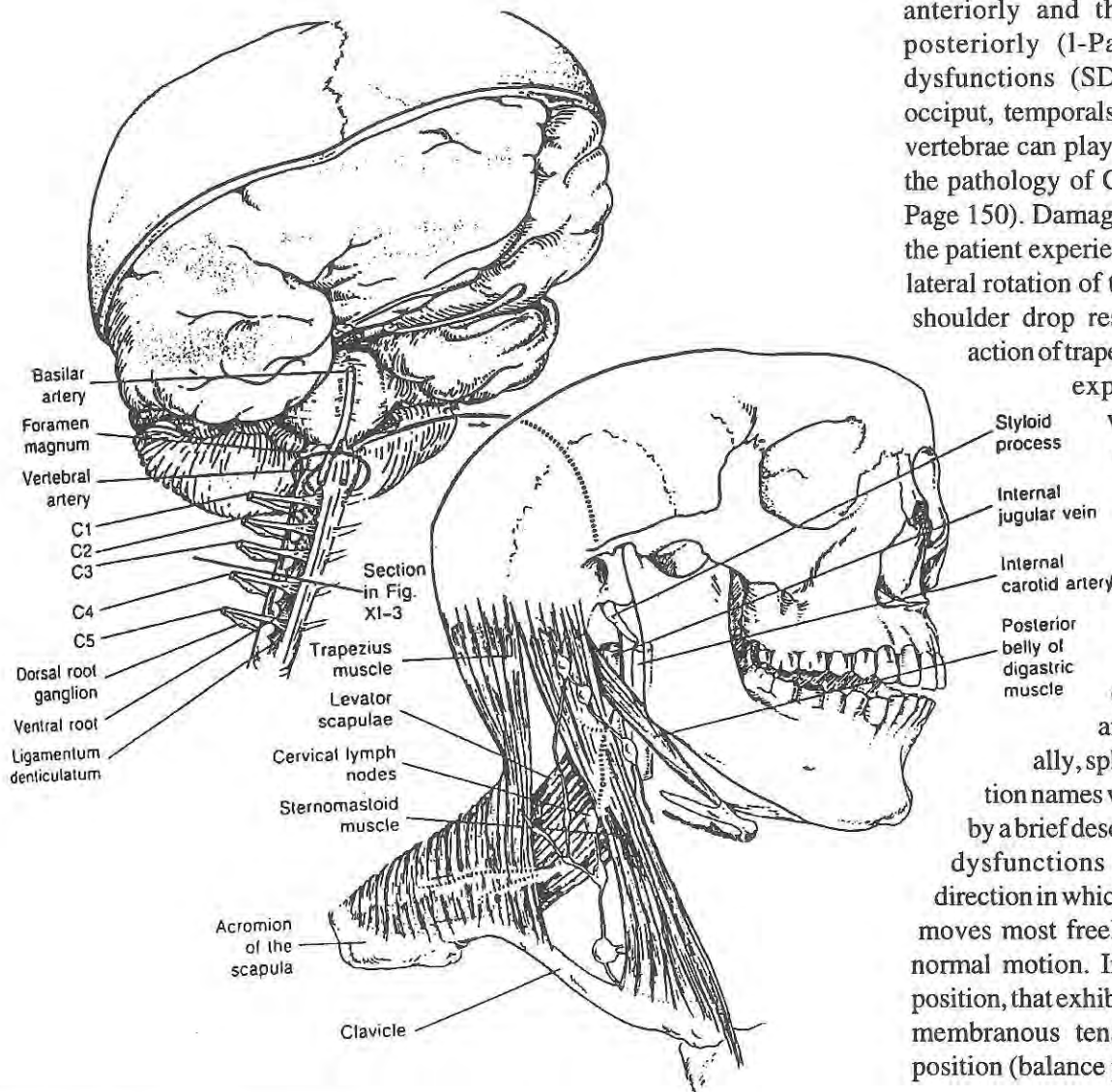


Figure XI-3 Cervical Segment of Branchial Motor Component (See Level of Section on Fig. XI-4)

levator veli palatini, pharyngeal constrictor muscle and muscles of the larynx and esophagus). The spinal trunk turns backwards, lying ventral to the internal jugular vein in two-thirds and dorsal to it in one-third of the population (1-Page 944). It then passes posteriorly to the stylohyoid and digastric muscles to the sternocleidomastoid (SCM) and trapezius muscles (to which it supplies voluntary motor function). The spinal accessory trunk, after exiting the jugular foramen, communicates with the second, third, and fourth cervical nerves (Figures XI-3, 4, 5). The jugular foramen lies between the lateral portion of the occipital bone and the petrous portion of the temporal bone. CN XI, along with the glossopharyngeal (CN IX) and vagus (CN X) nerves, lies in the jugular foramen between the inferior petrosal sinus anteriorly and the transverse sinus posteriorly (1-Page 142). Somatic dysfunctions (SD) of the sphenoid, occiput, temporals, and upper cervical vertebrae can play an important part in the pathology of CN XI's pathway (4-Page 150). Damage to CN XI results in the patient experiencing downward and lateral rotation of the scapula and some shoulder drop resulting from loss of

action of trapezius. Also, the patient



when turning the head to the side opposite the somatic dysfunction (especially against resistance). Somatic dysfunctions of the sphenoid and occiput will be considered together and named, traditionally,

sphenobasilar. Dysfunction names will be listed, followed by a brief description of each. These dysfunctions are named for the direction in which the involved bone(s) moves most freely within the limit of normal motion. In treatment, the ease position, that exhibiting the least possible membranous tension, is found. This position (balance point) is held with the

least possible effort. According to Magoun, "...if the membranous articular strain...is held at the precise neutral position, conditions will be most favorable for adjustment because every part of the delicate complex is under the least possible strain. Then the power inherent in the tension tone of the dura can operate effectively to secure functional freedom." (4-Page 100.) One then waits for spontaneous release and resumption of the Cranial Rhythmic Impulse (CRI). Retesting follows. Somatic dysfunctions of the sphenobasilar symphysis are:

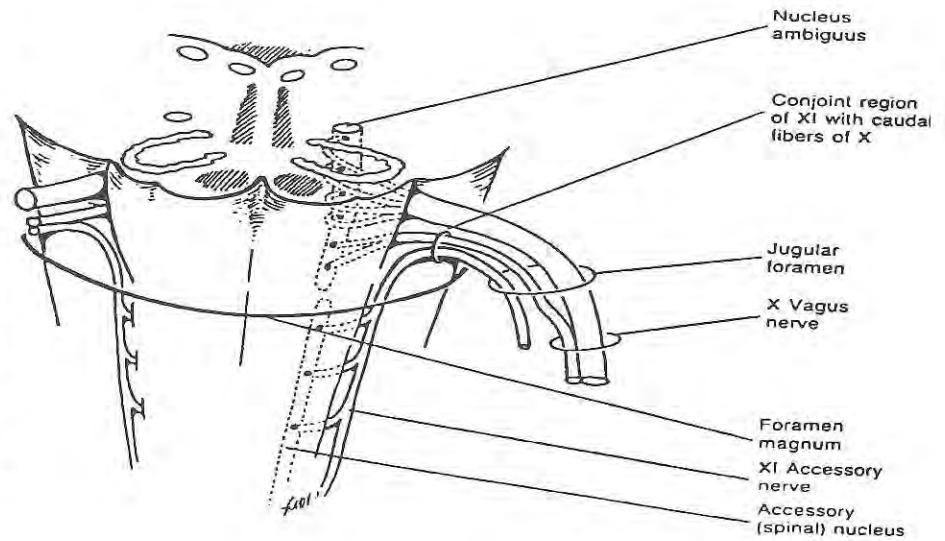


Figure XI-5 Cross-Section Through Rostral (Open) Medulla

1. Flexion - the sphenoid is rotated forward around a transverse axis through the body, anterior to and level with the floor of the sella turcica. The occiput is rotated backward around the transverse axis of the jugular process at the level of the sphenobasilar symphysis. The vault approach can be used for this and the dysfunctions that follow. Finger positions are:

- Thumbs - interlocked over the vault, but not touching it.
- Index fingers - over the lateral surface of the greater wings.
- Middle fingers - just in front of the ears.
- Ring fingers - behind the ears.
- Little fingers - occiput squama (medial to the occipitomastoid suture).

2. Extension - the opposite of flexion, the return to the neutral position after flexion occurs. In this dysfunction, flexion is restricted. Both anterior quadrants of the sphenoid and both posterior quadrants of the occiput are in internal rotation.

3. Torsion - the sphenoid and occiput rotate in opposite directions around an anteroposterior axis. The dysfunction is named for the superior greater wing of the sphenoid.

4. Sidebending rotation - The sphenoid and occiput rotate in the same direction around an anteroposterior axis (one-half of the cranium rotates inferiorly, the other superiorly). The sphenoid and occiput also rotate in opposite directions around parallel vertical axes, through the middle of the body of the sphenoid and through the middle of foramen magnum. The dysfunction is named for the inferior cranial half (right or left).

5. Vertical strain. The sphenoid and occiput rotate in the same direction around their transverse axes. The dysfunction is named for the position (superior or inferior) of the basisphenoid.

6. Lateral strain. The sphenoid and occiput rotate in the same direction around their parallel vertical axes. The dysfunction is named for the position (right or left) of the basisphenoid.

After correcting the above sphenobasilar somatic dysfunctions, the osteopathic physician (DO) should direct his/her attention to the sacrum. Since the sacrum has a firm dural attachment at the level of the second sacral segment, it

will move (rotation, sidebending, flexion/extension) in response to the occiput, since the dura is firmly attached at the foramen magnum. The sacrum can be treated using an indirect (exaggeration) approach. This can also be termed fascial release (5). For example, if the sacrum is restricted in nutation (craniosacral extension/sacral base anterior and inferior) and moving more freely in counter nutation (craniosacral flexion/sacral base superior and posterior), the patient would be asked to hold a deep inhalation and exhale when absolutely necessary. The DO follows the sacrum into counter nutation, during inhalation, and monitors it during the held inhalation. The sacrum is then followed/gently encouraged during exhalation: A counter nutation restriction would be treated by asking the patient to inhale, hold a deep exhalation, and then inhale when absolutely necessary. The DO follows the sacrum into nutation during exhalation, monitors it during the held exhalation, and follows/gently encourages it during inhalation. Retesting follows.

Dysfunctions of the temporal bone

continued on page 29

AAO Case Study

Recurrent Otitis Media

by Bonnie R. Gintis, DO

Identification:

F.M. is a 2-year-old Caucasian female.

Chief Complaint:

Recurrent otitis media.

History of Chief Complaint:

This patient had her first episode of otitis media at age 6 months, 2 weeks following the cessation of breast-feeding. The initial episode was treated with amoxicillin for 10 days. Following this course of treatment, serous otitis media persisted and 1 week later she was started on a 3 week course of cefaclor. The serous effusion resolved during this course of treatment, only to recur 2 weeks later. This pattern of recurrence occurred approximately every 2-4 weeks for 1 1/2 years. During this time F.M. was treated with 6 different antibiotics, multiple decongestants and expectorants without a change in her pattern of recurrence. When placement of myringotomy tubes by an otolaryngologist was suggested to her parents they sought a second opinion and osteopathic treatment.

Past Medical History:

During the course of treatment with multiple antibiotics F.M. developed chronic diarrhea. At age 18 months F.M. was in the 5th percentile in terms of weight, 10th percentile in height, and was developmentally delayed in fine, gross motor, and language skills. Medical history was otherwise unremarkable. Birth History: F.M. was born 3 weeks prematurely by spontaneous vaginal

delivery, and weighed 6 lbs. 3 oz. The mother's health had been excellent during pregnancy. No anesthesia was used. APGAR scores were 7/9. The child was slightly cyanotic and required suctioning and oxygen before she spontaneously began to breathe. She had difficulty sucking and swallowing for the first 3 days of life and required 1 day of intravenous hydration before breast-feeding was successful.

Past Surgical History:

None.

Social History:

F.M. lives at home with her mother and father. There are no siblings. She was placed in a day care situation with 6 other children at age 6 months when her mother returned to work.

Allergies:

Allergic reactions to amoxicillin and cefaclor manifesting as skin rash accompanied by vomiting and irritability developed after their repeated and prolonged use. Although not tested for dust and animal allergies, removal of the dog and cat from inside the house and removal of the carpet in her room was followed by a cessation of nighttime coughing and a marked improvement in the quality of her sleep.

Medications:

At the initial visit, F.M. was on a once daily maintenance dose of erythromycin/sulfisoxazole. Pseudoephedrine was given b.i.d. Physical Examination: On

initial examination, F.M. was pale, slender, and in moderate distress due to upper respiratory congestion. Her temperature was 98.4. Eyes, heart, lungs, and abdomen were normal. Tympanic membranes were bilaterally opaque, non-erythematous, and without motion on pneumatic tympanoscopy. Post-nasal mucus drainage was noted in the posterior pharynx with moderately enlarged tonsils. Nasal congestion with edematous mucus membranes obstructed the nasal passageways. There was diffuse bilateral cervical lymphadenopathy.

Denver Developmental Screening examination revealed delays of 3-6 months in various aspects of fine and gross motor skills and language development. Osteopathic examination revealed the following: There were normal anteroposterior spinal curves and no scoliosis. Gait was normal. There was full range of motion of all extremities. Spinal range of motion was limited in the cervical area in flexion and extension, and in left sidebending and rotation. The cervicothoracic junction was markedly restricted in motion with involvement of ribs 1-4, the clavicles, and sternum. Respiratory excursion of the rib cage was generally restricted in inhalation. Somatic dysfunctions were found as follows: bilateral condylar compression more pronounced on the left, AA RL, C3 E RL SL, C7 F SL RL, T1 F SL RL, T2 F SL RL, T12 E SL RL, L1 E SR RR, S2 membranous articular strain, S2-S3 intraosseous strain, sphenobasilar sidebending/rotation with marked restriction of left temporal in internal rotation.

Initial Assessment:

Serous otitis media with multiple osteopathic somatic dysfunctions.

Treatment Plan:

It was suggested that a course of osteopathic manipulation be administered on a weekly basis utilizing ligamentous articular and membranous articular techniques. Direct action or exaggeration (indirect) would be applied as needed. Lymphatic pump and other procedures aimed at improving drainage of the respiratory tract would be used.

The continued need for antibiotic prophylaxis would be evaluated according to the patient's response to treatment. Pneumatic tympanoscopy and tympanography would be used to evaluate response to treatment. Referral to an early intervention program for developmentally delayed children involving speech, occupational, and physical therapy would be considered after the first 6 weeks of osteopathic treatment.

Course of Treatment:

Osteopathic manipulation was performed as described above. After one week tympanic membranes showed a positive response on pneumatic tympanoscopy. The right TM showed a cone of light. The left TM was partially opaque. Nasal congestion was markedly decreased, but the mother reported a constant cough. Somatic dysfunction resolved at C7, T1, T2, ribs, T12, L1, S2-3, and right OA/condyle. All antibiotics and decongestants were discontinued.

After four weeks of treatment the right TM was clear, the left TM was

clear with a few scattered opaque scars. The tonsils were normal size. Lymphadenopathy resolved. There was mild nasal congestion. The cough only occurred at night. Bowel function had returned to normal. F.M. was showing increased gross and fine motor coordination, and improved speech articulation. She had an increased appetite and had gained 3 pounds. Additional somatic dysfunction resolved at S2, with a marked increase in motion within the pattern of sphenobasilar sidebending/rotation. The left temporal was still relatively internally rotated, but moving in reference to the cranial base. A mild restriction persisted from the left occipitoatlantal area to C3.

After 8 weeks of weekly osteopathic treatment there had been no recurrences of otitis media. There was minimal nasal congestion and nighttime cough which responded to removal of the rug in her bedroom and removal of the cat and dog from the inside of the house.

During the third month following the initial treatment F.M. was exposed to streptococcus at day care. She developed pharyngitis which cultured positive for group A beta-hemolytic streptococcus. Otitis media followed. She was successfully treated with a 10 day course of erythromycin with no recurrence or persistence of serous otitis.

Follow-up at her previous pediatrician's office after 6 months of osteopathic treatment showed a normal physical exam, bilateral normal tympanograms, normal audiology exam, and normal gross and fine motor skills.

Discussion:

Osteopathic treatment of this child restored the normal functional relationships of the ear within the temporal bone, the lymphatic system, and the respiratory tract. Bowel function improved when antibiotic treatment ended. Developmental abnormalities improved when normal hearing was restored and the child was able to interact with other people and her environment to obtain and process the stimulation needed for normal development.

Editor's Note:

Bonnie R. Gintis, DO, is currently in private practice in Woodstock, New York. After receiving her bachelors degree from Hunter College in New York City, she earned her Doctor of Osteopathy degree from the New York College of Osteopathic Medicine in 1986 where she also completed a predoctoral fellowship. She then finished a one-year rotating internship at Coney Island Hospital.

Dr. Gintis' professional affiliations include the American Academy of Osteopathy, American Osteopathic Association, The Cranial Academy, the American Medical Women's Association, the New York Academy of Osteopathy, the New York State Osteopathic Medical Society, and the Still-Sutherland Teaching Foundation.

Additionally, Dr. Gintis has had several of her articles published and made osteopathic presentations at various seminars around the country. □

Outcome Research on Health Care in Ambulatory Care Practice

by Deborah M. Heath, DO and Albert F. Kelso, PhD

The JAAO will include a series of articles to assist practicing osteopathic physician on documenting the effectiveness of health care and attaining a high level of patient satisfaction. Physicians in private, group, and managed care practice have a major role in health care that needs to be documented and reported. The series recognizes this need and suggests methods for obtaining reliable data on the results obtained in ambulatory care.

Credible reports are sought by the public, governmental, and third party payers for decisions on reimbursement for health care. The same date provides the osteopathic profession and patients with evidence on health benefits provided by fully licensed physicians who received osteopathic education and training. This emphasis on the high quality of care and patient satisfaction is the hall mark of "valuable" medical care being delivered in a "cost-conscious" environment.

Articles will emphasize methods for organizing data from many individual practices for reporting health care outcomes. Examples will be provided for converting patient's medical record data and information from office management for outcome research that documents the medical care provided in an office-based setting. Data collection on medical practice currently relies upon computerized medical records, claims for reimbursement and automated office systems. Erroneous conclusions may be drawn from such data unless it is an accurate reflection of practice. For example, descriptions of the actual care provided is often incomplete or biased. Records on acute care and sometimes chronic care fail to describe changes in a patient's health associated with their care.

The osteopathic physician has a critical role in presenting the *processes* used in providing care and describing the *outcomes* (benefits) of the care that are received. Education of data collection managers is an important step for insuring accuracy and reliability of data obtained from office records and converted to outcome research reports. Effective communication and participation at the various levels of researching ambulatory care practice requires understanding the methods used and the safeguards that insure accurate data and its interpretation. Competent efforts by patients, physicians and researchers insure credible reports on health care.

Clinical research has traditionally employed the "gold standards" of epidemiologic research and clinical trials to investigate population characteristics; health and illness, transmission of disease, risks and benefits of therapeutic interventions, medical devices, and drug therapies. The use of these designs in ambulatory care settings has had varying degrees of success while requiring large time commitments with extensive changes in routines. This leads to an "information gap" on the natural history of care and unanswered questions on quality, costs and patient satisfaction with ambulatory care.

Outcome research offers opportunities to obtain "up-to-date" and complete data on the care that is provided and the changes in patient's health and satisfaction. The synthesis of practice with an accurate method for reporting provides a balanced view of procedures used in care, associated benefits, and patients' perception of satisfaction. Modified methods of describing care and measurement of outcomes with

statistical analysis is a suitable approach. Proposed methods and suggestions from physicians are designed for minimal interference and to decrease burdens on office practice.

This first step in documenting ambulatory health care with outcome research enhances our ability to effect the quality of care and patient satisfaction. The newer research method also points to the important effects of health care that need the more detailed and rigorous investigation with epidemiologic and clinical trial designs. Screening ambulatory care for its major contributions and problems needing attention identifies the focus for future research in clinical research settings.

Clinical outcome research also has other advantages. It contributes data on large numbers of practices through surveys and routine reports, thereby providing needed information on a timely basis. Such research in industry and health care delivery has provided continuous quality improvement in products and services and a competitive edge through customer satisfaction. Medical outcome studies on diagnostic and treatment procedures have resulted in modifications that promise improvement in health care. Clinical outcome research on ambulatory care offers continuous quality improvement in health care and a competitive edge in private practice.

Collaboration and suggestions are sought for participation in surveys and creation of a professional data base on ambulatory care practice. Send your comments and suggestions to the AAO: Attn: Louisa Burns Research Committee or to Albert F. Kelso, PhD, Temporary Editor for the series, 15443 University, Dolton, IL 60419-2728. □

TRUST 2000

A LEGACY FOR THE OSTEOPATHIC PROFESSION

At their meeting during the 1996 Convocation, the American Academy of Osteopathy's Board of Trustees approved the establishment of a new endowment program — TRUST 2000: A LEGACY FOR THE OSTEOPATHIC PROFESSION. Your gift today to this endowment will become a perpetual legacy to your commitment to advance the Academy's Mission into the next millennium.

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.

The Academy's leadership recognizes the significant challenges ahead and realizes that the viability of the Academy will depend on significant financial resources accumulated *today* to fund *future* operations. The AAO Long Range Plan calls for the generation of \$10 million to support the Academy beyond the year 2000.

TRUST 2000 is truly unique. While the Academy will accept any gift for this new endowment program, the Board recommends a life insurance product as the preferred funding strategy. A contribution could be used at your discretion to apply for a life insurance program benefiting the American Academy of Osteopathy.

Your contribution is tax deductible

An affordable donation becomes a substantial gift

Your generosity works for the present and the future

This is your opportunity to reward the Academy and its many mentors who have passed on the **treasure of osteopathy** to you in your undergraduate education and postdoctoral training. Your gift will enable the Academy to meet the challenges of the future to ensure that it can continue to pass along the **treasure of osteopathy** to the younger DOs and students who value this profession.

Complete the form below and return it by FAX or by mail to the Academy's headquarters today so that you can obtain more information on this exciting program.

Please send me more information on
TRUST 2000: A LEGACY FOR THE OSTEOPATHIC PROFESSION

Printed Name

Address

City/State/Zip

Return form to:

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

continued from page 11

are most affected. The osteopathic physician could detect paraspinal changes at all levels of the spine which correspond to hypersensitive sympathetic ganglia, as well as corresponding Chapman's tender points,²⁹ especially for the lungs and airways. As with viscerosomatic findings in all types of patients, the manifestation and detection of somatic dysfunction and viscerosomatic reflexes are related to the skill of the palpator and to case-specific pathophysiology, which do not always dictate their presence in all similar cases.

Parasympathetics

The mind might be likened to the fertile soil of a tropical country. If not properly understood, neglected, and left unprotected to the mercy of erroneous thought, it will grow the rank weeds of Pathology. But if understood and properly cultivated will grow the beautiful flowers of health.

Herbert Hoffman³⁰

Many complications of AIDS involve the parasympathetic system. Mucosal barriers and other secretory functions of the body normally limit the amount of opportunistic infection by trapping and labeling the invading micro-organisms for destruction by enzymes and the immune system. Since this component of defense is dampened even in early presentations of the HIV-infected individual, an additional feed-forward mechanism is established. Hyperparasympathacotonia results as the infected tissues attempt to compensate for the loss of cellular and humoral immunity by overproduction of mucous and epithelial barriers.

Unfortunately, with the depletion of secretory IgA and other antibodies from destruction of T-helper cells and alteration of B-cells, this overproduction (combined with decreased vascular and

lymphatic supply from hyper-sympathacotonia) provides growth medium for opportunistic micro-organisms and allows septic colonization of tissues to occur. The GI and GU tracts are particularly susceptible to this effect, as is shown in the high incidence of GI/GU pathology in AIDS patients, such as dyspepsia, peptic ulcers, ulcerative colitis, diarrhea, diverticulitis, UTI, cystitis, and septic bowel disease. This hyperparasympathacotonia can present as enlarged OA/AA/C2-vagal connections, sub-occipital tenderness, sphenopalatine ganglion tenderness, splanchnic pain referral to thoracolumbar areas, decreased abdominal diaphragm movement, and sacral dysfunction and tenderness with corresponding cranial referral patterns.³¹ These presentations of increased parasympathetic activity both result from and contribute to further complications of AIDS, and must be successfully diagnosed and treated in the osteopathic approach to this disease.

Lymphatics and Fascias

What we meet with in all diseases is dead blood, stagnant lymph, and albumen in a semi-vital or dead and decomposing condition all throughout the lymphatics and other parts of the body, brain, lungs, kidneys, liver, and fascia.

A.T. Still³²

Though all aspects of the osteopathic theory of homeostasis are important in the etiology of AIDS, the movement and flow of lymphatic fluid is arguably the most important. The advent of cycles of autonomic hyperactivity caused by the conflagration of infection in these patients takes its toll on the lymphatic system as well. Hypersympathetic activity to all vascular and lymphatic supply in general, and to infected organs in particular, contributes to fluid stasis and chronic states of inflammation.

Remembering that fluid movement is absolutely essential to proper functioning of any organ or system, the osteopath must pay considerable attention to the state of fluid stasis and congestion, and of the position of the fascias. The global effects of AIDS on the body can be seen in the restriction patterns of the fascia, and of the fluid stasis that results from them. Common opportunistic infection sites include the lungs, the GI and GU tracts, rheumatic sites, cutaneous and endothelial areas, and lymphoid tissues. Infection of these areas leads to fluid congestion, inflammation, and fascial irritation. With the decreasing efficacy of the immune system, these states will become more chronic and self-perpetuating. Specifically, the patient can exhibit restrictions of the thoracic inlet, abdominal and pelvic diaphragms, cisterna chyli and thoracic ducts, and mesenteric lymphatics, all resulting from direct and indirect influence of systemic infection. These restrictions perpetuate the cycle of immune dysfunction in these patients, since their homeostatic mechanisms cannot function without the free movement of lymphatic and vascular fluids. More important, the lymphatics are the primary vehicle for the immune system, allowing for transport of cells and for communication between cells and lymphoid tissues. Fluid stasis subtracts from the efficacy of this system, and contributes to further states of inflammation and fascial irritation.

The fascias in the body can be a tremendous help in diagnosis and treatment of fluid stasis, as well as other problems. The fascias structurally relate organs and systems to each other, and can confer the states of distant tissues through inflammatory media, twists and distortions, and general disruption of normal structural integrity of fascial relationships. Common fascial strains could include congestion of all fascial diaphragms, strains on the dura (influenced by sacral/parasympathetic and cranial/encephalopathy states),

abdominal, peritoneal and mesenteric discontinuities, and trigger bands and trigger points resulting from referred inflammatory status from infected organs to adjacent tissues.³³ Visceral manipulative diagnosis of organ states has also been helpful in the determination of disease status.³⁴ These under-recognized influences on the health of the body must be diagnosed and treated for proper osteopathic care of the patient.

Philosophy of Treatment

Acceptance without proof is the fundamental characteristic of western religion. Rejection without proof is the fundamental characteristic of western science. In other words, religion has become a matter of the heart and science has become a matter of the mind. This regrettable state of affairs does not reflect that fact that, physiologically, one cannot exist without the other. Everybody needs both. Mind and heart are only different aspects of us.

Gary Zukav³⁵

The simple observation that AIDS is an ominous medical problem should tell us that our philosophy is not complete. As intellectual descendants of Western Europe and renaissance thinkers, we have established a society that nourishes a distinctive pattern of behavior and thought: we attempt to amend most of our problems—economic, political, medical, social—with a singular, material approach. The common western tradition of discovery of single causes for disease and of magic bullet therapies obviously does not apply to medicine alone.³⁶ As a society, we look for the one problematic facet instead of at the entire process, the entire system.³⁷ Our culture is characterized by two central ideas: materialism (“What I can see and touch is most real, and everything else is less real”) and Cartesian dualism (“This is me [my consciousness] in here, and the rest of the world is out there.”)³⁸ This particular organization of reality seems

intuitive to us, and the sheer complexity of cultural and developmental pressures makes it hard for us to imagine any other approach. However, we must remember that any particular organization of reality is unwittingly designed to solve specific problems; it is best at solving those problems alone, and it has built into it inexorable problems that it is not equipped to approach or remedy.

Western societies have adopted a certain philosophy of reality because over the last four or five hundred years it has helped us to control certain aspects of the outside world, such as physics, disease, industrialization and a way to describe what is happening outside of our bodies. However, this philosophy of materialism and dualism has not been as helpful with holistic, attitudinal problems with multiple, non-material, behavioral origins, such as violence, poverty, cancer, and AIDS. Such is the dilemma into which our classical view of medicine places us today.

In our society, we seem to believe intuitively that the world we experience through our five senses is more “real” than the world we experience in our thoughts. The world is an arena “out there” into which we have been placed. We interact with it through purely physical means of touch and sensation, and our mental processes are somehow separate. Our experiences of feelings, emotions and other purely mental phenomena are not regarded as somehow parts of the “real world.” However, as individuals interacting with ourselves and others every day, we rely heavily on these mental feelings and thoughts and we personally don’t disbelieve them. Our belief in our opinions and in our mental assessments of situations is as real to us in one sense that an object is real in another. However, our society does not have a good description of how these two realities interact. It is this separation of mental processes from external reality that our western philosophical background has given us,

and it is precisely this mentality which plagues the medical community with many ‘incurable’ chronic diseases.

In his book on the evolution and development of the brain, Dr. Gerald Edelman discusses how the chemical and electrical dynamics of the brain more closely resemble the living ecology of a jungle than they do the activities of an electric company.³⁹ In a description of how the developing brain has the ability to select for and strengthen those neural pathways that result in successful mentation, behavior and physiology, he parallels the emergence of the mature brain to the evolution of species. Termed, “neural darwinism,” this theory compares the evolutionary forces of natural selection of favorable traits in species to the biochemical genesis and reinforcement of neural pathways in the brain of the developing individual. Evolutionary pressures of the environment can be seen as similar to developmental pressures of neonatal-to-adult life. While certainly some neural connections are “hard-wired,” and are highly conserved between people and between species, the vast majority of mental connections are specific and unique to that individual, having been determined by the events, pressures and decisions of a lifetime. Our experiences are shaped into the microscopic anatomy of our neural connections, and give each of us our unique state of mind and specific frame of reference. As Dr. Edelman describes, this is the sole power of the brain: to select for, strengthen, and manifest those neural connections that best enable us to survive. He describes the rehabilitative processes that occur after certain portions of the brain are lost from disease or injury as the brain’s wonderful ability to adapt and compensate through the process of neural darwinism: the brain will organize and restructure itself to compensate for the loss through selection and strengthening of new neural connections.

→

Whether these rehabilitating abilities are embodied in the brain itself, as in the regaining of speech, or are extensions of it as somatic functions, such as the recruitment of existing immune cells to replace those damaged, does not affect the efficacy of this process. Simply stated, our brain has the amazing capacity to adapt itself to do whatever it needs to do. It is this capacity of the brain to rewire itself and to amend to nearly any particular demand that makes the mind the most powerful medicine, and the most unfortunate western oversight.

A.T. Still comments in his "Philosophy of Life" on this very point: "We should use caution in asserting that Nature has made its work complete in animal forms, and has [not] furnished the human body with such wisely prepared principles that the physician should administer remedies to suit the occasion. . ." ⁴⁰ It can be inferred from this and from his other teachings, and indeed from much of osteopathic philosophy, that the body uses many mysterious yet clearly biological mechanisms in its normal functioning; this belief is well supported and cultivated. The osteopathic philosophy coddles the belief that there is *something else going on* in the body, and that as physicians we should be open to evidence of it.

It is to this approach that we must turn if we are to successfully treat patients with AIDS. Its looming, palpable existence in the world is a testament to the gaps in our thinking; clearly our traditional philosophy of medicine is overlooking something. We must certainly approach the treatment of such diseases with tested and proven medical remedies and medications, but we must also allow ourselves to change our patterns of action and thought when the situation warrants it, and to rely on the reality of our mental worlds as well on that of the physical.

Osteopathic Treatment

In osteopathy, we focus on the health of the patient, not the disease. With AIDS, we must focus on the life of the patient, not on death.

Jack Rodgers, social worker ⁴¹

The AIDS patient is unique in his or her presentation in many ways; through combination of symptoms, psychological profile, and sexual preference, and through societal prejudices and expectations placed upon the patient, particular, unique qualities emerge. As one health care worker states, "These people can be some of the most rewarding patients you'll ever have, and they can be the most maddening." He describes the two broad groups of patients who present with AIDS: the obstinate patient who has decided to fight for life no matter what and who has probably done more research on treatment modalities than the physician (there is a turnover of medical information on AIDS every 6-8 months), and the defeated patient who has equated HIV with death and is waiting to die, and usually does so quickly. ⁴² AIDS has shown that the traditional medical model is the least effective model for dealing with HIV. It is more reactive than proactive. This disease has discovered an unexplored niche in medicine in that physicians and others seem helpless and unable to do anything. Treatment perhaps is directed more at comfort as patients wind down to die than at the health that is being denied them. It is here where osteopathy can supply the subtle twist of approach that has been shown to help AIDS patients most. The physician must heal the body, but to heal the spirit is every bit as important.

Diagnosis and Treatment of Structure and Function

We will stick to the belief that Nature's chemistry can produce and apply the substance that will destroy any germ that appears in the various kinds of

disease in which it is claimed they are found.

A. T. Still ⁴³

The many complications that AIDS patients exhibit certainly change the function of many bodily systems. Osteopathy has shown that these functional changes cannot take place without simultaneous changes in structure. Structure and function are aspects of the same entity, as are electricity and magnetism; one cannot be separated from the other. With this in mind, along with a full knowledge of anatomy and osteopathic therapeutic manipulation, the osteopath is best equipped to treat patients. The many sites of opportunistic infection in people with AIDS can manifest these structural/functional changes. It should be the primary goal of the manipulator to prevent any of the feed-forward mechanisms of hyperautonomic activity and fluid stasis to deplete the person's already ailing homeostatic mechanisms any further. This downward spiral is recursive in its effects: gross abnormalities in structure/function exhibit themselves in microscopic abnormalities, and also in larger, more esoteric fashions. Any particular insult manifests simultaneously at all levels of scale—biochemical, cellular, organic, systemic, mental and spiritual. ⁴⁴ The relationship of mind/body/spirit is not a causal relationship as such, but more a fractal representation of what we are as human beings. To affect any of the aspects of this triad is to affect the other two simultaneously, not causally, since they are aspects of the same figure. The concept of the facilitated segment illustrates this concept fully. A recent article in the *JAAO* hypothesized that the physiological mechanisms involved in the formation of a facilitated segment have features in common with the molecular mechanisms responsible for the development of cancer. ⁴⁵ It reasons that the gross changes in structure of the

facilitated segment have counterparts on the molecular scale. These facilitations on the scale of tissues are macro-representations of "facilitated cells" and "facilitated genes," and vice-versa. Macroscopic changes not only lead to and cause eventual microscopic changes, they simultaneously affect all scales involved to a recursive degree.⁴⁶ It is in this way that the mind/body/spirit triad can be seen as a unit and not just as a relationship.

Specifically, osteopathic treatments should address all structural eventualities of infection, and should include paraspinal inhibition of sympathetic ganglia, rib raising techniques, manipulation of all vertebral segments, Chapman point treatments, cranio-sacral manipulation, and peripheral joint manipulation. Special attention should be given to the chest cage, including the thoracic inlet and outlet, ribs, sternum, clavicles, scapulae and thoracic spine, doubly so since the primary site of infection is often the lungs, and since the abdominal diaphragm is so important⁴⁷ for fluid drainage and respiration.

Homeostasis

Turn the waters of life loose at the brain, remove all hindrances and the work will be done, and give us the eternal legacy, LONGEVITY.

A. T. Still⁴⁸

Homeostasis is perhaps the most wondrous ability of our bodies, and perhaps the most adaptable to change. The pure physical strength of tendons, bones and ligaments would soon buckle to the forces of the external world if not for the ability of the body to recognize and respond to stressors. Whether they be microorganisms, emotional events, or typical fight-or-flight situations, stressors most often affect us considerably little; our homeostatic mechanisms are extremely reactive, and

very effective at enabling us to endure our environments. However, it is precisely this mechanism that is attacked by HIV. When presented with this medical information, many patients view themselves as separate from the biochemistry of their bodies, and visualize their abilities to fight off infection as diminishing or disappearing. However, Gerald Edelman has shown that the brain has as its primary function the ability to adapt to whatever function is needed. Our mental wiring is in a state of constant flux, turnover and reinforcement, enabling the brain to incorporate more of our physical and mental lives into its very anatomy.⁴⁹ Additionally, Dr. Deepak Chopra has discussed how the body's immune system, and in particular its immune cells, are histologically very similar to cells in our brains, and indeed share many of the same receptors for CNS neurotransmitters.⁵⁰ In this sense, the immune system is eavesdropping on the biochemical machinations of the brain; it is in essence a "cellular brain" spread out in circulation throughout the body. It responds directly to the chemistry of emotions, thoughts and feelings, and is extremely sensitive to the biochemistry of our states of mind. It is in this fashion that the state of mind of the patient can affect health.

The structure of the body affects these biochemical mechanisms as well. Homeostasis is best achieved after attention has been given to the somatic structural components as well as to the mental components. Among the somatic structures are the state of the fascias and the degree of restriction therein. Any fascial strain will prevent fluid from moving as it should and will relay its strain pattern to other systems, thereby affecting their structures/functions. Fascial release techniques should be applied to all of the thoracic, abdominal and pelvic diaphragms, and "local listening" should be employed to detect any local pull or tension on fascias.

Cranial treatment will help with diagnosis and treatment of existing fascial strain patterns as well.

Additionally, lymphatic fluids must have freedom to move and circulate. Lymph fluid carries the immune cells and cellular waste products, and augments venous return from capillary transudates. Lymph is an information-laden fluid, carries immunologic fragments of infection and inflammation to the rest of the body, and presents immune cells and their antibodies to lymphatic tissues. Any restriction to lymph flow must be removed, and fluid movement must be actively and passively encouraged. Rib-raising techniques, pectoral lifts, passive range-of-motion manipulations, muscle pumps, re-doming of the abdominal diaphragm, opening the thoracic inlets, and release of the mesentery and pelvic diaphragms are all extremely effective in moving lymph fluids. In addition, release of the fourth cranial ventricle (CV4 release) will encourage free movement of fluids generally and CSF specifically, encouraging more effective communication between CNS neurotransmitters and the immune cells.

All attempts should be made to normalize any hyperactivity in autonomic output. Paraspinal inhibition, rib-raising, treatment of Chapman's points, CV4 release, sacral rocking, OA/AA manipulation, suboccipital massage, and sphenopalatine ganglia inhibition are all very effective techniques at down-regulating any existing hyper-autonomic nervous activity.⁵¹

Mind/Body/Spirit Relationship

*Let us begin today to exercise our minds to see only health; let us begin at once to refuse to accept the words of sickness and trouble, for they but express wrong mind action in matter. Mind is all.*⁵²

Herbert Hoffman

The three main components of

→

homeostasis on the somatic scale are the lymphatics, the sympathetics and the parasympathetics. The proper function of these is certainly altered with such fulminant diseases as those seen in AIDS. However, in the same way that the cells that comprise infected organs cannot operate correctly with alterations to any of these three, since all of the functions of the cell are controlled by them, neither can these homeostatic components function without the control of the mind. "The mind" can be symbolized as that combination of physical sensations, feelings, emotions, and thoughts that coalesce into our immediate consciousness. This aspect of the mind/body/spirit representation of the body is our simultaneous awareness of the state of our physical selves. As Dr. Willard has shown, our states of mind have direct neural connections with the biochemical workings of our bodies, and dictate as much as mirror them.

Further, as Dr. Edelman has shown, the physical blueprint of our brains is not exact, and has the ability to amend itself to a huge number of possible situations. Therefore, before addressing any physical manifestations of dysfunction, the mind of the patient must be amenable to treatment. For example, to perform any osteopathic manipulation (or any other medical treatment, for that matter) on a patient who has given up and who intuitively believes that the "world out there" in terms of the virus can defeat him has not proved effective. It is in this sense that we must reeducate our patients about our beliefs in the body's ability to amend itself to eradicate stressors.

In much the same way that the organ is a collection of cells, the system a collection of organs, and the body a collection of systems, the mind can be seen as the single unit representing the simultaneous states of these systems. We have awareness of our bodies because we have *mind*. The patient must be aware that immediate states of mind affect the body, detrimentally or positively.

However, the *spirit* component of osteopathic philosophy can be visualized as the product of the infinite number of the sequential states of mind of that person. The spirit is a solitary figure of all the beliefs, judgments and values one knows and trusts; it is essentially the wellspring from which we draw the shapes and colors of our states of mind. As Deepak Chopra describes it, "It is the space between our thoughts."⁵³ It is our tendency based on a lifetime's experience to react in any certain way. If a patient seriously believes that a human being is able to react to the environment under any possible circumstances, then that person's *mind* is more able to react to the existing stressors.

It is a subtle change in philosophy to recognize that we create our world as much as it creates us. Knowing that our eyes only respond to a tiny fraction of the electromagnetic spectrum, that our ears only register sounds within a specific wavelength, that our sense of touch is only sensitive to a certain window of temperatures and pressures, one begins to see that we are mentally constructing a picture of the exterior, "real" world out of a very limited amount of information. It is as if we are looking at the world through a peephole on a door; much of the available information from the world our bodies choose to ignore. It is this awareness of the difference between what is out there from our constructed representation of it that is the power of *belief*. Our ability to *believe* is the primary function of the mind; it is the spark that initiates the complex chain of physics that eventually leads to the biochemistry of the body. Our societal origins in western philosophy have fostered in us the belief that our mental phenomena are incidental and secondary to the physical processes of life, but this is not so. Perhaps our belief in what we can or cannot do, mentally and physically, makes all the difference. Spirit is belief, and belief is our sole power.

There have been several projects that

have focused primarily on this approach to AIDS treatment. Knowing that a person's spirit can affect a person's immediate state of mind (in the sense of what they believe and how they react to the world as a result of their entire life's experience), and that the mind has direct neural and biochemical effects on the state of the soma, these programs are designed specifically to promote a positive state of mind and to nourish the patient's spirit. Patterns in the spirit and in the mind ultimately manifest as biochemistry, and the typical medical approach to mending problems by addressing symptoms of these mental patterns has not been shown to work with AIDS, or with any chronic disease that results from the complexities of life-style. A particular program in Boulder, CO, called "AIDS, Medicine and Miracles" boasts many long-term survivors of HIV infection with little to no AIDS-related symptoms. Through a combination of workshops, support groups, physical activities, and loving, caring environments, this program preaches a kind of "umbrella therapy" for AIDS patients. One patient recently diagnosed with *Pneumocystitis carinii* pneumonia was upset because he had to reduce his bicycling from 100 miles per week to 50. Another patient has lived 12 years since his diagnosis without the use of any drugs.⁵⁴ These people are succinct examples of the success of such an approach.

In an intensive psycho-immunologic study of long-term survivors with AIDS that was recently conducted, many distinguishing correlations were found. Examining the survivors' varied mental and physical practices, the investigators discovered that, "All long-term survivors have:

1. A sense of personal responsibility for their health.
2. A sense that they can influence their own health outcome.
3. A commitment to life in terms of "unfinished business," unmet goals, or as yet unfulfilled experiences and

- wishes.
4. A sense of meaningfulness and purpose in life.
 5. Found new meaning in their life as a result of the illness itself.
 6. Engaged in physical fitness—exercise, dietary work.
 7. Derived useful information from and supportive contact with a person with the same diagnosis, shortly after the diagnosis.
 8. Become altruistically involved with other affected persons.
 9. Accepted the reality of the diagnosis in conjunction with a refusal to perceive the condition as a death sentence.
 10. Developed a personalized means of active coping that they believe has beneficial health effects.
 11. Assertiveness and are able to say “no.”
 12. The ability to withdraw from taxing involvements and to nurture themselves.
 13. Sensitivity to their bodies, including psychological and physical needs.
 14. Ability to communicate openly about their concerns.

Nearly every one of these characteristics is a product of the person's spirit, of the belief in life and autonomy and confidence.⁵⁵ The long-term survivor of HIV infection chooses to show symptoms of mental health rather than physical disease. These patients have strikingly similar characteristics to that cohort of people who live to extreme old age. In a study that examined medical profiles of people who are over 100-years-old, the results emerged that though the data on their medical histories, health practices and life-styles were so varied as to provide no single characteristic in common, their psychological profiles were nearly identical. All of these centenarians exhibited a strong sense of autonomy and self-reliance, and displayed a resiliency to obstacles to their states of mentality.⁵⁶ It was not as if these people had never had anything traumatic happen to them—medically, psychologically, or otherwise—they were just aware of their abilities to overcome and benefit from any problem

that life placed in their paths. It was their sense of autonomy, their sense of belief, their strength of spirit that gave their bodies the harmonic tendency to remain vital, strong and alive. It is precisely this belief that as osteopaths we must recognize, and precisely this spirit that we must encourage.

Summary

I don't see why a man should despair because he doesn't see a beard on his Cosmos. If a man believes that he is inside of it, not it inside him, he knows that consciousness, purpose, significance, and ideals are among its possibilities...and the business of philosophy is to show that we are not fools for doing what we want to do.

Oliver Wendell Holmes⁵⁷

As osteopaths, we must attempt to find health and not just disease. The idea that the patient's state of optimism is helpful is not enough in most cases; the patient must fully understand and believe that the efforts of fighting infection are no harder than the complex functions of any other bodily system. Our firm belief that there is a difference gives power to the stressor, and enables it to defeat us. It is here where osteopaths must direct their efforts, and it is perhaps the destiny of osteopathy to embrace and engender an approach that successfully addresses all aspects of disease, mind and spirit in the lives of people who have AIDS.

References

1. Still, A.T. *Research and Practice*. p.18
2. Wagner, M., and Rodgers, J. "Living with AIDS and HIV," lecture, Kirksville College of Osteopathic Medicine, Kirksville, MO. 4/18/95.
3. Hoffman, Herbert, DO. *Esoteric Osteopathy*. Philadelphia. ©1908. p.23
4. Chopra, Deepak, MD. *Quantum Healing: Exploring the Frontiers of Mind/Body Medicine*. Bantam Books, New York. ©1989. p.211
5. Rubin, E., and Farber, John L. *Essential Pathology*. J.B. Lippincott Co.,

- Philadelphia. ©1990. p.84-87
6. Kelley, William N., MD. *Textbook of Internal Medicine*. J.B. Lippincott Co., Philadelphia. ©1989. p.1481
7. *Professional Guide to Diseases*. Springhouse Co., Springhouse, PA. ©1989. p.366-8
8. Kelley, William N., MD. *Textbook of Internal Medicine*. J.B. Lippincott Co., Philadelphia. ©1989. p.1669-71
9. Rubenstein, Edward, MD and Federman, Daniel D., MD. *Scientific American MEDICINE Pocket Edition*. Scientific American, Inc., New York. ©1993. p.465
- 10,11. Wagner, M., and Rodgers, J. "Living with AIDS and HIV," lecture. KCOM, Kirksville, MO. 4/18/95.
12. Rubenstein, Edward, MD and Federman, Daniel D., MD. *Scientific American MEDICINE Pocket Edition*. Scientific American, Inc., New York. ©1993. p.455
13. Cassens, Brett J., MD. *Preventive Medicine and Public Health*. Harwal Publishing Co., Malvern, PA. ©1992. p.107
14. Kelley, William N., MD. *Textbook of Internal Medicine*. J.B. Lippincott Co., Philadelphia. ©1989. p.1790
15. "AIDS, Medicine and Miracles," HIV clinic. Boulder, CO
16. Edelman, Gerald M. *Bright Air, Brilliant Fire: On the Matter of the Mind*. Basic Books, HarperCollins Publishers. ©1992. p.41
- 17,18. Kelley, William N., MD. *Textbook of Internal Medicine*. J.B. Lippincott Co., Philadelphia. ©1989. p.1791-6
19. Edelman, Gerald M. *Bright Air, Brilliant Fire: On the Matter of the Mind*. Basic Books, HarperCollins Publishers. ©1992. p.49
20. Kuchera, Michael, DO and Kuchera, William, DO. *Osteopathic Considerations in Somatic Dysfunction*. KCOM Press, Kirksville, MO. ©1991. p.6
21. *ibid*. p. 26
22. *ibid*. p. 82
23. Edelman, Gerald M. *Bright Air, Brilliant Fire: On the Matter of the Mind*. Basic Books, HarperCollins Publishers. ©1992. p.19
24. Willard, Frank, PhD. "The β -afferent Nervous System and the General

→

- Adaptive Response," lecture, Kirksville College of Osteopathic Medicine, Kirksville, MO. 1/5/95
- 25,26. Willard, Frank, PhD. "The β -afferent Nervous System and the General Adaptive Response," lecture, Kirksville College of Osteopathic Medicine, Kirksville, MO. 1/6/95
27. Bade, Daniel J. "Family DOs examine AIDS for psychiatric problems." *The DO*; 36(2); Feb 1995: 78-83
28. Willard, Frank, PhD. "The B-afferent Nervous System and the General Adaptive Response," lecture, Kirksville College of Osteopathic Medicine, Kirksville, MO. 1/6/95
29. Kuchera, Michael, DO and Kuchera, William, DO. *Osteopathic Considerations in Somatic Dysfunction*. KCOM

Press, Kirksville, MO. ©1991. p.23-50

30. Hoffman, Herbert, DO. *Esoteric Osteopathy*. Philadelphia. ©1908. p.14

Editor's Note: *Arising in part from an assignment from the OTM Department at the Kirksville College of Osteopathic Medicine, this manuscript gained its present form from the author's interests in Eastern philosophy, physics, psychology, and history. Combined with the first two years of medical school, these areas slowly coalesced to reveal that osteopathy is much more than manipulation, and that osteopathic medicine embraces much more than traditional western practices.*

Terrace Mulligan is a third-year medical student at KCOM. He is a graduate of the University of Michigan, 1991, with a BA in

English Literature; and of the University of Michigan School of Public Health, 1993, with an MPH in Epidemiology. His previous publications include several articles and abstracts in the Journal of the American Society of Hematology, including "Unstimulated Bone Marrow Fibroblasts Secrete Multiple Hematopoietic Growth Factors: Detection by Serum-Free Proliferation Assay", printed in Blood, June 1990, which he presented at their conference. His other research interests have included the role of genetics in diabetes, and the role of body image in eating disorders, for the University of Michigan Schools of Medicine and Public Health, respectively. He is currently completing his externship in Philadelphia. □

Book Review

The Muscle Energy Manual, Volume One

Reviewed by Raymond J. Hruby, DO, FAAO

Authored by Fred L. Mitchell, Jr., DO, FAAO,
and P. Kai Galen Mitchell, BA

Editor's Note: *Available from MET Press, P.O. Box 4577, East Lansing, Michigan 48826-4577. Price is \$59 US currency.*

Doctor Mitchell has published the first volume of a comprehensive treatise on muscle energy technique, the well-known osteopathic manipulative approach developed by his father, Fred L. Mitchell, Sr. While it is generally accepted that Dr. Mitchell, Sr. developed muscle energy technique, he gives credit to two other DOs, T. J. Ruddy and Carl Kettler, for the original concepts that laid the foundation for what is now known as muscle energy technique.

The book is presented in two large sections, entitled "Principles, Concepts and Mechanisms," and "Procedures: Evaluation and Treatment," respectively. Each section is complete and highly detailed, yet very readable. Indeed, it is hard to imagine that anyone reading this book (and presumably future volumes) would have need for any further resources for information on muscle energy technique.

The first section of the book provides all of

the background knowledge related to the use of muscle energy technique. This includes a brief history of the development of the technique, and an extensive discussion of functional anatomy and the neurophysiological principles underlying the technique. The types of somatic dysfunction amenable to treatment with this approach are described. There is extensive discussion of the barrier concept relative to somatic dysfunction, and the relationship of proprioception and nociception to somatic dysfunction is also presented. With respect to nociception, the theory of nociceptive reflexes and somatic dysfunction, originally put forth by Van Buskirk, is extensively reviewed. In fact, Van Buskirk's original paper is reprinted as part of the text of the book.

The second book section begins with an in-depth presentation of the standardly accepted 'Ten Step' screening examination, presenting both the static and dynamic aspects of the exam. The remainder of the book is devoted to the examination and treatment procedures for the cervical spine. An appendix discusses the treatment of acute

torticollis, a problem every practitioner sees sooner or later. An extensive bibliography and recommended reading list are also included. This is a very professionally done book. It is presented in a soft cover, with text that is pleasant to the eye and very readable. There are 282 photographs and illustrations, all carefully arranged to appear on the same pages as the corresponding text descriptions. Some illustrations are reprinted from other high quality textbooks. The authors' original illustrations and photos are professionally and elegantly done.

In summary, this is an excellent textbook, and anyone interested in muscle energy technique should have this book in his or her library. The authors state in the book's preface that the remainder of the treatment procedures will be presented in Volumes 2 and 3. However, in a recent conversation with Fred Mitchell, Jr., he has indicated that the material may be able to be formulated into one more volume rather than two. Look for it in the near future. In the meantime, get a copy of Volume 1 and enjoy! □

Osteopathic Considerations in Systemic Dysfunction

June 28-30, 1996

Chicago College of Osteopathic Medicine, Downer's Grove, IL

Program

Michael L. Kuchera, DO, FAAO

Program Chairperson

June 28, 1996

- 7:30 Continental Breakfast/Registration
- 8:00 Introduction & "The Spinal Cord as an Organizer of Disease Processes"
Michael L. Kuchera, DO
- 8:25 Axoplasmic Flow
Brian F. Degenhardt, DO
- 8:50 Pain and Referred Pain Patterns
Michael L. Kuchera, DO
- 9:30 Lecture/Lab: Chapman's Reflexes/
Diagnosis and Treatment
Michael L. Kuchera, DO, FAAO
- 10:45 Lymphatic Drainage and Improved Immune Function
Brian F. Degenhardt, DO
- 11:30 A Coordinated Approach to Dx & Tx of Patients with Systemic Dysfunction
William A. Kuchera, DO, FAAO
- 12:00 Lunch
- 1:00 Osteopathic Considerations in Cephalgia
Brian F. Degenhardt, DO
- 1:45 Osteopathic Considerations in EENT Dysf.
Michael L. Kuchera, DO, FAAO
- 2:30 Lab: OMT in EENT Dysfunction
Brian F. Degenhardt, DO
- 5:00 Course dismissed for the day

June 29, 1996

- 7:30 Power Breakfast (30 min. lecture: Nutritional Support of Homeostasis)
Ann Habenicht, DO
- 8:00 Osteopathic Considerations in Upper GI Dysfunction (General)
Michael L. Kuchera, DO, FAAO
- 8:45 Osteopathic Considerations in Upper GI Dysfunction (Applied)
Paul Jones, DO
- 9:30 Lab: OMT in Upper GI Dysfunction
Michael L. Kuchera, DO, FAAO
- 12:00 Lunch
- 1:00 Osteopathic Considerations in Lower GI Dysfunction (General)
William A. Kuchera, DO, FAAO
- 1:45 Osteopathic Considerations in Lower GI Dysfunction (Applied)
Hugh Ettlinger, DO
- 2:30 Lab: OMT in Lower GI Dysfunction
Michael L. Kuchera, DO, FAAO
- 5:00 Course dismissed for the day

June 30, 1996

- 7:30 Power Breakfast (30 min lecture: Environmental Stressors of Homeostasis)
John Hohner, DO

- 8:00 Osteopathic Considerations in Lower Respiratory Dysfunction (General)
Brian F. Degenhardt, DO
- 8:45 Osteopathic Considerations in Lower Respiratory Dysfunction (Applied)
Hugh Ettlinger, DO
- 9:30 Lab: OMT in Pneumonia and other Lower Respiratory Disorders
Michael L. Kuchera, DO, FAAO
- 12:00 Lunch
- 1:00 Osteopathic Considerations in Cardiovascular Dysfunction (General)
Michael L. Kuchera, DO, FAAO
- 1:45 Osteopathic Considerations in Cardiovascular Dysfunction (Applied)
Hugh Ettlinger, DO
- 2:30 Lab: OMT in Cardiovascular Dysfunction
Paul Jones, DO
- 4:30 Coding and questions/Answer Session
- 5:00 Course Dismissed

CME Hours

25 Category 1-A

Fees

Prior to May 26, 1996

AAO Member	\$545.00
AAO Non-member	\$595.00
Residents/Interns	\$250.00

After May 26, 1996

AAO Member	\$645.00
AAONon-member	\$695.00
Residents/Interns	\$350.00

Textbooks available on site \$55.00

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.

Osteopathic Considerations in Systemic Dysfunction Registration Form

June 28-30, 1996

Chicago College of Osteopathic Medicine
Downer's Grove, Illinois

Name for Badge (please print clearly)

Street Address

City State Zip

Daytime Phone Number

AOA Number

College and Year Graduated

We Accept



(Circle One)

Card Holder's Name

Card Number

Expiration Date

Signature

Make Hotel Reservations by calling directly to:

Marriott Suites,

1500 Opus Pl, Downers Grove, Illinois
(708) 852-1500

Single/Double Occupancy \$90.00

Ask to be included in the room block held by the American Academy of Osteopathy (price includes breakfast)

American Academy of Osteopathy

3500 DePauw Blvd., Suite 1080
Indianapolis, IN 46268-1136
Phone (317) 879-1881
FAX: (317) 879-0563

Letter to A. T. Still

CME Calendar

Dear Doctor Still,

People sometimes have difficulty understanding some of the ideas put forth in your writings. When we read your works, we are at times overwhelmed but the depth of your philosophy, so much so that we become almost dazed in our attempt to follow your thought processes, to find the coherent principle underlying your expressions.

However, reading what others have said about you can help us to understand your principles even more. For instance, I recently read with interest what E. R. Booth had to say about you as a philosopher, in his book, *History of Osteopathy and Twentieth Century Medical Practice* (pp23-24). He had this to say about your writings: "We often come across passages in his writings that are incomprehensible at first. A more thorough study of them or a few words of explanation often make such passages perfectly clear and reveal a mine of thought hitherto uncomprehended. To fully understand Dr. Still it is almost absolutely necessary to have a personal acquaintance with him. It is only by coming in close touch with him that his character becomes fully revealed."

It is most important, I think, for every osteopathic physician to read your works in order to more completely comprehend the principles of osteopathic medicine. Reading what others wrote about you, especially those who studied with you, helps us to understand you even better. It is, in fact, the only way we can have personal acquaintance with you. If all of us took just a little time to explore what your colleagues had to say about you, I believe we would all be better osteopathic physicians.

Your ongoing student,
Raymond J. Hruba, DO, FAAO

June 18-21

*Basic Course,
"Osteopathy in the Cranial Field"*
The Cranial Academy
Holiday Inn International Drive,
Orlando, FL
40 Hours, Category 1A
Contact: Pat Crampton, Executive Director
(317) 594-0411

June 21-23

Annual Meeting
Colorado Society of Osteopathic Medicine
Manor Vail Lodge, Vail, CO
18 Hours, Category 1-A
Contact: Patricia Ellis, CSOM
(303) 322-1752

June 23-25

Annual Conference
The Cranial Academy
Grosvenor Resort
Orlando, FL
40-hours Category 1-A Credits
Contact: Pat Crampton, Executive Director
(317) 594-0411

July 12-14

Annual Summer Convention
Massachusetts Osteopathic Society
Cape Codder Hotel, Hyannis, Massachusetts
Contact: Northeast Osteopath Consortium
(800) 982-7247

August 5-9

*The Expanding Osteopathic Concept,
Basic Course*
Viola Frymann, DO, Course Director
Shilo Hilltop Suites, Pomona, CA
Contact: OPSC
(916) 447-2004

August 17-18 & 24-25

Cranial Diagnosis and Treatment
Sponsored by
Society of Osteopathic Educators
Midwestern University - CCOM
Chicago, IL
Hours: 26 Category 1A
Contact: Marta Bleich
(708) 515-6039

September 6-8

Annual Yankee Conference
Rhode Island Society of Osteopathic
Physicians and Surgeons
Double Tree Hotel, Newport, RI
Contact: Northeast Osteopathic Consortium
(800) 982-7247

September 9-13

*The Expanding Osteopathic Concept,
Intermediate Course*
Viola Frymann, DO, Course Director
Shilo Hilltop Suites, Pomona, CA
Contact: OPSC
(916) 447-2004

September 19-22

Twenty-Fifth Annual Convention
New England Osteopathic Association
Sheraton Tara Hotel, Nashua, NH
Hours: 30 Category 1-A
Contact: Michelle Drucker
UNECOM
(207) 283-0171 x 2125

September 20-22

1996 Midyear Seminar
Florida Osteopathic Medical Association
Wyndham Harbour Island Hotel
Tampa, FL
Contact: FOMA
(904) 878-7364

October 5-6

*Disability and Impairment
Evaluation Course*
American Osteopathic College
of Occupational and Preventive Medicine
Las Vegas Convention Center
Las Vegas, NV
Contact: AOCOPM
(770) 953-1803

October 18-20

Annual Fall Foliage Convention
Vermont State Association
of Osteopathic Physicians and Surgeons
Radisson Hotel
Burlington, VT
Contact: Northeast Osteopathic Consortium
(800) 982-7247

The Effects of Somatic Dysfunction on the Spinal Accessory Nerve (CN XI) with Subsequent Distal Dysfunctions

by Sherman Gorbis, DO, FAAO

continued from page 15

Dysfunction of the temporal bone can also alter the function of CN XI. The temporal bones rotate around the axes which run from the external auditory canals, through the petrous portions of the temporals to the sphenobasilar regions (6-Page 172). External rotation, the separation of the temporal squama, occurs during sphenobasilar flexion. Internal rotation, the approximation of the temporal squama, occurs during sphenobasilar extension. The temporal bones can be palpated for motion by loosely interlacing the fingers beneath the occipital squama with the thumbs along the mastoid processes (or tips) and the thenar eminences on the mastoid portions. External rotation is achieved by gently moving the mastoid process(es), or tip(s), medially. Internal rotation occurs by gently moving the mastoid portion(s) medially.

Dysfunctions of the temporal bone(s) include:

1. Bilateral external rotation (rare).
2. Bilateral internal rotation.
3. Bilateral alternating external and internal rotation.
4. Unilateral external or internal rotation.

These problems, especially unilateral external or internal rotation, can be approached by securing the point of balanced membranous tension and awaiting for a spontaneous release.

Since about 95 percent of cranial venous blood is returned through the

jugular foramina (4-Page 96), it is important that venous congestion be prevented or treated. The venous sinus technique is directed toward enhancing venous flow through the jugular foramina. This technique is frequently used before approaching specific articular restrictions when the initial palpatory screening exam revealed a hard, rigid skull with loss of resiliency (7-Page 120). To begin, the weight of the head is supported on the middle fingerpads having contact on the external occipital protuberance. The DO awaits for a softening sensation and freer motion. Sequential treatment is directed toward the foramen magnum, affecting the cerebellar sinus. When softening occurs, treatment is directed back to the transverse sinus (external occipital protuberance). With the pads of all four fingers applied to the occiput along the superior nuchal line, firm pressure is maintained until softening occurs. At this point, a fluid force is directed, with the thumbs, toward the straight sinus for its release. Returning to the external occipital protuberance, the superior sagittal sinus is addressed from behind forward. A thumb is placed on each side of the sagittal suture, palmar surfaces of the hand against the head, and a separation force is applied with each thumb until softening occurs. This continues anteriorly until arriving at bregma. The last phase is the application of four fingers at either side of the midline of the frontal bone from bregma to nasion. The frontal's metopic suture remains in about 20 percent of the population. Compression and lateral distraction on the frontal bone are made simultaneously by both hands, again waiting for the sensation of softening and release (7-Page 120).

With release of somatic dysfunction around the jugular foramina, one may now turn his/her attention to the spinal portion of CN XI and treat dysfunctions of C1-5 or 6. This region serves as the source of motor control of the SCM and trapezius muscles. One can begin with the typical cervicals, C2-7 (for completeness) since any flexion restriction should be corrected prior to

treatment of C1-2 (rotation makes up about 90 percent of its mobility) which requires the typical cervicals to be in flexion (this removes any rotational component from C2-7, which would be present if rotation was tested without flexion and isolates rotation to C1-2). Using the principles explained by Goodridge (8) and Greenman (7-Page 131), ERS dysfunctions can be treated (FRS dysfunctions should not be neglected). These dysfunctions are restricted in flexion, rotation, and sidebending to the same side. When the flexion, sidebending, and rotation barriers are engaged, an isometric contraction is performed by the patient against resistance. Upon patient relaxation, the physician moves the tissues to the next barrier(s). This is repeated three to five times and retested. Let us assume that after flexion of the cervical spine from C7 up to C2, there is restriction of rotation of C1 on C2 to the left. One can gently rotate C1 on C2 to the left until the first resistive barrier is engaged. The patient is instructed to turn his/her head to the right (isometric) against resistance. After relaxation, the physician gently rotates C1 on C2 to the left to the next barrier. This is repeated three to five times and retested. Using these direct techniques (muscle energy), hypertonic muscles can be passively lengthened to a new resting length after isometric contractions.

By relaxing the suboccipital soft tissues using deep pressure, one can attempt to release all tissue hypertonics that may influence the outflow from the jugular foramen. Upledger (6-Page 205) describes the importance of the rectus capitis lateralis, a short flat muscle that arises from the superior surface of the transverse process of the atlas and inserts into the inferior surface of the jugular process of the occiput. It laterally sidebends the head. It is innervated by a branch from the loop formed by the first and second cervical nerves. Unilateral hypertonus of the rectus capitis lateralis contributes to a torsion pattern of the

→

cranial base, also reflected in the sacrum. The proximity of this muscle to the jugular foramen is also of importance. When these foramina become partially obstructed by tissue contracture, the result is increased venous back pressure within a semi-closed cranial vault contributing to intracranial congestion and cephalgia. Due to Cranial Nerve XI passing through the jugular foramen, increased tone in this area can therefore produce dysfunction resulting in SCM muscle dysfunction, trapezius muscle dysfunction, and hypertonus of cervical musculature, which further compounds the problem of the jugular foramen.

With the patient supine and the physician at the head of the table, the physician's fingers are flexed so that the distal phalanges are at 90 degrees to the longitudinal plane of the patient's cervical spine. The fingertips apply deep pressure in the suboccipital region and fingerpad contact is maintained with the inferior aspect of the occiput. As the tissues relax, the occiput gently settles into the physician's palms. Respiratory assistance (inhalation followed by slow exhalation) helps facilitate relaxation. The firmness of the bony atlas is apparent upon completion (6-*Pages 75-76*).

Treatment of the trapezius muscle(s) completes this discussion. The trapezius muscle arises from the external occipital protuberance and medial one-third of the superior nuchal line of the occiput, ligamentum nuchae as well as the spinous processes of C7-T12 and the corresponding portion of the supraspinal ligament. The superior fibers insert along the posterior quarter of the lateral one-third of the clavicle. The middle fibers insert on the medial margin of the acromion. The inferior fibers end in an aponeurosis which eventually inserts into a tubercle at the apex of the medial end of the superior spine of the scapula (1-*Page 447*). The lower and middle fibers can be approached by using myofascial release principles described by Ward (9).

The patient is prone. The physician's hands are placed over the thoracolumbar region with the thumbs parallel to the

spine and the remaining fingers close to right angles with the thumbs. Firm contact is made with the skin and subcutaneous fascial below. The right hand moves clockwise, the left hand moves counterclockwise, and neither hand moves over the skin. Thinking of this as a direct approach, the physician then attempts to reach a myofascial barrier. When one is met, the physician uses a variety of release enhancers (of which respiratory cooperation is one) to go through the barrier. Other barriers are sought and treated. Once the superficial barriers are loosened, one may then focus on treating the deep fascia. The physician can continue this treatment cephalically until all but the most superior fibers of the trapezius are treated. The physician can then cross his/her arms and contact the patient's right anterior shoulder with his/her left hand and the patient's left anterior shoulder with his/her right hand. The patient's head is supported by the physician's forearms. The head is then gently flexed to an initial barrier. The patient is asked to gently push back against resistance, then to relax. After relaxation has been obtained, the physician flexes the head to the next barrier. This is done three to five times and retested. For completeness, a myofascial release technique can be applied which is termed "the necklace technique" (9). With the patient seated, the physician stands behind and places his/her hands over the patient's shoulders as if the hands were a necklace. In this technique, cervical fascia, upper thoracic fascia, fascia surrounding the thoracic inlet as well as upper extremities can be approached. The same principles apply and myofascial barriers are released (9).

Dysfunction of the trapezius strains the occiput in a flexion (occiput rotated posteriorly around a transverse axis through the jugular process at the level of the sphenobasilar symphysis) pattern. This can cause dysfunction at the jugular foramen, irritating CN XI and causing further trapezius hypertonus. Hypertonicity of the upper trapezius will have an effect on clavicular mechanics.

A problem in abduction or horizontal flexion of the clavicle(s) will increase fascial tension in the region where the right lymphatic and thoracic (on the left) ducts empty into their respective subclavian veins. This will produce an impedance to lymphatic drainage. These regions need to be addressed and treated, if necessary. Hypertonicity of the middle and lower trapezius will, in turn, cause myofascial tension inferiorly to the deeper layers of muscles. Through a sustained increase in afferent input, facilitation may occur with a resultant somatoviscero and/or somato-somatic reflex. Lower trapezius involvement will affect the lumbodorsal fascia making it appropriate to examine this region.

The sternocleidomastoid muscle arises from the sternum (the cephalic part of the ventral surface) and clavicle (superior border and anterior of the middle third). It inserts into the lateral surface of the mastoid process, by a strong tendon and by a thin aponeurosis into the lateral one-half of the superior nuchal line of the occiput (1-*Page 395*). The SCM is innervated by XI, C-2, and C-3. A hypertonic SCM will cause dysfunction at the jugular foramen, irritating CN XI and causing further SCM hypertonicity. A dysfunctional SCM can cause restriction in the motion of the occipitomastoid suture, which it crosses, causing much discomfort. It can also cause temporal bone dysfunction which can lead to vertigo. Hypertonicity will also cause improper clavicular mechanics affecting lymphatic drainage from the cranium as well as more caudal body areas. It is important to address the thoracic inlet (C7-T1, upper ribs, clavicles, acromion processes of the scapulae, and the upper sternum) to ensure physiologic lymphatic drainage. The use of the "necklace technique" along with indirect myofascial softening at subclavicular sites is appropriate.

Hypertonicity of the cervical musculature should be addressed. The example of the rectus capitis lateralis was used earlier. Unilateral hypertonicity of this muscle contributes to a torsion

pattern at the sphenobasilar symphysis, also reflected in the sacrum. This should be examined and treated, if necessary. Increased tone in the area of the jugular foramen can cause CN XI dysfunction, causing further hypertonicity of cervical musculature. The scalene muscles, if hypertonic, can have distal effects. The anterior scalene muscle (origin-transverse processes of C3, 4, 5, 6; insertion-first rib) and middle scalene muscle (origin-transverse processes C2-7; insertion-first rib) raise the first rib and are innervated by branches of the lower cervical nerves. The posterior scalene muscle (origin-transverse processes last two or three cervical vertebrae; insertion-second rib) raises the second rib and is innervated by the last three cervical nerves. Hypertonicity of one or more of the muscles raises ribs one and/or two. This puts tension on the neurovascular bundle which can present as thoracic outlet syndrome. The diaphragm, innervated by C3-4-5, when dysfunctional, can contribute to respiratory restrictions in the last six ribs. Diaphragmatic hypertonicity can, through crural attachment, contribute to dysfunctions in L1-3.

It has been this author's experience that more acute dysfunctions respond better to more frequent treatments over a shorter time. More chronic dysfunctions can be treated with less frequency over a longer time period. Prognosis is, of course, different for each patient. However, if the complaints are due to somatic dysfunction, without organic disease, most patients experience an increase in their quality of life.

This paper has described the anatomy of CN XI, the structures through which it passes along with the structures it innervates. The consequences of somatic dysfunction have been discussed along with osteopathic manipulative medicine options.

Bibliography

1. Gray, H. 1974. *Gray's Anatomy*. Philadelphia: Lea and Febiger.

2. Upledger, J., DO, FAAO. 1987. *Craniosacral Therapy II: Beyond the Dura*, Seattle: Eastland Press, Inc.

3. Wilson-Pauwels, L.; Akesson, Elizabeth; and Stewart, Patricia A. 1988. *Cranial Nerves: Anatomy and Clinical Comments*. Philadelphia: B.C. Decker, Inc.

4. Magoun, Harold I., A.B., DO, FAAO. 1976. *Osteopathy in the Cranial Field*. Kirksville, Missouri: The Journal Printing Company.

5. Frymann, Viola, DO, FAAO. Personal communication.

6. Upledger, J., DO, FAAO. and Vredevoogd, J., M.F.A. 1983. *Craniosacral Therapy*. Chicago: Eastland Press.

7. Greenman, P.E., DO, FAAO. 1989. *Principles of Manual Medicine*. Baltimore, Maryland: Williams and Wilkins.

8. Goodridge, J.P., DO, FAAO. 1989. *Muscle energy technique: Definition, explanation, methods of procedure. The Principles of Palpatory Diagnosis and Manipulative Technique*. Newark, Ohio: The American Academy of Osteopathy.

9. Ward, R.C., DO, FAAO. Personal communication.

Permission to reprint figures given by Wilson-Pauwels, L.; Akesson, Elizabeth; and Stewart, Patricia A. 1988. *Cranial Nerves: Anatomy and Clinical Comments*. Philadelphia: B.C. Decker, Inc.

Editor's Note: *Sherman Gorbis, DO, FAAO is currently in clinical practice and serves as Associate Professor of Biomechanics at Michigan State University College of Osteopathic Medicine. He is certified by the AOBSPOMM and earned his Degree of Fellowship in the American Academy of Osteopathy (AAO) in 1995. Dr. Gorbis received his Bachelors Degree in Pharmacy from Rutgers University and earned his Doctor of Osteopathy degree from Kansas City College of Osteopathic Medicine.*

Dr. Gorbis served as a representative to the Educational Council for Osteopathic Principles for the University of Medicine and Dentistry of New Jersey School of Osteopathic Medicine, where he received the Excellence in Teaching Award in 1988-1989.

His professional affiliations include membership in the American Academy of Osteopathy, American Osteopathic Association, and The Cranial Academy. □

Classifieds

Kentucky Mountains

McDowell, Kentucky is base for varied family practice. 60-bed hospital in small, rural community, two hours from Lexington, KY via excellent roads. "Cradle-to-grave" medicine in friendly, safe area. Generous salary, productivity bonus, and benefits package. Contact Andrew Johns, Appalachian Regional Healthcare, P.O. Box 8086, Lexington, KY 40533, (800) 888-7045 or (606) 226-2537 collect. EOE.

Supporters

of the

1996 Annual Convocation

American Academy of Osteopathy

American Anatomical Corp.

AMI

Central Pharmaceuticals

CCOM

The Cranial Academy

Curatek Pharmaceuticals

Daniels Pharmaceuticals

Ilectro Therapy Association

Glaxo Wellcome

Health Care Manufacturing

Horizon Pharmaceuticals

ION Laboratories

Jackson & Coker

Janssen Pharmaceutica

Johnson & Johnson

Juice Plus

KCOM

Knoll Pharmaceuticals

National Levitor Center

National Osteo. Foundation

OMM Recruiting

OPTP

Osteopathic Center for Children

PCOM

Stronglite

Thera Cane Company

Thorne Research

UAAO Chapters

U.S. Army Health Care

Wallace Laboratories

Wyeth-Ayerst Laboratories

Y-Knot Publications

Visceral Manipulation

(Advanced/Intermediate Course)

July 26-30, 1996

Pre-requisite: Basic Course

Loews Ventana Canyon, Tucson, Arizona

Program

John C. Glover, DO, Program Chairperson

Day 1

Questions
Spleen
Pancreas
Greater Omentum
Peritoneum

Day 2

Kidneys
• three stages of ptosis
• posterior, lateral, medial, superior fixations

Ureters

Day 3

Bladder
• pubovesical ligament
• median and medial ligaments
• obturator

Cervix
• broad ligaments
• uterosacral ligaments

Prostate

Ovaries

Fallopian Tubes

Day 4

Lungs, pleura
Mid Cervical Fascia
Subclavius muscle, conoid and trapezoid ligaments
Soto Hall Test
Ribs
• chondral sternal, chondral costal, and costovertebral joints

Day 5

Heart, Pericardium
Motility of liver, stomach, small intestine, large intestine
Hiatus
Superficial cardiac, celiac, and hypogastric plexus
General listening and local listening
Manual thermal diagnosis, 1st & 2nd level
General treatment, treatment plans

CME Hours

40 Category 1-A

Fees

Prior to June 26, 1996

AAO Member \$1,000.00
AAO Non-member \$1,200.00

After June 26, 1996

AAO Member \$1,100.00
AAO Non-member \$1,300.00

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 directly to:

Loews Ventana Canyon
7000 North Resort Drive
Tucson, Arizona
Phone: (602) 299-2020

Single/Double Occupancy \$95.00
Hospitality Suite \$110.00

Guest Speaker:

Jean-Pierre Barral, DO, MROF

Jean-Pierre Barral, DO

Visceral Manipulation Course

Registration Form

July 26-30, 1996

Loews Ventana Canyon

Tucson, Arizona

Name for Badge (please print clearly)

Street Address

City State Zip

Daytime Phone Number

AOA Number

College and Year Graduated

We Accept



(Circle One)

Card Holder's Name

Card Number

Expiration Date

**American
Academy of
Osteopathy**

3500 DePauw Blvd., Suite 1080
Indianapolis, IN 46268-1136
Phone (317) 879-1881
FAX: (317) 879-0563

From the Archives

by Warren B. Mack, DO, Lynn, MA

My objective in coming before you is not to attempt to teach you spinal mechanics, because most of you could teach me much about this subject, but I wish to offer certain suggestions for your consideration and to discuss a subject in which I am intensely interested, the subject is called "osteopathic technique." It is my impression that most of us pass through several phases of development before we become capable practitioners. The stage I have reached in this year of 1915 is a very firm belief in the existence of specific bony lesions, also a belief that I have a great deal to learn about the correction of them.

After a careful study of the AOA JOURNALS and comparing the issues of 1914 with those of 1907 and 1908, it appears that we have had, and are now having, a revival of technique that has swept over the whole country. The profession, as a whole has apparently awakened to the fact that this is the all important subject to us. While other branches of medicine are of importance they are, after all, not as necessary to us as the real essence of the science, the part in which the public expects us to be proficient. General medical knowledge is a necessity to every one of us, but, to perfect ourselves in the one thing which makes us different, and I hope superior to any known school of medicine, is our only hope and salvation. Skill in the use of our hands. Finding minute misplacements and adjusting them, and a very profound knowledge of anatomy, are some of the things of which we are very proud.

We tell the public we are clever at these things, we speak about our highly developed tactile sense, and, take it all in all, set a very high standard for ourselves, which is commendable; but how near do

we come to this high standard? Probably not as near to it as we think and not as near as is possible if we make the most of

*Is it not possible
that the rapid growth
of osteopathy
has had a tendency
to make us a
little self-satisfied
with our
present knowledge?*

our opportunities. Opportunities await us at every turn, but they are so numerous we undoubtedly overlook many of them each day.

I have often wondered how many of us make a serious and exhaustive study of each lesion we attempt to correct and how many make a daily study of anatomy, physiology, pathology, and spinal mechanics; tracing each nerve and blood vessel from the part in lesion to the organ affected. In a word, using every opportunity and striving in every conceivable way to attain the perfect technique of the honorable and respected founder of osteopathy, Dr. Andrew Taylor Still.

Is it not possible that the rapid growth of osteopathy has had a tendency to make us a little self-satisfied with our present knowledge? This satisfied feeling probably was prevalent up to a few years ago, but certainly is not during the past two years. One has but to read the AOA JOURNAL of 1913 and 1914 to convince himself that the profession as a whole is far from satisfied with its knowledge of spinal mechanics and technique.

I am inclined to believe that the marked

success of osteopathy is not attributable so much to our superior skill as it is to the fact that the principle of osteopathy is right and even a crude attempt at correction, if the force is applied in the right direction, is beneficial. This is proven by the fact that the various "cults" and "pathies" who imitate osteopathy in a raw and unrefined way, apparently secure results on cases formerly treated by drugs. Our policy should be to develop our knowledge of spinal mechanics and technique to such an extent that it would be utterly impossible for any ambitious imitator to even approach our state of perfection. This ideal can only be attained by concentrating most of our energies in one direction.

Manipulation of the human body is as much an art as the painting of a picture, and is surely a much more serious proposition. It seems to me that we should consider the method of adjustment of an individual vertebra, of as much importance as the method of reducing a dislocation of the hip or shoulder. I also believe that the pathology of the bony lesion ought to receive as much careful thought as the pathology of gastritis or any other "itis."

The more I study technique the more impressed I am with the vast importance of it and with the fact of how difficult an art it is to acquire. It is a subject brim full of interesting features that furnish plenty of food for thought and offer many hard problems which are difficult to solve. Its possibilities for study and for private research work are many and varied: motion study, leverages, placing of our hands so that the patient experiences a feeling of confidence in our ability, studying reactions from treatment and

→

many other little point; of refinements which if worked out in detail would prove to be of great value to us and of greater value to our patients.

What a wonderful thing it is to be able to relieve human suffering with the hands alone; simply using proper leverage applied in the right direction. On the other hand, how easy it is to drift into the general treatment habit, crack the neck, snap the back, tickle the liver and massage the abdomen, at the same time carrying on an interesting discussion of the European war or some other vital subject. Some call this melanges "osteopathic technique," but the majority do not. When Doctor Still invented osteopathy, he probably did not have a procedure such as the above in mind.

In the past and to some extent at the present, a certain element in the profession has shown a tendency toward laying more stress on the study of drugs and other procedures than on the study

of osteopathy; some few go so far as to suppress the word "osteopathic on their cards, letter heads and signs and substitute the word "Doctor." For sentimental, social, and commercial reasons I would much prefer to cease calling myself a doctor than to cease calling myself an osteopath. This so-called broadening by the study of drugs and other forms of treatment and neglecting to perfect our technique, tends to start us on a long, rapid and easy slide toward oblivion, instead of a gradual and hard climb toward the highest pinnacle of success. No one person can monopolize all medical knowledge and, while it is convenient to have a liberal fund of general information, it is more to the point for us to know our own work first.

The manipulative part of medicine is the part the public expects and demands us to know and to know thoroughly, regardless of how many side issues we

may have to offer. I firmly believe the time is coming and it is almost here, when people will go to an osteopath not because he owns a hot air machine, high frequency apparatus or has a smattering of drug therapeutics, but because he or she has a remarkably high efficiency in adjusting lesions and because this person does it, not in a brutal manner; but smoothly, easily and with the least degree of discomfort or pain to the patient; in other words, in an artistic manner. People are beginning to understand that there are as many kinds of osteopaths as there are varieties of breakfast foods, so let us have a care that we are not classed as mixo-paths, myo-paths, semio-paths, or smash-o-paths, but as genuine dyed-in-the-wool, scientific and artistic osteopaths. □

Editor's Note: The editor would like to thank Theodore Jordan, DO of Columbus, Ohio for recommending this article.

Healing body, mind and spirit.



Osteopathic Internship:

Nine approved internship positions available in an AOA accredited teaching hospital in Pittsburgh, PA. Traditional and Family Practice Specialty tracts available. Competitive stipend and excellent benefit package.

Family Practice Residency:

Eight approved Family Practice Residency positions offering residents the complete resources of the largest health care system in Southwest Pennsylvania. Competitive stipend and excellent benefit package.

Call our Medical Education Department:


412-562-3250



ST. FRANCIS
HEALTH
SYSTEM

ST. FRANCIS
CENTRAL HOSPITAL

1200 Centre Avenue ♦ Pittsburgh, PA 15219

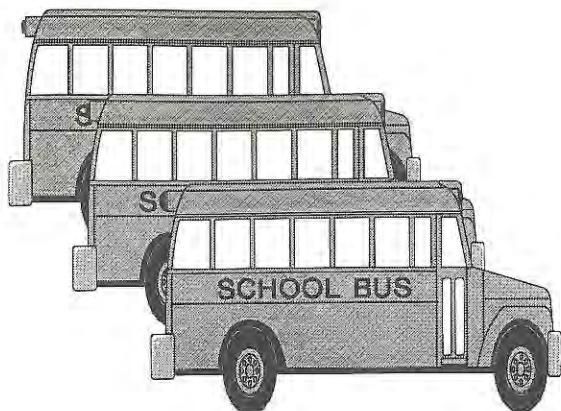


The West Virginia School
Of Osteopathic Medicine
Presents:
**Osteopathic Manipulative
Medicine / Anatomy**
CME Series:
THE LUMBAR SPINE
September 27-28, 1996

A course designed for physicians (DO or MD) and structured to allow for individual instruction in the anatomical & clinical concepts relevant to evaluation & manipulative treatment of the lumbar spine.

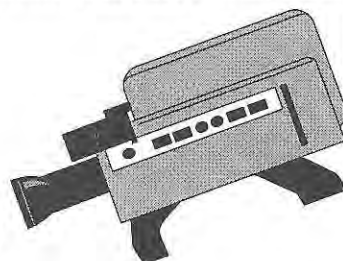
Plastinated human anatomical specimens (a process by which dissected cadaveric anatomy is converted into odorless, non-toxic specimens) dissected to show the pertinent clinical anatomy of the region under study will be used.

A 1:6 faculty / student ratio will be maintained
Enrollment is limited. 11 CME hours anticipated.
Call Barbara Elliott, CME Coordinator
(304) 647-6257



Call the AAO
for Information about the
the Triple Decker Courses
October 25-27, 1996

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



A Sneak Preview

Strain-Counterstrain Course
Mark Cantieri, Speaker

Course Objective: to provide introduction to counterstrain and review for those who have taken a prior counterstrain course. Emphasis would also be on applied functional anatomy.

Open to MDs and DOs, interns and residents. No students. Course Level: Basic or Intermediate (depending on prior skills). 20-Hours Category 1A CME. Limited to 50 participants. Fee: \$525.00

Facilitated Positional Release
Eileen DiGiovanna, DO, FAAO and Stanley Schiowitz, DO, FAAO

Course objective: Train faculty of Colleges of Osteopathic Medicine and private practitioners in quick, easy form of manipulation.

Open to MDs and DOs, interns and residents. No students. Course Level: Basic. 12-Hours Category 1A CME. Limited to 26 participants. Fee: \$350.00

Myofascial Release
Judith O'Connell, DO, FAAO

"As this philosophy (osteopathy) has chosen the fascia as a foundation on which to stand, we hope the reader will chain his patience for a few minutes on the subject of the fascia, and it's relation to vitality. It stands before the philosopher as one of, if not the deepest living problems ever brought before the mind of man."

Philosophy of Osteopathy, p. 162

Open to DOs, interns and residents. No students. Course Level: Intermediate; 20-Hours Category 1A CME; Limited to 24 participants. Fee \$525.00

For more information, Contact: American Academy of Osteopathy,
3500 DePauw Boulevard, Suite 1080, Indianapolis, IN, 46268-1136;
phone (317) 879-1881; FAX (317) 879-0563.

1996 Convocation Video Tapes

"Persistent Somatic Dysfunction: Causes and Treatment Strategies."

Atlanta, GA

- | | |
|--|---|
| <p>Tape #1 <i>Somatic Dysfunction Generated by Joint Surface Irritation</i> – Frank Willard, PhD</p> <p><i>Proprioceptive Input and its Relationship to Generating and Treating Somatic Dysfunction</i>
Dr. Vladimir Janda</p> | <p>Tape #5 <i>Rheumatologic Evaluation and Treatment of Patients with Persistent Somatic Dysfunction</i>
Joy Schechtman, DO</p> <p><i>Diagnostic Radiology: What Tests are Reasonable and Why</i> – David Berg, DO</p> |
| <p>Tape #2 <i>Somatic Dysfunction Generated by Visceral Problems: The Feedback Loop</i>
Frank Willard, PhD</p> <p><i>Visceral Manipulation: Theory, Practice and its Effect on Structural Patterns</i>
Kenneth J. Lossing, DO</p> | <p>Tape #6 <i>The Potential for Outcomes Research in OMM</i>
Michael Kuchera, DO, FAAO</p> <p><i>Muscle Energy: Advantages, Shortcomings and How to Integrate the Technique</i>
Gary Ostrow, DO</p> |
| <p>Tape #3 <i>Somatic Dysfunction Generated by Muscle and Nerve Root Irritation</i> – Frank Willard, PhD</p> <p><i>The Diagnostic and Therapeutic Roles of Trigger Point Injections</i> – Andrew A. Fischer, MD, PhD</p> | <p>Tape #7 <i>Counterstrain: Advantages, Shortcomings and How to Integrate the Technique</i>
John Glover, DO</p> <p><i>HVLA: Advantages, Shortcomings and How to Integrate the Technique</i> – John Hohner, DO</p> |
| <p>Tape #4 <i>Diagnostic and Therapeutic Injections</i>
Timothy King, MD</p> <p><i>Psychiatric Evaluation and Treatment of Patients with Persistent Somatic Dysfunction</i>
Richard Rosengard, DO</p> | <p>Tape #8 <i>Conclave of Fellows; "The New Fellow"</i>
Anthony Chila, DO, FAAO, Program Chairperson</p> |

Order Now – Save

VHS video tapes of the 1996 AAO Convocation are now available for your personal library at a special Convocation discount of \$195.00 + shipping for the full set of (8) tapes. Program Chairperson Brad Klock arranged the program around the theme "Persistent Somatic Dysfunction: Causes and Treatment Strategies." The Academy hired a professional contractor to tape these lectures with a two-camera set-up. Please review the titles and order your complete set. You may also order individual copies of tapes which pique your interest.

You may charge this purchase to your **MasterCard or VISA**
(circle one)

Cardholder's Name _____
Card # _____
Expiration Date _____
Signature of Cardholder _____

- ___ Please send one complete set of tapes @ \$195 plus \$10 shipping.
- ___ Please send me a special package of Dr. Frank Willard's three lectures for \$69.95 + \$5 shipping.
- ___ Please send me one copy of tape(s) # _____ (specify tape #) @ \$30 per tape + \$5 shipping.

Printed Name _____

Street Address for UPS shipment _____

City _____ State _____ Zip _____

Daytime Phone _____

Return this form along with your payment to cover both tapes and shipping to:
AMERICAN ACADEMY OF OSTEOPATHY
3500 DePauw Boulevard, Suite 1080
Indianapolis, IN 46268-1136
Phone: (317) 879-1881 or FAX (317) 879-0563

American Academy of Osteopathy's

Computer Medicine Tutorial August 22-25, 1996

AAO Headquarters
3500 DePauw Boulevard, Bldg. 3, Lower Level
Indianapolis, Indiana



30-Hours
Category 1A
CME

Program

Thomas A. Naegele, DO Instructor and Program Chairperson.

Thursday, August 22, 1996

- 5:00 pm Registration and Reception
- 6:00 pm Installing the Software and General Overview
- 7:00 pm Create a medical note with the existing databases and print out all forms
- 8:00 pm Correct titles for your office and redo

Friday, August 23, 1996

- 8:00 am Understanding the Foresighted Practice Guideline Model
- 9:00 am Laboratory 1 – Build an example FPG
- 10:00 am As a team, define all of the FPGs for the group
- 11:00 am Distribute the Guideline Names among the teams
- 12:00 nn Lunch
- 1:00 pm Define the common decision tables for the group
- 2:00 pm Build the common decision tables around OMM
- 3:00 pm As a team, go over all medical encounters while building the common decision tables
- 4:00 pm Put the common medical decision tables in all the FPGs and start on the unique decision tables.
 - 1) Create a research study
 - 2) Enter it into the computer
 - 3) Create another FPG with the study in it
 - 4) Make two make-believe patient notes
 - 5) Look at the research directory
- 5:00 pm Dinner
- 5:30 pm Open Lab: Instructors available until 8:00 pm

Saturday, August 24, 1996

- 8:00 am Lab: Try to make a workable FPG for each participant's FPGs
- 10:00 am Create a medical note with your decision table, using a simple example and have each participant pretend that they are patients
- 12:00 nn Lunch
- 1:00 pm Research: while working on the FPGs, we'll enter a research study into the AUDIT/RESEARCH feature
- 2:00 pm Make corrections within the FPGs for the research criteria. Make one medical note with all forms and, then, look at the research tables.
- 5:00 pm Adjourn

Sunday, August 25, 1996

- 8:00 am Reviewing Medical Data Transfer Methods
 - 1) MORF Interface;
 - 2) Standard Patient File Format
 - 3) Standard Practice Guideline Format
 - 4) Make a patient note and see all of these interfaces
 - 5) Improve your FPG to make better interfacing
 - 6) InterLink
- 11:00 am Review of course; Questions and Answers
- 12:00 nn Adjourn

Course Objective:

Participants will build a computerized medical record system for their offices using customized software that will be **installed on their own equipment**. The unique feature of this course is that the final product will serve as a foresighted practice guideline which integrates the use of osteopathic principles and practice as well as osteopathic manipulative medicine into patient care.

Registration Fee:

\$2,500 (includes software and manuals; course data and software; and course manuals). **Each participant will bring his/her own computer (DOS 286 or higher).**

Refund Policy:

The American Academy of Osteopathy reserves the right to cancel this educational program if less than 10 physicians. 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.

REGISTRATION FORM

Computer Medicine Tutorial

Name _____

Address _____

City _____ State _____ Zip _____

Day-time Telephone _____

AOA # _____ College/Year Graduated _____

Deposit of \$500 will hold space in course. Remainder is due by July 22, 1996.
Make Check Payable to:

American Academy of Osteopathy

3500 DePauw Boulevard, Suite 1080

Indianapolis, Indiana 46268-1136

Telephone: 317/879-1881 or Fax: 317/879-0563

We accept VISA / MC (Circle One)

Credit Card Number _____

Expiration Date _____

Signature of card holder _____

New Publication!



Counterstrain: Handbook of Osteopathic Technique

by Herbert A. Yates, DO, FAAO and John C. Glover, DO

New! Now available through the AAO Bookstore for \$49.95!

This manual is the most succinct coverage of this kind of osteopathic technique that has as yet been formulated. In the beginning, the authors have clearly shown how Lawrence H. Jones, DO, FAAO developed this concept of counterstrain, and secondarily have explained the rationale and theory behind the methods.

Part two gives a clear explanation of the abbreviations which simplify record keeping, and make it possible for the operator to make the findings understandable. By this means, one can readily know what was found on the previous examination, and thus it gives the operator an opportunity to recheck accurately the changes which have occurred as the result of osteopathic treatment. The line drawings accompanying the step-by-step examination and treatment clearly illustrate the positioning of the patient. After the operator has taken the time necessary to memorize this nomenclature, it will become amazingly convenient to record the information.

In my opinion, this is the best book on the subject that has been prepared. The spiral binding makes it easy to lay the book open while applying the techniques during the learning process.

*Alan R. Becker, DO, FAAO
Private practitioner
Kailua, Hawaii*



Counterstrain: Handbook of Osteopathic Technique

by
Herbert A. Yates, DO, FAAO
and
John C. Glover, DO

Order Form

Printed Name _____

Address _____

City _____ State _____ Zip _____

Telephone _____

VISA/MasterCard _____
(circle one) Card Number

Expiration Date _____

Signature _____

FAX No. (317) 879-0563 or mail to the
American Academy of Osteopathy,
3500 DePauw Blvd., Suite 1080, Indianapolis, IN 46268-1136

"Introductory Visceral Manipulation Course"

Advance Registration Deadline:
August 27, 1996

September 27-29, 1996

Holiday Inn North

Program

Friday, September 27, 1996

- 8:00am Registration
- 8:30am Course Introduction
- 8:45am Introduction to Course
 - 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?
- 10:30am Small Group Discussion
- 11:00am Exercises:
 - Sacral compliance; Liver lift
- 12:00pm LUNCH
- 1:00pm Anatomy: Review of topography and general anatomy
- 1:45pm Practice
- 3:00pm Small group discussion
- 3:30pm Stomach

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 Biliary System Practice
- 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 Jejunioileum

Sunday, September 29, 1996

- 8:00am Review and Questions
- 8:30am Jejunioileum 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

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
AAO Non-Member	\$625

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.

Who May Attend

Educational objectives for AAO are to provide programs aimed to improve understanding of philosophy and diagnostic and manipulative skills of osteopathic physicians and foreign DOs with a full license or a registration, medical, podiatric and dental professions within their licensed privileges of practice and for those in programs leading to such license.

Make Hotel Reservations

by calling directly to:

Holiday Inn Select (North at the Pyramids)
3850 DePauw Blvd.; Indianapolis, IN 46268.
Phone: (317) 872-9790; FAX: (317) 871-5608

\$74.00 single/double
cut-off date is August 27, 1996

Conference Registration
Visceral Manipulation Course
September 27-29, 1996
Holiday Inn North
Indianapolis, Indiana

Name for Badge (please print clearly)

Street Address

City State Zip

AOA Number

College and Year Graduated

**We Accept
MasterCard and VISA**

Card Name

Card Number

Expiration Date

Signature

CME Credits
25 Hours - Category 1-A

Program Chairperson
John Glover, DO

Faculty
Daniel Bensky, DO
Ken Lossing, DO

Appropriate Dress
Loose fitting sports attire

Sponsored by:
**AMERICAN ACADEMY OF
OSTEOPATHY**
3500 DePauw Boulevard, Suite 1080
Indianapolis, IN 46268-1136
Phone: (317) 879-1881
FAX: (317) 879-0563

Jones Strain- Counterstrain

Lawrence H. Jones, DO
With
Randall Kusunose, PT
Ed Goering, DO

Price: \$39.95 (softbound)
\$54.95 (hardbound)
plus \$6.00 S&H (USA)

New Publication

Lawrence H. Jones, DO, FAAO, originator of the counterstrain approach to treatment of somatic dysfunction, has updated his original book, first published by the American Academy of Osteopathy in 1981 under the title Strain and Counterstrain. There are a number of changes from the original text. All of the photographs have been redone to improve the clarity of the text. Another major change is the general layout. Identification of tenderpoints and positions of comfort are grouped by body region. Each point is described in a narrative form, often with clinical correlations. There is an index with the updated book

John C. Glover, DO
Chairperson, Dept. of Osteopathic Principles and Practice
University of Health Sciences College of Osteopathic Medicine, Kansas City, MO

Order your copy today!

Number of Books Ordered _____
Softbound or Harbound (circle one)
Total \$ amount _____

Printed Name _____

Address _____

City _____ State _____ Zip _____

Telephone _____

VISA/MasterCard _____
(circle one) Card Number _____

Expiration Date _____

Signature _____

FAX No. (317) 879-0563 or mail to the
American Academy of Osteopathy, 3500 DePauw Blvd., Suite 1080, Indianapolis, IN 46268-1136



3500 DePauw Boulevard
Suite 1080
Indianapolis, IN 46268-1136

ADDRESS CORRECTION AND
FORWARDING REQUESTED

NON-PROFIT ORG.
U.S. POSTAGE
PAID
PERMIT NO. 14
CARMEL, INDIANA