

THE AAO
JOURNAL

 A Publication of the American Academy of Osteopathy

VOLUME 2 NUMBER 1 SPRING 1992

OSTEOPATHY: Treatment for Chronic Pain



Instinctively Secure

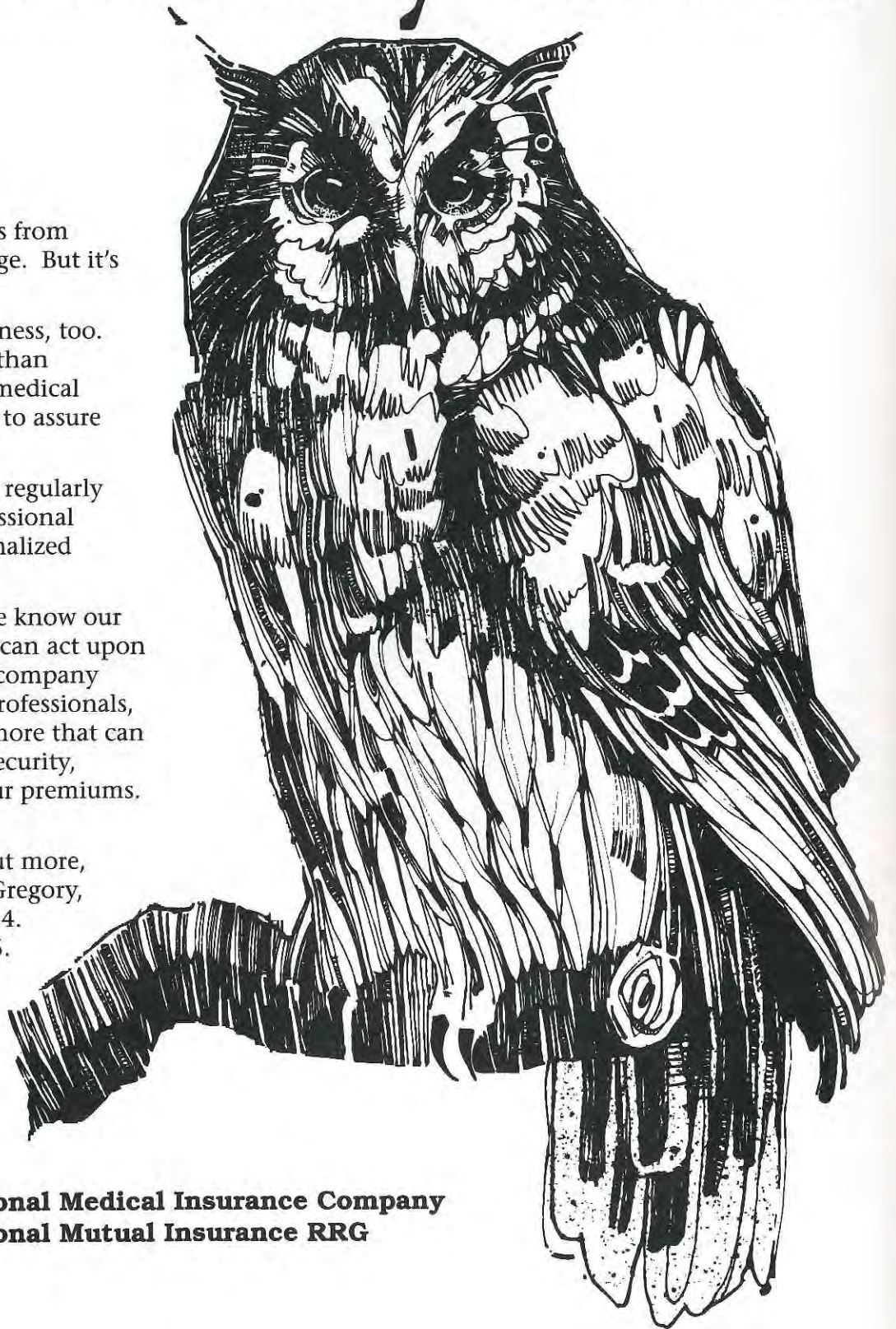
It's a feeling that stems from strength and knowledge. But it's built upon respect.

That's true in our business, too. Because it takes more than providing the proper medical malpractice insurance to assure security.

That's why our clients regularly receive not only professional advice, but also personalized attention.

By staying in touch we know our client's concerns, and can act upon them promptly. As a company directed for medical professionals, we know how much more that can add to your sense of security, without adding to your premiums.

If you'd like to find out more, write us at: Two East Gregory, Kansas City, Mo. 64114. Or call (816) 523-1835. Outside Missouri, call toll-free 1-800-821-3515.



Professional Medical Insurance Company
Professional Mutual Insurance RRG

1990-1991

BOARD OF TRUSTEES

- President
J. Scott Heatherington, DO
- President Elect
Judith A. O'Connell, DO
- Immediate Past President
Raymond J. Hrubby, DO, FAAO
- Secretary-Treasurer
John P. Goodridge, DO, FAAO
- Trustee
Barbara J. Briner, DO
- Trustee
Jerry L. Dickey, DO, FAAO
- Trustee
William A. Kuchera, DO, FAAO
- Trustee
William E. Wyatt, DO
- Trustee
Frank C. Walton, Sr., DO
- Trustee
Herbert A. Yates, DO, FAAO
- Executive Director
Steve Noone, CAE

Editorial Staff

- Editor-in-Chief Raymond J. Hrubby, DO,
FAAO
- Editorial Board Barbara J. Briner, DO
Anthony G. Chila, DO, FAAO
Frank H. Willard, PhD
- Managing Editor Laurie B. Jones

The *AAO Journal* is the official quarterly publication of the American Academy of Osteopathy (1127 Mt. Vernon Rd., P.O. Box 750, Newark, Ohio 43055). Third-class postage paid at Newark, Ohio. Postmaster: Send address changes to American Academy of Osteopathy 1127 Mt. Vernon Rd., P.O. Box 750, Newark, Ohio 43055.

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.

Table of Contents

From the Editor 3

Message from the New Executive/Education Director 4

Calendar of Events 4

The Academy Salutes John P. Goodridge, DO, FAAO 5

The Patient Who Wouldn't Give Up 6
by Harlan O.L. Wright, DO

Osteopathy & Chronic Pain 8
by Ted D. Miller, DO

An Integrated Approach for Treating the OB Patient:
Treating the Five Diaphragms of the Body, Part II 10
by Ken Johnson

Observations on A.T. Still 17
by Asa Willard, DO

Letter to A.T. Still 19

A.T. Still Medallion of Honor Deadline 19

Coding for OMT for Medicare 20
Courtesy of Judy Lewis, DO

Osteopathic Research in New Zealand 21
by Richard Carruthers, DO

Alternative Schools of Manual Medicine
Practicing in the United States 23
by J.M McPartland, DO, MS

I Too Had Some Dreams 25
by John Baker, DO

Advertising Rates for the AAO Journal

An Official Publication of the American Academy of Osteopathy

1/4 Page Advertisement	Full Page Advertisement
\$200 placed one (1) time	\$600 placed one (1) time
\$180 placed three (3) times	\$575 placed three (3) times
\$150 placed six (6) times	\$550 placed six (6) times
1/2 Page Advertisement	Classified Advertisements
\$400 placed one (1) time	\$.50 per word
\$375 placed three (3) times	
\$350 placed six (6) times	Subscriptions: \$25.00 per year

The First Graduating Class of Osteopathy 1892-93



Sometimes, when one of my older patients comes into the office and they aren't feeling well, he or she will half jokingly tell me that they're not impressed with the "golden years." In an attempt to make them feel more comfortable, I half jokingly tell them that in medical school I learned that the first one hundred years was the hardest, and after that it's not too bad.

I wonder if this could work for other situations as well. This year we are celebrating the first one hundred years of osteopathic education. These hundred years have been difficult but also rewarding. During this time the number of schools grew from one to fifteen, the number of DOs from one to over 30,000. Osteopathic physicians received full practice rights in all states. Many other similar milestones could be cited, all having been accomplished during the first one hundred years of osteopathic education.

These are changing times for the osteopathic profession, and they are certainly changing times for the AAO. Most notable right now for the Academy is a change in the Executive Director position. This year Mr. Richard Dyson will step down as Executive Director of the Academy. He came into this position a few years ago during very difficult times, and has done a remarkable job in holding down the fort for us. I, for one, appreciate his dedication, hard work, and commitment to the osteopathic profession, and I will miss him. As he moves on to other adventures in life I wish him the best of luck.

We also note the appointment by the Board of Trustees of Mr. Steven J. Noone, CAE, as the new Executive Education Director of the Academy. Mr. Noone comes to us having been the Executive Director of the Indiana Association of Osteopathic Physicians and Surgeons for

the past seven years. He is also the Executive Director of the Indiana Academy of Osteopathy. He has also held positions as a teacher, principal, and director of a school department. He has excellent qualifications in executive leadership and education. He is a Certified Association Executive, and has recently been recertified as such. We welcome him to the AAO, and look forward to his leadership.

Yes, these are changing times for the profession and for the Academy. But as we go through this next century hopefully there will be more good times and few difficult ones. At the end of the second century, maybe DOs will be able to look back at the first one hundred years and say that they were indeed the toughest ones, but after that it wasn't too bad. Not too bad at all.

Raymond J. Hruby, DO, FAAO



Did you realize that the American Academy of Osteopathy is the only national entity within the profession that continues to use the term "Osteopathy" as a noun? It is true and I believe that it is both significant and fitting! You are the D.O.s who have dedicated yourselves to preserving the basic principles of the profession while at the same time developing the art and science of Osteopathic manipulation. I urge you all to proclaim your uniqueness as Osteopathic physicians and take a more assertive posture within the profession. It is in this spirit that I write Osteopathy with a capital "O".

I am excited at the opportunity to serve the Academy as Executive/Education Director and eagerly anticipate beginning my full time duties the first part of April. I certainly was challenged by the Board of Trustees in preparing for the final interview for this position. They presented three fundamental questions as to how I would assume this leadership role and asked for specific plans in leading the Academy into the 21st Century. I pledge my dedication and loyalty to

you as we begin our professional relationship.

What are the priorities from my perspective? First of all, I believe that the Academy must balance its budget by the 1993-1994 fiscal year. You are fortunate to have substantial reserves to assist with operational expenses in these tough economic times. However, membership must increase and educational programs must generate additional non-dues revenue to fund the organization's priorities. Secondly, I believe that there is a need to streamline the internal organization of the Academy in order to maximize the time and talent of its members. You must integrate your structure with your mission, goals and objectives. Finally, I believe that "planning for the future" must become an ongoing process for the Academy if you hope to respond to the rapid changes which are taking place both within the profession and the medical marketplace. The Academy can become THE national educational leader within the profession.

For the past four years, I have been privileged to serve as the Executive Director of the Indiana Academy of Osteopathy in addition to my duties with the Indiana Association of Osteopathic Physicians and Surgeons. The experience has been a highly fulfilling one as we planned and implemented our annual educational seminar. It has been more "fun" than work. I eagerly anticipate that working with the AAO will bring me even more pleasant experiences in the coming years.

I look forward to meeting each and every one of you!

Steve J. Noone, CAE
Executive Director

CALENDAR OF EVENTS

April 30 - May 2 — District IV of the Florida Osteopathic Medical Association, 7th Annual Medicine Update on the Beach - Hilton Indigo Conference Center, Daytona Beach, FL. Contact: Don Jablonski, DO, (904) 673-0020

June 20-28 — 6/20-24/92 - Basic Course in Osteopathic in the Cranial Field - Sir Francis Drake Hotel, San Francisco, CA. 6/26-28/92 - Annual Conference, As the Twig Is Bent - Sir Francis Drake Hotel, San Francisco, CA. Contact: Madeline Rathjen, (208) 888-1201

June 25-28 — Ohio Osteopathic Association 94th Annual Convention - Drawbridge Inn-Cincinnati, Ft. Mitchell, KY. Contact: Jon F. Wills, (614) 299-2107

June 25-28 — Osteopathic Physicians and Surgeons of Oregon Annual Convention Sunriver, OR. Contact: Jeff Heatherington, (503) 244-7592

June 25-28 — Illinois Association of Osteopathic Physicians & Surgeons 93rd Annual Convention. Location: Hotel Pere Marquette in Peoria, IL. Contact: Jenise L. Nanni, (815) 434-5576

June 26-29 — Colorado Society of Osteopathic Medicine, Annual Convention - Colorado Springs, CO. Contact: Patricia Morales, (303) 322-1752

June 28 - July 1 — Washington Osteopathic Medical Association, Annual Convention, Celebrating 100 Years of Osteopathic Medicine - Inn at Semiahmoo, Blaine, WA. Contact: Kathie Iiter, (206) 937-5358

July 10-12 — Massachusetts Osteopathic Society Annual Summer Convention on Cape Cod - Ocean Edge Resort, Brewster, MA. Contact: Michael Shay (508) 896-7247

July 14-19 — American Osteopathic Association Annual Business Meeting of the Board of Trustees and House of Delegates - Hyatt Regency-Doarborn, MI. Contact: Ann Witner, (800) 621-1773, ext. 5814 or (312) 280-5814

July 23-26 — New Mexico Osteopathic Medical Association, 55th Annual Convention - Clarion Inn Eldorado, Santa Fe, NM. Contact: Richard W. Saiser, (505) 828-1905

April 30-May 2, 1992 — "93rd TOMA Annual Convention & Scientific Seminar" Marriott Hotel, Corpus Christi, Texas Hours: 24, Category I-A. Contact: TOMA, (817)336-0549 Friday, May 1, 1992, from 2 - 5:00 p.m. is dedicated to OMT Workshops.

The Academy Salutes John P. Goodridge, DO, FAAO



After 18 years of service, John P. Goodridge, DO, FAAO, will resign from the office of Secretary-Treasurer effective March 24, 1992. At that time, the Academy membership will elect another person to fill the position. Dr. Goodridge has served as Treasurer since 1973-74, and took on the added duties of Secretary when the two offices were combined in 1987-88. The Academy's confidence in his abilities has been evident at each annual membership meeting, where he repeatedly ran for the office uncontested and was voted in unanimously.

A 1943 graduate of KCOM, Dr. Goodridge interned at Massachusetts Osteopathic Hospital in 1943-44 before beginning 30 years of active practice in Hartford and West Hartford, Connecticut, where he and his wife, Marjorie, began their family. His activities then included serving as President of the Connecticut Society of Osteopathic Physicians and Surgeons and Secretary of the Connecticut Osteopathic Examining Board. As Past President and Legislative Committee Chairman of the Connecticut Society of Osteopathic Physicians and Surgeons, our Dr. Goodridge helped organize and lead the successful legislative battle to modernize an archaic practice act with

fragmented rights, making Connecticut the first state to adopt a broad definition of osteopathy which was written into Michigan's statutes a year later.

He then went on to East Lansing, Michigan (where he and Marjorie still reside) to become professor at Michigan State University College of Osteopathic Medicine, providing 12 years of academic and clinical service before his 1991 retirement. He remained politically active in Michigan through the Michigan Association of Osteopathic Physicians and Surgeons, and instructed and coordinated numerous courses.

On the speaking circuit, Dr. Goodridge has appeared on AOA Convention and Academy Convocation programs and has presented to the Vermont Association of Osteopathic Physicians and Surgeons, the New England Academy of Osteopathy, the Michigan Association of Osteopathic Physicians and Surgeons, and the New York State Osteopathic Medical Society. His numerous publications have appeared in various issues of the *JAOA* and the Academy Yearbooks.



Dr. Goodridge in 1946

An Academy member since 1946, Dr. Goodridge has served us in many other capacities besides Secretary-Treasurer, including President, the Visiting Clinician program, the Finance Committee, Publications Committee, Louisa Burns Clinical

Observation Committee, Advisory Council, Membership Committee, and Component Societies Committee. In addition, his position as an officer also meant his inclusion on the Board of Governors, Board of Trustees, and the Executive Committee, where he has served during such significant events as the Academy's relocation to Ohio, the AAO/AOA certification issue, and most recently, the hiring of the newly appointed AAO Executive/Education Director,



Dr. Goodridge with students

Stephen J. Noone. Dr. Goodridge's honors include earning Fellowship in the AAO in 1978, delivering the Thomas L. Northup Lecture in 1983, and accepting the Andrew Taylor Still Medallion of Honor Award in 1987. The UAAO also expresses its gratitude to Dr. Goodridge for his help in making them a more efficient, professional organization, including revision of their Constitution and Bylaws and increasing our understanding of Robert's Rules of Order for conducting their meetings.

All in all, there is probably not a single area of Academy activity which has not benefited from Dr. Goodridge's dedicated service, nor a single one of us who know him that have not been touched by his enthusiasm and wisdom. Our hats go off to you, Dr. Goodridge, and may the love you have shown for the Academy and our profession return to you in double measure.

The Patient Who Wouldn't Give Up

By Harlan O.L. Wright, DO

Mrs. Gregory (not her real name) age 70 years, had been a very active and energetic person until about three or four years ago, at which time she began to experience excessive weight gain, viral infections, bronchial asthma, fatigue, aching in muscles and joints, allergic reactions, swelling in legs and hands, phlebitis and muscle spasms. These symptoms became gradually more severe and more frequent as time went by. During the six month period of time before I saw her she had also developed a skin rash and an unusual amount of depression. The information that Mrs. Gregory provided revealed that she had been given nineteen (19) different kinds of drugs for these various conditions within the previous six months and most of them had made her feel worse. She had taken several different antihistamines, calcium channel blockers, antibiotics, viral medications, hormones, cough medicines, stomach acid inhibitors and "blood thinners".

Dietary history revealed that for many years she had consumed the average American diet with far too much refined carbohydrates, far too little raw food and fiber and frequent binges on sweets and chocolates.

When I first saw Mrs. Gregory at the office I met a very pleasant woman who, as I later learned, was wondering if this was going to be just another futile effort to regain her health. She related to me her many experiences with voluminous laboratory tests, examinations and numerous diagnoses including anemia, depression, hypertension, duodenal ulcer, asthma, chronic obstructive pulmonary disease, arthritis, phlebitis, multiple allergies, erythema aureolar centrifigum

and auto-sensitization dermatitis. One of the specialists told her that she was just getting old and that she would have to learn to live with some of these problems. This really distressed her and she told him that no doctor was going to consign her to a rocking chair. She was all the more determined to find help somewhere, and after constant pressure from her daughter, an advocate of DOs, Mrs. Gregory had consented to fly in from her home town to visit my office.

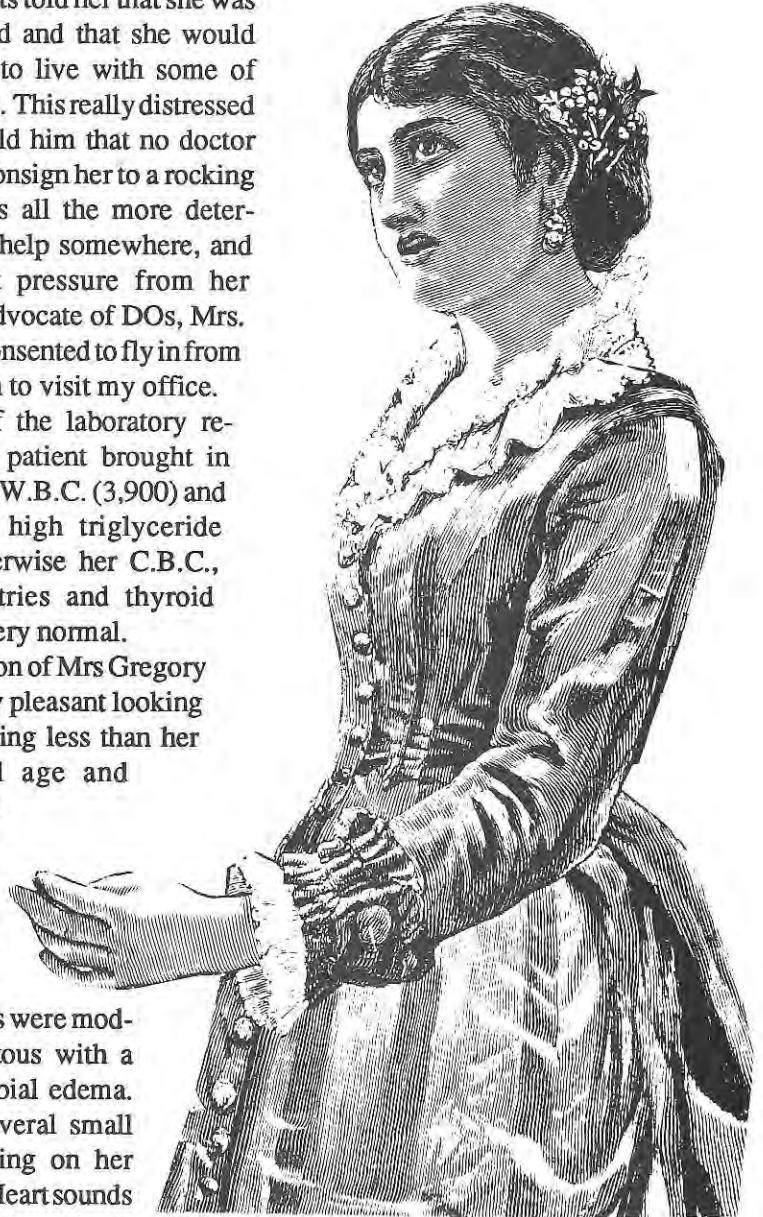
Review of the laboratory reports that the patient brought in revealed a low W.B.C. (3,900) and a moderately high triglyceride (310) but otherwise her C.B.C., blood chemistries and thyroid studies were very normal.

Examination of Mrs Gregory revealed a very pleasant looking woman appearing less than her chronological age and weighing 228

pounds. Her skin had somewhat of a turgid appearance and her fingers and legs were moderately edematous with a 2+ to 3+ pretibial edema. There were several small areas of bruising on her arms and legs. Heart sounds were normal and regular at 80 beats per minute. Her lungs displayed slight crackling in the lower lobes. Tongue was lightly coated with small fissures present. Abdomen had moderate generalized tenderness. Breasts were normal for her weight with no masses palpable. Pelvic examination was normal except for slight indication of candida inflammation

on the vulva. Neurological reflexes were active and normal. Structural examination revealed acute tenderness to firm palpation of the upper six ribs bilaterally. There was very acute pain to pressure over the left sacroiliac articulation and over the left sciatic notch.

The diagnosis in this case will



have to be a discussion instead of a term which could be found in the Merck Manual. Much of Mrs. Gregory's edema was caused by excessive doses of cortisone over too long a period of time. Much of the fluid retention was probably from the cortisone also but the dietary ingestion of far too much sugar and refined carbohydrates was also causative since sugar requires lots of the vitamin B complex for metabolism (particularly B6) and B6 is essential to help prevent and get rid of excess tissue fluids. This could also account for the slight crackling in the lower lobes of the lungs. Although her thyroid tests were normal, this patient had the classical appearance of one in need of thyroid support.

The overuse of antibiotics and cortisone and the excessive intake of sugar can also be causative in immune system depression, thereby accounting for the exacerbation of this patient's allergies and unusual fatigue. Another problem which is largely disregarded by the medical profession that should be considered with the excessive use of antibiotics and cortisone is the possibility of an intestinal yeast overgrowth (candidiasis) which can certainly trigger many of these problems.

The lack of an adequate amount of calcium and magnesium in the muscle tissue could certainly account for the muscle spasms and cramping and the generalized aching of the joints that Mrs. Gregory was experiencing.

The articular lesions in the upper thoracic area and ribs could certainly account for the thoracic aching and the left sacroiliac in lesion could account for the low back and left leg pain.

Treatment: The above reasoning made the treatment of this patient quite straight forward and simple. Since she was going to be in town

only two days, I treated her on both of those days. Treatment was begun with good old fashioned osteopathic manipulation to the involved areas of the back. This followed by intravenous infusion of orthomolecular doses of vitamin B complex with extra B6 and B12, calcium and magnesium, adrenal cortex extract and amino acids in 500 cc of Ringer's Lactate. The above treatment was accomplished on consecutive days.

Mrs. Gregory was given a simple but strict sugar free diet to follow which included adequate amounts of raw foods and whole grain products. She was also instructed to avoid cheese, milk and fermented products such as vinegar and pickles because of their candida enhancing effect.

On dismissal she was given prescriptions for one grain of Armour thyroid, Nystatin Powder to counteract the intestinal yeast, individual vitamin and mineral supplements with adequate amounts of vitamin B, calcium and magnesium, vitamin C, and vitamin E. She had quit taking the myriad prescriptions she had previously been given before she had come to see me and was feeling better without them. She was instructed to continue on one tablet of Moduretic for her blood pressure until further notice.

I first saw this patient on October 30, 1991 and have contacted her about every two weeks by phone or letter to keep up with her progress. She has been very rapidly recovering her health and eradicating her symptoms. The last time I heard from her was on Jan. 25, 1992. She reported the following: Weight loss 30 lbs. (now below 200 lbs), swelling in legs and tissues is about 90% gone, digestion is good with no "ulcer" pains, skin rash is gone, spontaneous bruising has ceased, back pains and sciatic nerve pain is gone, phlebitis has disappeared, allergies are very much

improved, depression is gone and her energy is "great".

Comments: This was a very exciting and satisfying experience. To be able to help someone who had suffered with all these problems for such a long time back to a vibrant state of health is very personally rewarding. Usually, health is such a simple thing. We don't just happen to "get ulcers" and "get arthritis" and "get diabetes" and "get depression" and "get fatigue." Most illness is the result of long continued stresses to our bodies and immune systems due to poor habits regarding such things as eating and drinking, elimination, exercise and thinking etc. We, as Osteopathic Physicians, should evaluate our patients with these things in mind and teach them how to correct them. We shouldn't immediately go to the PDR to see what the pharmaceutical companies want us to prescribe for these various conditions but conversely we should do a little reasonable thinking and find out if possible, what this patient has been doing wrong to suppress their body's natural immunity to allow them to be ill. We need to return to the tenets of Osteopathic Philosophy.

Last Word by Robert J. Klein, DO

If you, dear person, lost the ability
To make your hands do vibrato
And no longer could flip them
Back and forth in staccato
If for this motion you really were
amnesic
We doctors would say you were
Dysdiadochokinesic

Help Wanted

Opportunity available for Cranial Osteopath to join an established growing OMT-only. Practice in Maryland suburb North of Washington DC. Call (301) 587-7072 weekdays or (301) 585-7023 evenings and weekends.

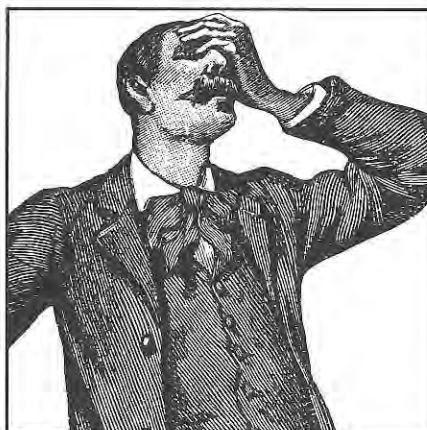
OSTEOPATHY & CHRONIC PAIN

by Ted D. Miller, D.O.

Traditional approaches to chronic pain aren't always effective. Why? For the simple reason that they do not enhance the body's natural healing process sufficiently. The human body can heal itself in many circumstances but it cannot fully dissolve deep restrictions in the body caused by trauma. With the assistance of manual techniques, particularly the non-force approaches, these restrictions can be released and chronic pain eventually relieved.

It is well known that the body's connective tissue, the "fascia," will "remember" the force of an injury, particularly if it is severe and traumatic. After an injury, the body does what it can, on its own, to release the deep restrictions caused by the trauma. Yet it may only be able to release 30%-40% of these restrictions in the days and weeks that follow. The remaining restrictions are covered over by the body and then compensated for. Children's bodies possess an amazing capacity to compensate so well for remaining restrictions in the fascia that they often don't experience problems until decades later.

The pain of an injury usually subsides after a relatively short period of healing. The patient and physician both believe that the injury has been cured. But a practitioner trained in manipulative techniques can put his or her hands on that patient's body and say, "No, you are not cured. Serious restrictions still remain here and will probably cause problems years later if not treated now." This is the reason why the osteopathic profession recommends that every patient involved in a serious injury be treated with manual techniques, particularly the non-force approaches, as soon as



possible after the accident occurs, even if the pain goes away. Many physicians and patients are completely unaware of the relationship between current pain and previous injuries, including those that occurred in childhood.

The truth is that the effects of these injuries are only partially dissolved, and the body has compensated for what remains. Over the years, further injuries add new layers of restriction to those that already exist. As long as we can compensate well for these restrictions, we can remain unaware of their presence. But with the insidious stress of modern living, these restrictions eventually make their presence known and cause pain that does not go away. Patients often come to my office and say, "I don't know what I did. I just woke up with this pain, and it doesn't seem to be getting any better with the treatment my family doctor is using."

The approach that I use in my practice for these patients, as well as for those who have sustained an acute injury, is the application of non-force "unwinding" myofascial release and cranial osteopathic techniques to help catalyze the body's inherent capacity to unwind and dissolve these restric-

tions. All we do is gently lay our hands on some part of the body and wait. We wait for an internal unwinding, a softening to begin. As the process continues, we have a sense of when to gently pull with traction, and when to press with compression, all for the sake of enhancing the body's inherent healing capacity.

From the patient's point of view, this process is so gentle and relaxing that some patients fall asleep due to release of deep fatigue held in the tissues. The fundamental basis of this approach is to initiate and enhance the spontaneous unwinding process that every human being possesses. These non-force approaches have not been recognized or utilized outside the osteopathic professions until the past decade or so. I do not hesitate to add more "direct" approaches from time to time, as needed. These include "muscle energy technique" and even, occasionally, "high-velocity thrust" technique to mobilize whole-body restrictions or specific restrictions in the vertebrae. The more forceful techniques are not the mainstay of my work and I have used them less and less over the years. This is because, in my experience, it is far more effective to use the non-force, unwinding approaches as the foundation of treatment and then add more direct approaches only if needed. By doing so, one only needs to use a fraction of the force that would have to be used if high-velocity thrust techniques were the only ones used.

I think of the body as an integrated whole, and I see most traumatic injuries as being whole-body in nature. Auto accidents are an important example. In a whiplash injury, the force at the moment of impact is initially

transmitted through the chassis of the automobile to the seat in which the driver or passenger is sitting, and then first to the patient's pelvis, which absorbs a great deal of energy before it is then transmitted up the spine, causing the head and neck to "whip". The head may actually move the farthest, but it is the pelvis that absorbs the greatest amount of energy at the moment of impact. As a result, with an auto accident patient, DOs are trained to release the restrictions in the pelvis and lumbosacral area, whether or not the patient has pain in the low back, along with treating the obvious areas that do hurt in the neck and upper body. When the pelvis and sacrum are freed up, the neck and upper back have a better chance to loosen and heal, and hence the pain can more easily be relieved. This raises an important principle in the practice of osteopathy. Even though a patient may come for neck or back or shoulder pain, we do not just treat the painful area. It is crucial to treat the whole body and find the underlying restrictions that are at the root of the pain. Working on the place where the patient hurts is only the "tip of the iceberg". It is my job to find these other restrictions and help catalyze the body to release them at its own pace, layer by layer, and to "melt" this "iceberg" over the weeks that follow.

I generally do not treat people more often than once a week unless they are in acute pain. It is important to let the body unwind and integrate during the week between treatment sessions, because most of the healing takes place at night while the patient is asleep and at other times during the day when he or she is able to rest.

I continually remind my patients that I am merely a catalyst in the healing process. Those of us who use these approaches find that our patients often respond when nothing else has worked, even if they have had chronic

pain for years or decades. Generally, the longer the patient has been in chronic pain and the greater degree of overall restriction, the longer it will take before these restrictions finally "melt". But if the patient and practitioner persevere, the goal can be accomplished. For some patients in my practice with long-time chronic pain, it has even taken one or two years of weekly visits before they have less pain and have regained greater function. The majority of pain patients, however, usually begin to respond within a few weeks to a few months.

It is also important to recognize the whole-body nature of these restrictions, which affect whole regions rather than a specific joint or muscle. Any diagnosis made by the doctor or physical therapist trained in traditional medicine, such as a "shoulder bursitis" or "carpal tunnel syndrome", is actually never confined to the bursa or the tendons. There also exist underlying, more distant fascial restrictions, often far from the area that hurts, which constantly put a strain on the site of pain and inflammation. Only when these restrictions are gone will the problem fully resolve.

A further example of this concerns the common diagnosis of a herniated or bulging disc. If there has been enough trauma to actually herniate a disc, the soft tissues in the area are also affected, which include the paraspinal connective tissue, muscles, ligaments and tendons. Any patient with a herniated disc should be treated first with non-force manual techniques to unwind the restrictions that have caused an injury. This may actually eliminate the need for surgery. If not, these techniques can also provide relief for patients who end up having disc surgery but still have pain afterwards.

We in the osteopathic profession believe that hands-on techniques should be used widely for medical

problems, in general, by the allopathic medical profession, in addition to (or sometimes even instead of) the treatment methods now being used. These techniques should be recommended and used by pediatricians, internists, family and general practitioners, emergency medicine specialists, orthopedists, neurosurgeons—in fact, by all physicians, particularly in the case of trauma. In addition, many of us recommend that every person be treated two or three times a year to prevent problems from arising and to help maintain the body's suppleness and flexibility.

Osteopathic manipulative techniques are also very effective in the field of dentistry and the treatment of temporomandibular joint (TMJ) syndrome. All patients with TMJ syndrome should, in the opinion of our profession, receive osteopathic manipulative evaluation and treatment, particularly with cranial techniques, whether or not oral appliances are used. It has been our experience that up to 70 to 80% of the oral splints used in the treatment of TMJ syndrome might be avoided if cranial treatment were provided. If an appliance is still needed after the initiation of cranial technique, then the overall course of treatment can typically be shortened.

While on the subject of dentistry, it is extremely important to recognize the need of cranial therapy before and after a dental extraction, particularly extraction of molars or wisdom teeth, which always takes a great force. Many patients who do not respond to traditional treatment for chronic head, neck and back pain, as well for neurologically-based have probably had traumatic dental extractions at some time in the past, particularly of impacted wisdom teeth. The hands-on practitioner treating restrictions caused

Continued on page 22.

An Integrated Approach for Treating the OB Patient: Treating the Five Diaphragms of the Body, Part II

by Ken Johnson, an Anatomy/Osteopathic Principles & Practices Fellow at UNECOM.



This is Part II of a two-part series on the diagnosis and treatment of the OB patient.

Part I explained the anatomical and physiological changes associated with pregnancy.

When treating OB patients, I get the impression that we are involved in something that is almost sacred. In the Bible it states that God knit us in the womb... He knows us so well that he knows every hair on our head. As you treat pregnant women, you can't help but feel this presence as you work with them.

Part I of this article explained the anatomical and physiological changes that occur during pregnancy. These changes tax the cardiovascular and respiratory systems by increasing demands. Postural changes further tax the compensatory abilities of the body. Commonly you will find a decrease in diaphragmatic excursion which decreases the thoraco-abdominal-pelvic pressure gradients, leading to lymphatic and venous stasis. Some of the symptomatology that may be associated with these changes are:

1. Lower extremity edema and leg cramps.
2. Low back pain.
3. Pubic symphysis lesions.
4. Paresthesias.
5. Carpal tunnel syndrome associated with pregnancy.

6. Thrombophlebitis.
7. Hemorrhoids
8. Pre-eclampsia/eclampsia.
9. "Morning sickness".
10. Hyperemesis gravidarum.

The goals of treatment will be:

1. To treat the structural restrictions to improve function, 2. To decrease thoraco-abdominal-pelvic motion restriction which will decrease the work of breathing and therefore increase the efficiency of venous, lymphatic and cerebral spinal fluid dynamics, and 3. To treat the five diaphragms to promote coordinated and optimal function of the whole body. It is important to note that any problems that the patient previously had can be exacerbated by the changes of pregnancy. The good side of this is that the hormonal changes that occur during pregnancy allow for a greater ease in relieving the long term restrictions that the patient may have had.

There are some general preventative goals of treatment for each trimester. During the first trimester you are preparing the patient for her pregnancy. You want to optimize neuroendocrine function by paying special attention to the cranial base and sacrum and their effects on the pituitary-ovarian axis. You want to help the physiology get organized to prevent hyperemia or toxicity later.

The second trimester is when the fundus lifts off the pelvic floor and out of the true pelvis. This marks the beginning of increased postural de-

mands on the patient. Special attention is applied to the liver for prevention of hyperemesis gravidarum. (This will be discussed later.)

In the third trimester, the pelvis tips forward, there is an increase in the lumbar lordosis, a decrease in the A-P diameter of the thoraco-abdominal-pelvic cavities, the buttocks protrudes, the knees are extended and the feet pronate. The goal here is to prevent the sequela of compromised function and prepare for delivery.

Balanced Ligamentous (Membranous) Tension

The following description of diagnosis and treatment is one that I have found useful, but it is by no means inclusive or exclusive. I believe it is important to address each of these areas. The way in which the physician chooses to do so is up to them. I will be describing some techniques that I have found especially useful and beneficial in treating the pregnant patient. Many of these techniques were originally expressed by William Garner Sutherland and were taught to me by Dr. Anne Wales. Before describing the techniques, it is important to review a few key concepts in this approach to treating the patient. All joints of the body can be viewed as either a ligamentous articular mechanism or a membranous articular mechanism with their own characteristics of motion. This form of treatment utilizes the principle of balanced membranous tension or balanced ligamentous tension. "The point

of balanced membranous (ligamentous) tension is defined as the point in the range of motion of an articulation where the membranes are poised between the normal tension present throughout the free range of motion and the increased tension preceding the strain or fixation which occurs as a joint is carried beyond its normal physiology. Thus, it is the most neutral position possible under the influence of all factors responsible for the existing pattern. All tensions have been reduced to the absolute minimum."¹²

"The strain or the lesion is when the joint is held in an abnormal position by whatever forces happen to hold it in that position (trauma, posture, etc). The relation between the parts of any mechanism in the skeletal system is either normal and free or it is in a warped and strained position. If it is in a strained position, it is held there by the abnormal tension in the ligaments. This increased or unbalanced tension which is carried in the joint mechanism is maintained by the strain in the ligaments, membranes or fascia. That is why when you balance the joint where you find the lesion you empower the ligaments, membranes or fascia to move the bone which is their function. The principle of this approach is to hold the joint in a state of balance instead of strain so that the normal actions of the ligaments can resolve the problem. The increased tensions in the lesion unbalances the joint. The mechanism resolves the lesion if you balance all of its parts. It is important to have a clear understanding of the anatomy of each ligamentous (membranous) articular mechanism in order to achieve a state of balance."¹⁴

Therefore, in treating the lesions that we will be addressing, the operator will try to achieve the most neutral point in the lesion complex that is found. There are four main principles

that you can use to achieve balance membranous or ligamentous tension.

1. Exaggeration. To employ this method, increase the abnormal relationship at the joint by moving the articulation slightly in the direction toward which it is lesioned.

2. Direct action. This is achieved by moving the joint toward a more normal position.

3. Disengagement. "This may be necessary before either exaggeration or direct action can be used. Disengagement technique mainly separates the opposing surfaces before attempt is made to secure balance. There may be an element of muscle or fascial stretching also."

4. Opposite physiological motion, which is "holding the bones toward the position they would not physiologically assume. One component is held toward the physiological position (direct action) while the other component is held away from it (exaggeration)."¹²

In this neutral position (balanced ease) it is the function of the ligaments to move the bones (involuntary system). The muscles also move the bones, but that is in the voluntary system. The shape of the articular surface determines the motion that occurs at a given joint. The ligaments that are around the joint hold the bones together and are arranged so as to permit and limit the motion in the joint. The muscles have a tone which further limits the motion at the joint. Muscles are the agents of the voluntary motion at the joint which moves the skeletal system according to its architecture. The muscles have the origin and insertion of a muscle is the framework in which it functions. If the skeletal framework were to change sufficiently so that the distance between the origin and insertion is shortened the muscles contract. If the distance between the origin and insertion is lengthened, and the muscle

can't contract it will become fibrotic. The goal of treatment is to readjust the mechanical imbalance in the skeletal system of the mechanism in order to make it possible for the neuromuscular system to be at ease. Soft tissue technique's focus is to relax the muscles involved in a lesion complex. The system presented here changes the framework in which the muscles work which in turn relaxes them, as well as having other far ranging effects. The unbalanced tension is found in the ligaments which are part of the involuntary system. The strain in a lesion is in the ligaments, membrane or fascia. When you balance the tensions in the direction of ease (neutral) all the tensions are reduced to an absolute minimum - that is when the ligaments have their natural power to move the bones into their natural relationship. The perceived neutral point is a fulcrum. A fulcrum is defined as a point about which something moves but it itself does not move. In a joint mechanism, the fulcrum is the neutral that you perceive through palpation.

In summary when palpating a ligamentous articular mechanism, the operator tries to perceive the neutral point in the range of motion of that joint (the fulcrum about which that joint is moving). This neutral point is then held and the innate forces within are allowed to manifest themselves to secure a release. There are a number of different innate forces that may be used to help assist in the reduction of these lesions. They are the normal tension present in ligaments, membranes and fascia, the use of respiratory cooperation, fluctuation of cerebral spinal fluid and finally postural cooperation. For further details on the use of these principles, the reader is referred to Osteopathy In The Cranial Field, pages 100-106, as well as Teachings in the Science of Osteopathy.

"In this system of operation, you

perceive a fulcrum about which a joint mechanism is moving. You secure that neutral (fulcrum) point. Once you have achieved balanced membranous tension you become an observer. The operator's function is to perceive the workings of a given ligamentous articular mechanism and help to establish the neutral or still point in that mechanism and to allow the innate forces within to manifest themselves to secure the change. It is not the operator that secures the change. It is the forces within that are securing the change. Once you have established the neutral you simply become an observer and watch whatever change happens."¹⁴

Diagnosis and Treatment

The anatomical changes that occur in pregnancy, namely an anterior shift in the center of gravity with a corresponding posterior shift of the shoulders, will have profound effects throughout the patient's body. It is important to observe the patient as they walk into your office and start by examining the patient in a standing position. The medial longitudinal arches of the feet are often in a "flattened" position. With the patient standing, try to insert your fingertips under each medial longitudinal arch and observe the depth and length of the arch. It is common to find one or both arches flat to the floor. Next observe the relationship of the patient's lower extremities to the pelvis. Commonly, the patient will be in a position with both feet and legs externally rotated. Next, I palpate the patient's sacrum and innominate bones with my hands and observe the amount of respiratory and primary respiratory movement that is occurring in the pelvis. In the patient who presents with one or both arches flattened, you will often notice that the pelvis is locked on its respiratory, primary respiratory and postural axes,

with the sacrum not being able to move freely between the ilia. I have found that many people examine the pelvis and the sacrum with the patient supine and treat from that position; they do not examine the patient after the treatment, standing, to see what effect posture has on the motion in the pelvis. I have found that many times you can treat the pelvis from the supine model and restore normal function only to find that when a patient stands there is loss of motion that occurs.

First Diaphragm - The Arches

The foot is a wondrous construction of many different ligamentous articular mechanisms. You must view the relationship of the medial longitudinal arch, the fore foot and hind foot, and the remainder of the lower extremity, as all working together to maintain the balance and function throughout the lower extremity.

When you observe a patient with a functionally flat foot or pes planus, you will notice that the medial longitudinal arch is flattened, the calcaneus will be slid posteriorly, and the cuboid typically rotates internally along its longitudinal axes. As the arch flattens or the longitudinal arch pronates, the fore foot and hind foot slide away from each other with the calcaneus moving posteriorly under the talus. With the foot in the pronated position, more weight is getting into the medial longitudinal arch. As this occurs, there is a change in the relationship between the foot and the lower extremity, with the lateral malleolus shifting anteriorly and the superior portion of the fibular shifting posteriorly. This is the fibular shifting about an axis somewhere in the lower extremity near the inferior tibiofibular articulation. The inferior portion of the fibula is in an anterior position and the superior portion of it

is posterior. The interosseous membrane that is between the tibia and fibular is a membranous articular mechanism that is present to maintain normal structure and function. These changes reflect not only throughout the lower extremity, but up into the pelvis as well.

The treatment of the lower extremity and feet can begin with observing the position of the fibular in relation to the tibia. By placing your thumbs on the anterior aspects of the medial and lateral malleoli, you can observe if the lateral malleolus has shifted into an anterior position, comparing left and right ankles. Also, you can observe the position of the fibular head being relatively anterior or posterior. Commonly you will find in the patient who has a pes planus, that the superior aspect of the fibular head has been driven posteriorly with the inferior aspect being anterior.

We will use the example of treating the right lower extremity. The operator places their right hand, with their thenar eminence on the medial malleoli, with their fingers wrapping around the achilles tendon so that their fingers are grasped around the lateral malleolus to apply a posterior traction. The operator's left hand is used to grasp the fibular head and pull it anteriorly. You use this technique to achieve balance of the membranous tension in the tibio-fibular interosseous membrane and can use dorsiflexion of the foot to amplify the release. You wait for the interosseous membrane to restore the normal relationship between the tibia and the fibular. This is a direct technique to establish balanced membranous tension. When there has been a change in the tissue, with a more normal relationship of the tibia and fibular established, the operation is finished. As with any other technique, it is important to recheck after treating that area (see Figure 1).

The treatment of the fore foot and the hind foot is accomplished by



Fig. 1 Tibio-Fibular Release

grasping the patient's calcaneus with one hand and the fore foot with the other hand, and applying a compressive force between the two. The key to the hind foot is the talocalcaneal ligament. The hind foot is regulated by this ligament. As the operator compresses the foot, they follow the motions that are occurring in the patient's tissues, find the point of balance and wait for a release. (Figure 2).

As the fore foot pronates, creating a functional pes planus, the me-



Fig. 2 Forefoot/hindfoot Release

dial longitudinal arch (navicular) drops inferiorly. Laterally, the cuboid rotates about its long axis, moving internally and inferiorly, changing the relation of the articulation between the cuboid and 4th and 5th metatarsals. There is also an increase in the fascial tone of the plantar surface of the foot. You can examine the individual ligamentous articular mechanisms of the feet to determine if there

are any dysfunctions present.

To treat this relationship, you cross your thumbs under the patient's plantar surface of the foot, placing one thumb under the cuboid and the other thumb under the navicular. You then interlace your fingers on the dorsum of the foot. Have the patient dorsiflex their foot as the operator leans into their thumbs. This creates a spreading motion at the thumbs and allows for increase in the transverse diameter of the arch to allow for restoration of the normal articular mechanisms. Have the patient plantar flex their foot and hold it until you feel a response, and then have the patient dorsiflex their foot. You repeat this sequence of plantar and dorsiflexion a few times until you feel that the tissues have relaxed and the arches have been restored to their normal positions. (Figure 3).

It may be necessary to use a soft basic foot orthotic to maintain the medial longitudinal arch in its normal position. These can be used throughout the pregnancy and will help to keep the medial longitudinal arch in its normal position, thereby allowing the pelvis to have its normal free range of motion both posturally and respiratorily. With the patient supine you can check for the respiratory motion of the sacrum between the ilia and then have the patient stand up and check for motion of the sacrum between the ilia again. You then have the patient stand on the soft foot orthotics and observe the changes that occur. It is common for the pelvis to become less restricted and increase its respiratory range of motion when you use arch supports in this way.

Second Diaphragm - The Pelvic Diaphragm

The pelvis can be treated using a technique that was called the "Differential Technique" by Dr. Sutherland, which uses the state of balance liga-

mentous tension between the femurs, acetabulum, innominates, sacrum, and lumbar spine. This is a comprehensive technique that allows you to generally treat all of these areas at one time.

With the patient sitting on the table and the operator facing the patient, you grasp the patient's ankles and lift both legs until you feel an increase in the tension and then back off slightly. You secure both legs to your legs, forming a parallelogram between their pelvis, legs and your legs. You can then motion test both



Fig. 3 Arch Release

innominates by pulling one leg while pushing on the other. This rolls the patient's innominates on the table.

You use the legs as long levers to move the pelvis and seek the position of ease. Commonly you will find that the pelvis rolls anteriorly on the right and posteriorly on the left. You have found position of ease with the lower extremities and you will exaggerate the position that you have found the pelvis in. You have set up a framework here in which to work to establish the state of balanced ligamentous tension. You then ask the patient to sit tall and in the case with the pelvis being anterior on the right you have the patient turn their whole body towards the left. This engages the lumbar spine and the sacrum within the pelvis and turns the lumbar spine and sacrum within the framework that you have set up. Have the patient turn back to the center as you hold the

innominates with the long levers of the legs in that position. You hold this new state of balanced ligamentous tension until the changes that are occurring stop and a more normal state of function has resumed. As the release is occurring, you will feel a relaxation of the tensions in both fibular. When the changes stop, the procedure is finished. (Figure 4).

In review, you establish a state of balance ligamentous tension using the femurs as long levers and you have the patient sit tall and turn to the left, thereby establishing a new state of balanced ligamentous tension in which you have engaged the lumbar spine and sacrum within the pelvis. When you have the patient sit tall and turn, the procedure becomes more inclusive and changes the state of balanced ligamentous tension throughout the whole system. You go from one state of balanced ligamentous tension to a new state of balanced ligamentous tension. As the patient turns back to center, you hold that state of balanced ligamentous tension. This is where the final correction occurs. This tends to be the most difficult portion of the treatment because it is sometimes difficult to hold that state of balanced ligamentous tension.

The goal of this treatment is to have the lumbar spine and sacrum turn within the framework of balanced ligamentous tension that you have set up within the pelvis. This technique is especially useful in those patients which have such acute problems or acutely painful problems that it would be difficult to approach them in any other way.

They typically will allow you to set them up in this position with very little difficulty because you are going with the position of ease.

This technique allows you to comprehensively treat the lumbar spine, sacrum, innominates, and fe-

murs in the acetabulum, thereby establishing a normal state of function within the pelvis. Specific problems within this area may not respond to this treatment and will need to be addressed separately.



Fig. 4 "Differential Technique"

Third Diaphragm - Respiratory Diaphragm

It is extremely important to have free function of the respiratory diaphragm to help maintain the pressure gradients between the thorax, abdomen and pelvis. A very useful technique to treat the diaphragm is the 12th rib technique or the lateral lumbocostal arch technique. This is used for releasing tension in the posterior abdominal wall, the 12th rib and the thoracolumbar spine. There is a complex of five arches, two lateral arcuate ligaments, two medial arcuate ligaments, and a median arcuate ligament, that forms a sequence of arches in the posterior abdominal wall. These are connected to each other as well as into the anterior longitudinal ligament.

The patient is lying supine and the operator palpates the 12th rib noting its position. The 12th rib can be anywhere from being tucked under the 11th rib to pointing directly inferiorly towards the pelvis. You place one hand under the rib in a position that mimics the direction that the rib is pointing, typically using the index finger to get as far medially on the rib as you can get. You place your second hand under the first and the operator leans back in their chair, applying a lateral traction into the 12th rib. Hold the 12th rib until you feel the innate mechanisms within the body take over. These mechanisms include the primary respiratory mechanism, the respiratory motion of the diaphragm and the action of the tension in the ligaments.

With the lateral traction, you have engaged the lumbocostal arches. The motion of the diaphragm with the attachment of the crura to the anterior longitudinal ligament moves the anterior longitudinal ligament as well as these lumbocostal arches. By engaging these arches, you use the respiratory motion to secure a release of the 12th rib. Dorsiflexion of the opposite foot can be used as a stabilizing force in this technique. At the conclusion of treatment, you will feel the diaphragm release, an involuntary inhalation, and the posterior abdominal wall relax. You should do this technique on both sides.

The operator then examines the remainder of the rib cage and notices dysfunction of any ribs. Using both hands separately, you can treat a number of ribs together at one time. Finding a number of segments that are dysfunctional on one side, the physician places their fingers as far medially as they can on the ribs and leans back in their chair, applying the lateral traction; again, waiting for the innate forces within to manifest themselves and secure a release. You

can use postural cooperation by having the patient dorsiflex the opposite foot, or respiratory cooperation by having the patient take in a breath as deep as they can and then let it out as far as they can. The operator notices whether inhalation or exhalation increases the amplitude of the release. The patient holds their breath in that position as long as possible.

The Liver Turn Technique is especially useful in any situation in which the liver is not swinging free from its attachment to the diaphragm. This is useful for the woman who is experiencing hyperemesis gravidarum. The postural changes of pregnancy can impede the duct system and circulatory system of the liver.

The operator places one hand under the lower rib cage to stabilize their posture. The fingers of the other hand are cupped under the costal cartilages with the finger tips up against the capsule of the liver. The patient is instructed to inhale and hold it as long as they can. When they must let out their breath, they are instructed to do so vigorously. The contact fingers on the liver capsule function as a fulcrum. During inhalation the liver is forced against the fingers. During exhalation, the liver turns around your contact point. You could do this technique with exhalation first and then inhalation. The contact is the most important part of this technique. You do not need to dig under the rib cage to perform this technique.

Fourth Diaphragm - The Thoracic Inlet

The thoracic inlet, being composed of T1, 1st ribs and the manubrium, is an extremely important area to treat. It contains the cupola of the lungs with its covering Sibson's fascia. Sibson's fascia is attached to C7 and T1 posteriorly and runs anteriorly to the inferior surfaces of the first ribs and manubrium, creating a func-

tional diaphragm between the neck and thorax. Contained within a space that is approximately 2 1/2 x 4 1/2 inches is a very large number of structures.

This area can be diagnosed by palpating the costal cartilage of the first rib which juts out from under the clavicle in the parasternal infraclavicular space. The operator stands facing the head of the patient and palpates this costal cartilage and notes a convexity on one side and a concavity on the other side, which implies rotation of the thoracic inlet. Commonly you will find a convexity on the left and a concavity on the right, indicating right rotation of the thoracic inlet. The operator then stands at the head of the patient and finds the costotransverse articulation of the first rib with their thumbs. The operator notices which finger is more caudad and then motion test the thoracic inlet for sidebending. Typically you will feel that the right side is more caudad with a resistance of inducing a left sidebending motion, implying right sidebending of the thoracic inlet.

In review, the thoracic inlet is typically rotated to the right and sidebent to the right. Releasing the thoracic inlet has a profound effect throughout the rest of the thoracoabdominal pelvic cylinder. Releasing this area typically will allow the thorax to be balanced in a state of inhalation as well as decreasing the lumbar lordosis to a more normal state.

A very useful technique for releasing the thoracic inlet is to use a high velocity low amplitude technique which is accomplished in two steps. (One, to desidebend and two, to derotate). To derotate the thoracic inlet, the operator establishes a fulcrum behind the transverse process of T1 with their PIP and flexes the neck, rotates the whole cervical column to the left until they feel motion at T1 and sidebends towards the side of the

fulcrum that they have established (right). Setting up this technique is best accomplished with a slight amount of flexion, sidebending to the right and rotation to the left with ever increasing flexion, sidebending and rotation until you have found the exact fulcrum that will help you to perform this release. A high velocity low amplitude maneuver is then applied to the thoracic inlet to derotate. The direction of thrust is generally towards the left axilla.

A similar maneuver is used to desidebend. With the inlet that is sidebent to the right, you establish a fulcrum on the left superior aspect of the transverse process of T1 using your left first PIP joint. You then flex the head, sidebend to the left and rotate the cervical column to the right, until you feel motion down through T1. When you have established a fulcrum at the barrier to rotation and sidebending, a high velocity low amplitude thrust is then applied. Typically this thrust is in the direction of the right ASIS. Then go back and recheck to see that the procedure has worked.

Fifth Diaphragm - Tentorium Cerebelli

A final place to pay attention to in the system of treatment is the cranial base and tentorium cerebelli. It is important to treat this area to maintain normal overall function of the body. It is beyond the scope of this paper to describe all the possible treatment procedures that could be applied to the cranium with attention to the tentorium. The following two techniques are useful in treating this area:

OA Release - The operator palpates the inion with one hand and gently slides their index finger of their other hand from the inion to the opisthion (the most posterior point of the foramen magnum). The operator

then holds that finger there until the tissues of the suboccipital region relaxes. Once these changes have finished the operator flexes the occiput gently while holding their index finger at opisthion. The patient is asked to gently flex their head (or drop their chin to their chest). This motion brings the condyles of the occiput into the divergence of the facets of C1. The index finger prevents the facets of C1 from coming posterior with the occiput. The posterior arch of C1 will come back to meet your finger. The atlas then may slip forward and you won't be able to feel the posterior arch of C1 any more. The operator will notice a decrease in the tension of the suboccipital muscles as the release of the OA is accomplished.

Base Spread - This will influence the tentorium and dura internally and the suboccipital ligaments and muscles externally. This technique should follow the OA release and will amplify its effects. The operator puts their 3rd and 4th digits on the mastoid portions of the temporal bones. Then you lean back in the chair which firms up the contact on the temporals and increases the tension between the temporals and occiput. The operator then firmly and gently pulls their fingers laterally. The operator will feel motion occurring around the situation that they have set up. The operator follows the motion in the tissues as it establishes a new fulcrum of motion. Once the changes have ceased and a new fulcrum is established, the operator slowly and gently releases the base spread.

How Often To Treat

Treatment of the OB patient can be done throughout regular prenatal visits. Typically, a treatment scheme may be monthly for the first six months and every two weeks for the next 2 months, and then weekly until delivery. If you happen to be present dur-

ing labor, you can treat the patient to help alleviate back pain, free up the pelvis and have an easier delivery. It is important to treat the mother and the child as soon after delivery as possible. This will allow for the mother to have a more rapid recovery after delivery and to prevent any postpartum problems such as postpartum depression, back pain, etc. You can continue treating the mother monthly while she is breastfeeding.

* A heartfelt thank you goes to Dr. Boyd Buser, Dr. Anne Wales, Dr. Jim Jealous, Dr. Michael Kuchera, and the many other osteopathic physicians who have unendingly given to me through my development as an osteopathic physician.

References

1. Hellman, L. N., Pritchard, J.A., Williams Obstetrics, New York, Appleton-Century-Crofts.
2. Guyton, A.C., Textbook of Medical Physiology, 7th Edition, Saunders & Company, pp. 987-994.
3. William, P.L., Warwick, R., Dyson, M. and Bannister, L.G., Gray's Anatomy, 37th Edition, Churchill & Livingstone, 1989. (chapters on fascia)
4. Hollingshead, Anatomy for Surgeons, pp. 269-289.
5. DeBlok, S., "The Connective Tissue of The Female Pelvic Region", Acta Morphol, Nearl-Scand, 20(1982) pp. 65-92.
6. Becker, F., "The Meaning of Fascia and Fascial Continuity", Osteopathic Annals, June 1975, 186/35- 198/47.
7. Kuchera, M. and W.A., "Osteopathic Considerations in Systemic Dysfunctions", Second Edition, Kirksville, MO, pp.119-128.
8. Zink, J.G. and Lawson, W.B., "Pressure Gradients in the Osteopathic Manipulative Management of the Obstetric Patient", Osteopathic Annals, 7:5 May 1979.
9. Hechman, J.D., "Managing Musculoskeletal Problems in Pregnant Patients, Part 1", The Journal of Musculoskeletal Medicine, June 1984, pp. 14-24.
10. Zink, J. Gordon, D.O., "The Osteopathic Holistic Approach To Homeostasis, 1969 Academy Lecture", Academv of Applied Osteopathy - 1970 Yearbook, 1 pp.

11. Zink, J. Gordon, D.O., "Respiratory and Circulatory Care: The Conceptual Model", Osteopathic Annals, Vol. 5, pp. 10-16, March, 1977.
12. Magoun, H.I., Osteopathy in the Cranial Field, 3rd Edition, Journal Printing Company, Kirksville, MO.
13. Sutherland, W.G., Teachings in the Science of Osteopathy, Anne Wales, D.O., Editor, Rudra Press, 1990.
14. Communication with Anne Wales, D.O.

Difference

by Robert J. Klein, DO

"Traditional Medicine" is fine and just great
 But at times, it's too little, too late.
 When a doctor treats symptoms, and not the main cause
 The treatment may help, but the trouble returns
 The germs come again, and the tight tissue still burns.

The tests we all use are much, and extensive
 But we rely on them now, and man,
 that's expensive.

Our hands are quite cheap, we get one pair at birth
 They come attached to our brain, and that is their worth.

Help Wanted

Springfield, Oregon

McKenzie-Willamette Medical Services Opportunity with busy osteopathic family practice clinic that offers an excellent income, large call group, professional growth and quality lifestyle. Progressive community offers unlimited recreation, access to University of Oregon and is within 60 mile radius of Cascade Mountains and Oregon coast. Please contact: Teri Jo Wallace, Physician Services Specialist, 1460 G Street, Springfield, OR 97477, (800)447-9419.

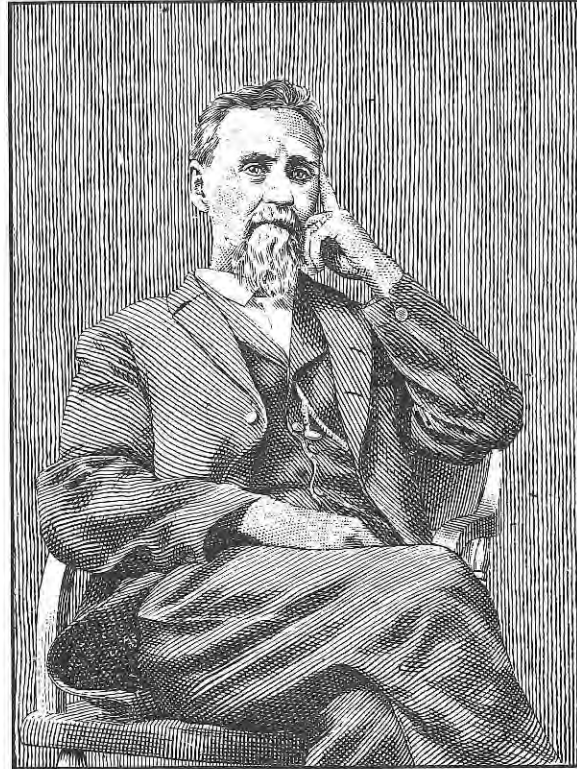
Observations on A.T. Still

by Asa Willard, DO

Excerpts from 1954 Academy Yearbook

HIS HUMOR

A very self-appreciative young scion of a prominent West Virginia family appeared at Kirksville in the nineties. He registered at the infirmary, and he introduced himself as of the B family of West Virginia, "of whom you have doubtless heard". There was a chair on the porch. The Old Doctor said, "Sit down. What seems to be your trouble?" "Well, some have said I have indications of water on the brain, but. . ." The Old Doctor ran his hands over the young man's head and said, "Huh, I don't see any evidence of brain whatever," and strode into the house.



HIS ACCURACY

In and prior to the nineties, the pharmacopeia listed alcohol as a stimulant. Dr. Still, in the nineties and before, repeatedly insisted that this listing was incorrect and would be changed. That in its effect upon the nervous system and body processes, alcohol was essentially a narcotic. In 1908 the pharmacopeia began listing it as a narcotic and it has been since.

HIS COMMENTS ON EDUCATION

"I'm no normal professor, Asa. I don't pretend to know the fine points about pedagogy, but I do know you students have got to learn to think osteopathy. "One day he quietly dropped into the anatomy class of Dr. William Smith. Dr. Smith was a graduate of Edinburg U. Scotland, and one of the best anatomy teachers

that ever lived. He listened as Dr. Smith lectured on the quadratus lumborum muscle. When he had finished the Old Doctor asked, "What's all that got to do with the practice of osteopathy?" Dr. Smith, after thinking a moment replied, "Well, if that quadratus lumborum muscle was contracted it might pull that 12th rib down on that side and it might tend to hold the body that way. "The Old Doctor said, "Well, why didn't you tell them that?" and strode out.

Dr. C. W. Proctor was brought over from the State Normal to teach chemistry. Dr. Still came into the class one day and listened awhile and abruptly asked, "What's all that stuff got to do with the practice of osteopathy?" Dr. Proctor was quite embarrassed and had no ready reply. He evidently gave the matter thought, for

as the classes went along he frequently, as he outlined some aspect of chemistry, pointed out how normal body chemistry might be changed by lesion conditions—the secretions of the stomach perhaps—and the students got food for osteopathic thought as they studied their chemistry. Isn't that our colleges' cardinal teaching problem today? In general educational circles, it is more and more emphasized that there is a great difference between learning and wisdom.

HIS COMMENTS ON THE FUTURE OF THE PROFESSION

If our profession dies, it will die from within, not from outside opposition. The latter may handicap and put stumbling blocks in our way, but conviction and opposition merely draws us together and fires our determination. The Old Doctor realized this and sensed from whence would come our real danger. He said, "We want no moderate osteopaths." He wanted them if they represented osteopathy at all to do it without apology and with conviction and wholeheartedness. He said we must "leach it, preach it, and practice it, or you will not survive."

That there is among us a tendency to spread away from distinctive, fundamental osteopathic practice, and only incidentally "teach it, preach it and practice it" is true. It would be a great disservice to our profession to fail to note or to gild over this trend and not bulwark against it.

There was once a river that burst its banks and no longer followed its course and carried its water to the many thirsty ones below. It flowed out on the desert and kept getting broader and broader until finally it disappeared in the sand.

Our usage of every known therapy, remedy or procedure should not be the measure of our breadth or worth as individual physicians, nor of our completeness or competency as a profession. The measure should be the degree of our ability to prevent disease and restore health through the maximum utilization of natural body defense agencies, and the greatest possible avoidance of the introduction of artificial agencies which themselves frequently disturb and injure.

During the 'flu' epidemic of 1918 in my state (Montana), we D. O. 's reported 4, 480 cases and lost 38, which was less than one per cent. Our State Health Office reported nine percent loss of all cases for the state.

EARLY RESEARCH

The Old Doctor said, "Osteopathic care from infancy to the grave will lengthen a man's life." Believing that with the enthusiasm of youth, some few years after I graduated in 1900, I decided to test my conviction with an experiment running through the years. I made a list of people in early adult life who depended primarily upon osteopathy for their health and received treatment frequently. For each of these persons I listed a 'control'—some other person about the same age and physical type who I knew, when ill, depended upon medicine and general medical care. Through succeeding years tab was kept on all those listed. In some instances a person on the osteopathic list would move to a locality where osteopathy was not available and

would be dropped from the list, or one of the 'control' list would begin to use osteopathic care and be dropped. Some fifty pairs were followed through some forty odd years. A year ago, a few people on each list, the osteopathic and the 'controls' were still living. Of those on the control list, the average age of the few living, with the average age of the others on that list at time of death was sixty-seven. The average age of the people who were osteopathically treated

"Without all else in therapy, you would still have something immeasurably valuable and having general applicability in relieving human ills and deformities. Without it you would have nothing which would entitle you to recognition as an independent profession."

through the years was seventy-seven. Now of course a group this small is but indicative. However, after decades of general practice, including recording of cases and noted observations, I am entirely convinced that an expanded like statistical study with all facets of influence on health considered, would produce absolute proof of the benefit of osteopathic treatment in lengthening life's span. It would show, too, more physical efficiency and comfort during the span. Yes, I am convinced even less tumors would have to be considered, even malignant ones, in the osteopathically cared for group for I'm sure the Old Doctor spoke sagely when he said, "Unobstructed blood cannot form a tumor."

And why should not this human machine run smoother and longer with

such care? You take your car into the garage even when it is running all right, and tighten a screw a little here, and loosen one there, and a car so looked after runs smoother and longer. Why not the human machine and its structure affected laboratory? If we would concentrate upon and put Just that thought over with the public, life's span would be further increased, and we would be very, very busy people. Yes, even the life span of the D. O. would be increased if he would take time to get more of his own remedy, whether he thought he needed it at the moment or not. I constantly run into cases among our people of shoulder girdle tension, upper rib and dorsal lesions with neuritis and heart arrhythmias that a little timely freeing up and adjusting would have forestalled.

HIS POWERS OF OBSERVATION

A lady at a street corner, speaking to another lady of her ten year old daughter who stood near, said, "I've scolded Nellie and done everything but she just won't hold her shoulders up; she's getting so round shouldered." The Old Doctor from nearby interjected, "Madam, if you'll have that second dorsal looked after she can hold her shoulders up." That's where the trouble was, and after its correction and the child encouraged to use muscles that were handicapped before, there were no round shoulders.

OBSERVATIONS

His observations were always educational. One day when a student I stood leaning against one of the porch pillars in front of the old A. O. O. Infirmary. The Old Doctor came along and just glancing at me said, "Asa, why don't you have that 5th lumbar fixed?" The day before I had

stepped into a hole in running backward for a flyball in a ball game, and wrenched my back. I said, "How did you know, Dr. Still, that my 5th lumbar was off?" He chuckled and as he passed by said, "Keep your eyes open, boy." His were indeed always open. He could evidently tell by my poise, by the sag of my body, the position of my feet perhaps where, in the body machinery, the trouble lay.

SUMMARY

Suppose, individually, we, even in a fractional degree, concentrated upon the study and understanding of that intricate interrelated machine and laboratory, the human body, what problems we might solve, what suffering prevent, what prestige bring to our profession. Dr. Burns has given us an example of such diligence.

If the law of gravity was true in Newton's time, it is true today; and if it was true that structure influenced function in Dr. Still's day, it is true today; and the principles of osteopathy and osteopathic manipulative therapy are basic in the consideration of procedures for disease prevention, elimination, and the extension of human life. All else in therapy is relatively adjunctive. That was the position of the Old Doctor, and it must be our position if we hope to survive as a profession. It is not an incident among a multitude of therapy considerations and procedures, but fundamental, foundational, basic. And we haven't even scratched the surface of the possibilities of influencing body health from a structural standpoint and of distinctive manipulative osteopathic therapy.

If we as a profession show the good sense (he would probably call it "gumption") of the Old Doctor, his constant striving to perfect himself in the understanding of the human body, his consecration to an idea and its application because it would help

people, his willingness to sacrifice immediate advantage to protect distinctive osteopathy in order to gain long run wider appreciation of it, then we will worthily lengthen his shadow, and go forward as a distinctive profession, helpful to mankind.

Letter to A.T. Still

Dear Doctor Still,

As we celebrate the first one hundred years of osteopathic education, we certainly have a lot to be proud of so far. I think you would be pleased to see how the profession has grown and prospered since your time. We certainly now know a lot more about osteopathic science, philosophy and technique than we did back then.

Of course, I know we should not rest on these laurels. There is always more to learn. As a profession, one thing I hope we can do as we enter the second century of our existence is to stand up and be proud of who and what we are. You very eloquently explained how important it is for us to think osteopathically and to apply the principles you gave us, for only in this way could we truly care for our patients. In Philosophy of Osteopathy you said, on page 220, that our osteopathic knowledge would tell us "what is normal, and what abnormal, what is effect and how to find the cause."

It seems so obvious that we must spend more time studying the principles of Osteopathy and their application. I recall that in that same book, on pages 221-222, you also pointed out how one could not practice otherwise, once he or she came to understand Osteopathy's truth. You said, "You cannot do otherwise, and

not betray your ignorance to the thinking world. If in the human body you can find the most wonderful chemical laboratory mind can conceive of, why not give more of your time to that subject, that you may obtain a better understanding of its workings?"

These are powerful words for me. They mean that the more I understand Osteopathy the better I will be able to serve my patients and my profession. And I certainly would agree with you that the more I know about Osteopathy the more I wonder how any physician could practice in any other way and feel fulfilled. Let's hope that as we approach the next hundred years of osteopathic education, all DOs will strive to master the wonderful principles you have given us.

Your ongoing student,

Raymond J. Hruba, DO, FAAO

A.T. Still Medallion Deadline Nears

Please remember that if you wish to submit the name of a candidate for the 1993 A.T. Still Medallion of Honor Award, the deadline is April 15, 1992.

Deserving members of the Academy who shall have exhibited among other accomplishments in scientific or professional affairs an exceptional understanding and application of osteopathic principles, and of the concepts which are the outgrowth of those principles, may be awarded the Andrew Taylor Still Medallion of Honor. The Academy cherishes this award as its highest honor, and all petitions are considered confidential.

If you have any questions or need any additional information about this procedure, please contact the Academy office or refer to page 104 of your AAO 1990-91 Directory.

CODING FOR OMT FOR MEDICARE TO BE IMPLEMENTED JANUARY 1, 1992

Information courtesy of Judy Lewis, DO

As of January 1, 1992, the Harvard RVS Phase II guidelines for reimbursement will be in effect for Medicare claims. Payment for these services can be determined by:

Payment = (RVU_w)(GPCI_w) + (RVU_{pe})(GPCI_{pe}) + (RVU_m)(GPCI_m) x CF where:

- RVU_w = physician work relative value units for the service
- GPCI_w = GPCI value reflecting of geographic variation in physician work applicable in the fee schedule area
- RVU_{pe} = Practice expense relative value units for the service
- GPCI_m = GPCI value for malpractice expense applicable in the fee schedule area
- RVU_m = Malpractice relative value units for the service
- CF = Uniform national conversion factor = \$31.001

The following table outlines some of the factors necessary to determine the compensation from the M codes:

HCPC	DESCRIPTION	RVU _w	RVU _{pe}	RVU _m
M0702	Brief OMT 2 areas	0.47	0.25	0.02
M0704	Limited OMT 4 areas	0.66	0.41	0.03
M0706	Intermediate OMT 6 areas	0.92	0.40	0.03
M0708	Extended OMT 8 areas	1.08	0.45	0.04
M0710	Comprehensive OMT 10 areas	1.25	0.40	0.03
M0722	Brief Inpatient hospital OMT	0.47	0.62	0.05
M0724	Limited Inpatient OMT	0.69	0.85	0.07
M0726	Intermediate Inpatient OMT	0.92	0.82	0.06
M0728	Extended Inpatient OMT	1.07	0.36	0.03
M0730	Comprehensive Inpatient OMT	1.25	0.55	0.04

The rest of the factors in the equation can be found in Addendum C, Table 1 of the Federal Register Vol 56, No. 227 and are specific to your practice location.

It is considered appropriate to utilize both an office visit code to establish the specific diagnosis for your patient at each visit and then subsequently the appropriate M code to treat the somatic dysfunction which was found to be involved.

Negotiations are underway to include codes similar to the M codes in the CPT manual early in 1992. The manual will not, however, be published until the fall of 1992. When these codes are included they will be accessible to all insurance carriers and would be the preferred codes to use. This does not affect Medicare billing as they have historically accepted the M codes in the HCFA system.

Osteopathic Research in New Zealand

by Richard Carruthers DO, MNZRO
Editor, Journal of the New Zealand Register of Osteopaths.

Current osteopathic research in New Zealand can be roughly divided into two main groups: a) outcome studies, and b) research into the side effects of complications of treatment.

As all these studies have been undertaken at various osteopathic authors' expense, in their own time and utilizing their own receptionists/paid research assistants, and as there has been little formal research training for Osteopaths outside the USA, those studies can only be considered as exploratory studies. All were retrospective, none were blind and in none could the possibility of bias be totally excluded.

However, the seven outcome studies published to date (with two due for publication soon) all seem to demonstrate a remarkable similarity in results, involving as they do the recording of treatment received from 12 osteopaths at four different osteopathic clinics around New Zealand.

The first study involved the treatment of 19 consecutive children presenting with a variety of sports injuries. All 19 made full recoveries requiring an average of two treatments each.

The second involved the purely cranial treatment of 43 patients suffering from headaches, noting the length of time required for the patient to report "considerable relief" and "total relief" from symptoms. 75% reported "considerable relief" within 10 minutes of treatment and 2/3 reported "total relief" within 12 hours. Only one patient reported any side effects (temporary and minor).

The third, and probably most major study, involved 287 medical referral patients treated in 2 clinics, with the results being broken down into acute (<7 days), sub-acute (7-30 days), chronic (1-12 months), and very chronic (>1 year) categories for analysis. In the study as a whole, 78% of patients were discharged either "symptom free" or "much improved" (60-90% improvement); 90% of acute patients were discharged SF or MI with an average of 4.8 treatments each: 78% of chronic patients and most interestingly, 67% of very chronic patients (who had had their problem for more than one year) were discharged SF/MI.

The fourth study involved a follow up of 46 of the chronic and very chronic patients who had been discharged SF or M in the previous study, some 1-2 years later. This study found that 60% had maintained that SF/MI state 1-2 years after discharge, and that a further 20% had maintained that state of improvement for some time or to a certain extent.

The fifth study involved a breakdown of the success rate of treatment for different pain sites (low back, neck, knee, etc.) in 330 medical referral patients. The overall success rate in this study was 75%, equating well with that of the third study as reported above (78%). Sciatica (89%), mid-back pain (83%) and headaches (81%) were among the pain sites that responded best, whilst ankle/foot (56%) and leg pains (67%) were those that responded worst.

The sixth study involved the administration of a retrospective ques-

tionnaire to 133 new patients soon after discharge. 71% of the respondents to this questionnaire reported being SF/MI after treatment (c.f. studies 3 & 5 above), 76% requiring four treatments or less and 95% reporting satisfaction with the treatment received.

The seventh and by far the largest study was a randomized retrospective sampling involving over 1000 different patient presentations over a four year period. 90% of the patients in this study required four or less treatments per presentation and only 2% required more than 10 treatments. Patients required on average only 2.3 visits per presentation at an average of two patient visits per year. It was also noted that first presentations (i.e., new patients) tended to require a higher proportion of treatments than subsequent presentations, some 60% of which were for one-off treatments.

The eighth study (to be completed soon) involves a further follow up of the patents involved in the previous follow up study, now 4-5 years after discharge.

The ninth (to be completed soon) is a repeat of the third study with a new group of 200 ACC patients, one aspect of which will be to look at the time taken for acute patients from onset of pain to discharge SF/MI, to compare this to several similar studies of conservative methods of treatment. Although strict comparisons will not be possible, this will be one step closer to a controlled trial of Osteopathy vs conservative treatment.

Turning now to studies involving

the side effects or complications of treatment, an interesting study by Jacoby et al into the treatment reaction phenomenon found that almost 50% of 200 new patients reported a RR, although 88% perceived the severity of that reaction as slight or moderate, only 11% reporting severe and 1% very severe reactions. All reactions started within 24 hours of treatment and 93% were over the reaction within two days.

Two further studies involved reviews of the risk of post-manipulative CVAs: a rare but very serious complication of manipulation. This risk has been variously assessed from one in 400,000 cervical manipulations to one in 10,000,000 manipulations by various specialists in the field. In one survey of the worldwide medical literature over the past 40 years, of the 54 cases reported, only four were attributed to osteopaths, the majority (44) being attributed to chiropractors.

One most important aspect of these studies is that the manipulative procedures that involve the most risk are those involving pure rotation in extension of the upper cervical spine (in cadaver fluid-flow studies, 19 out of 20 subjects had a 90% reduction of flow in this position) while those of least risk involve rotation coupled with side-bending (1 in 20 subjects demonstrating reduced fluid flow). Since almost all osteopathic procedures involve the coupling of side-bending and rotation in manipulation, this may account for the relatively low incidence of CVAs amongst osteopathic patients.

Osteopathic research in New Zealand is still in its infancy, but like a young child is in a rapid state of growth and development. What is needed now is to nurture and guide that growth so the quality of research output is continuously improved upon even as the quantity and diversity expands. The New Zealand Registry

of Osteopaths is committed to promoting future osteopathic research in New Zealand and full details of these studies have been published in the Journal of the New Zealand Register of Osteopaths.

Osteopathy & Chronic Pain

Continued from page 10.

by traumatic dental extractions will use gentle, cranial treatment inside the mouth to restore normal cranial motion and relieve chronic pain.

It is my heartfelt desire and that of the osteopathic profession in general that these techniques be embraced and widely incorporated into the practice of medicine as a whole in the years to come.

Dr. Miller is in private practice in Silver Springs, Maryland, a suburb of Washinton D.C. Article reprinted courtesy of Lifeline Magazine.

New HCFA 1500 Medical Insurance Claim Form Now Released

The Health Care Financing Administration (HCFA) has revised and released for use the HCFA 1500 Health Insurance Claim Form. This form is used for all Medicare Part B claims as well as being used for Blue Cross/Blue Shield, Medicaid and private insurance in many states.

In order to facilitate the training of insurance coders using this form, we are making available the FREE booklet "How to Code The NEW HCFA 1500 Insurance Claim Form" to interested persons. It is designed to show them the changes on the form as well as update them as to new filing requirements such as secondary payers and UPINS.

This booklet is available FREE by calling our toll free automatic literature request line at 1-800-822-3638, 24 hours a day.

(Courtesy of Dirk Smith, Graftek Communications)

ASSISTANT/ASSOCIATE PROFESSOR

Full-time position in the Department of Osteopathic Principals & Practices, involving didactic as well as clinical instruction, research, student advising, service on College Committees, and the usual faculty commitments. Requires an earned D.O. degree, board eligibility by specialty college, and licensed or capable of being licensed in the State of Oklahoma. Preference will be given to candidates who are board certified and who have publication, research, and/or academic teaching experience. Applications will be reviewed beginning May 1, 1992 until the position is filled. Reply to Kenneth E. Graham, D.O., Chairman of the Search Committee.

**College of Osteopathic Medicine of
Oklahoma State University**

**1111 West 17th St.
Tulsa, OK 74107**

An Affirmative Action/Equal Opportunity Employer

ALTERNATIVE SCHOOLS OF MANUAL MEDICINE PRACTICING IN THE UNITED STATES

by J.M. McPartland, DO, MS

Introduction

Have you ever had a patient ask, "What do you think about Orthobionomy?" And you didn't know what to say? Because you didn't know what your patient was talking about?

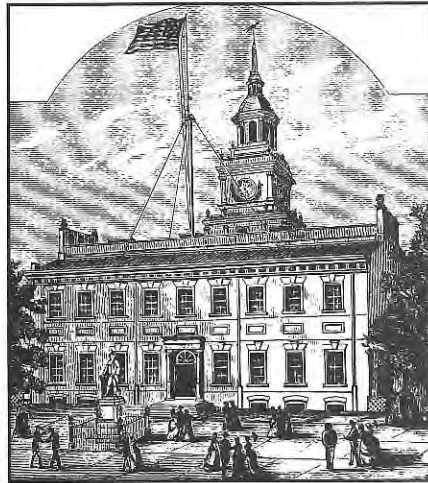
Most manual medicine in the United States is done by Chiropractors, Osteopaths, a minority of M.D.s and physical therapists. Within the last twenty years, however, a number of new systems of "bodywork" or "somatic therapy" have gained popularity. Their numbers are significant; Gevitz (1988) estimates 60 million Americans today have relied on alternative healers.¹

I place these new schools in three groups: 1) old Asian traditions enjoying revivals, such as *Tuina* (Chinese manipulation) and *Marma* (Indian Ayurveda); 2) Physical Therapy-based systems, such as Maitland's or McKenzie's methods; and 3) eclectic schools integrating movement therapy and/or psychoanalysis with manual medicine (e.g., Aston Patterning, Reichian Bodywork).

Third-world methods of manipulation are acknowledged in the west, but little is known about them.² Some Asian systems have hybridized with western methods, promoting advances in medicine.³ These traditionalists often appropriate western technology and apply it in novel ways.^{4,5}

Recently, Physical Therapy-based manual medicine has received increasing attention in the medical community. Some schools of thought share biomechanical and neurophysiological models with western medicine, others do not.

Several eclectic schools are well-known to the osteopathic community, having been developed by D.O.s



(e.g., the Polarity system, Naturopathy, Kaltenborn therapy) or borrowed heavily from the osteopathic literature (Rolfing). Some evolved from a psychological milieu (e.g., Radix, Bioenergetics), dance (Alexander technique) or even the martial arts (the Feldenkrais method).

Despite their rapid proliferation, many systems have yet to be critically examined. At M.S.U. we have begun documenting and analyzing the therapeutic modalities used by alternative healers. For over 100 years, osteopathy has incorporated a variety of methods into its therapeutic armamentarium. As Cookson & Kent stated twelve years ago, "To our knowledge, no educational system has combined the various schools of thought into a single integrated system."⁶

The first step, however, is to know what is out there. Where else to pose this question but on the pages of the J.A.A.O.! A list of alternative schools is presented below. Readers are invited to send additions to this list.

A.T. Still said D.O.
meant "Dig On."

Schools of Manual Medicine in the U.S.A. Today:

- Alexander Technique (Australia, 1910)
- Applied Kinesiology (Goodheart, U.S.A., 1964)
- Asana (Yoga, India, date?)
- Aston Patterning (Aston, U.S.A., ca. 1980?)
- Autogenic Training (Schultz, Germany, Ca. 1930)
- Ayurveda (Indian medicine, 0-100 A.D.)
- Marma, Thirummal, Pizhichal, Navarakizhi therapy Bindergeuebsmassage (Dicke, Germany, 1953)
- Byugs-pa (Tibetan medical massage, 400 A.D.)
- Chung-i (Chinese medicine, 200-100 B.C.)
- Acupuncture, Moxibustion, Auricab, Do-in, Tuina, T'ai Chi Ch'uan
- Chiropractic (Palmer, U.S.A., 1895)
- Cyriax Technique (J. Cyriax, England, 1944)
- Eurhythm (Steiner, Austria, ca. 1920)
- Feldenkrais Method (Feldenkrais, Israel, 1949)
- Grieve System (Grieve, England, 1967)
- Grindler (Grindler, Europe? date?)
- Hellerwork (Heller, U.S.A., 1985)
- Japanese Bodywork
 - Amma, Kanpo (800 A.D.)
 - Shiatsu (ca. 1900)
 - Ryodoraku (Nakatani, 1950)
 - Kaltenborn System (Kaltenborn, Norway, 1957)
 - Maigne "Painless and Opposite Manipulation" (France, 1960)
 - Maitland Methods (Maitland, Australia, 1964)

ALTERNATIVE SCHOOLS OF MANUAL MEDICINE PRACTICING IN THE UNITED STATES cont.

McKenzie Methods
(McKenzie, New Zealand, 1972)
Medical Gymnastique
("Swedish Massage")
(Sweden 1813)
Mennell "Joint Play"
(J. Mennell, England, 1952)
Naturopathy
(Davis (1900) or Lust (1895) via
Germany)
Nuad Cab Sen
(Thai manipulation, date?)
Nwuga System
(Nwuga, Nigeria, 1976)
Ortho-Bionomy
(U.S.A., date?)
Osteopathy
(Still, U.S.A., 1874)
Paris System
(Paris, New Zealand, 1963)
Percussion Cadencee
(France, 1838)
Peto System
(Europe? date?)

Polarity Therapy
(Stone, U.S.A. via Austria, 1948)
Radix
(Kelley, U.S.A., 1967) Bioenergetics
(LoWen, U.S.A., 1975)
Reflexology/Zone Therapy
(Fitzgerald, U.S.A., 1907 or 1913)
Reichian Bodywork
(developed from Reich, Austria)
Reiki therapy
(U.S.A.? date?)
Rolfing
(Rolf, U.S.A., 1962)
Therapeutic Touch
(Krieger, U.S.A., 1979)
Tragerwork & Mentastics
(Trager, U.S.A., 1975)
Trigger Point Therapy
(Travell, U.S.A., 1942)

Literature Cited:

Gevitz, N, "Other Healers: Unorthodox
Medicine in America," (Johns Hopkins
University Press, Baltimore, 1988).

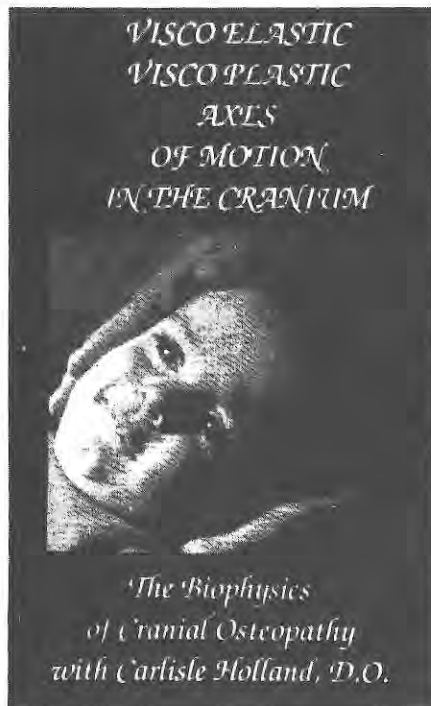
Riley, J., F.L. Mitchell D. Bensky, "Thai
manual medicine as represented in the
Wat Pho epigraphies: preliminary com-
parisons," *Medical Anthropology*, 5:155-
194. 1981.

McPartland, J.M., "Manual medicine at
the Nepali interface," *Journal of Manual
Medicine* 4:25-27 1989.

Guderian *et al.*, "High voltage shock
treatment for snake bite," *Lancet* II:229,
1986.

McPartland, J.M. & R. Foster, "Stun-
guns and snakebites," *Lancet* II:1141,
1988.

Cookson, J. C. & B. E. Kent, "Orthope-
dic manual therapy - an overview,"
Physical Therapy 59:136-146 1979.



VISCOELASTIC VISCOPLASTIC AXES OF MOTION IN THE CRANIUM

This outstanding video presentation with Carlisle Holland, D.O. explains the physics and biochemistry underlying the gentle and effective technique of Cranio-sacral Osteopathy. State-of-the-art computer animations enhance this fascinating and thought-provoking sixty minute tape, making a complex subject understandable for anyone using this technique in the treatment of children and adults.

To order, send your check for \$125.00 (PAL format \$140.00) with your name and address to:

Video Medicine Labs
14435 N. 7th Street, Suite 300
Moon Valley, AZ 85022

Brochure of other video presentations
available upon request.

I Too Had Some Dreams....

By John T. Baker, D.O., FAODME

After reading the article "I Had A Dream" by Laurie B. Jones in the last issue of the Arizona Osteopathic Digest, I too had some dreams.

The first night, I dreamed that antibiotics had vanished and were no longer available. As this progressed, I realized that the Osteopathic Physicians had to revert to pre-World War II methods of combating infections, particularly of the pneumonia types. This was to add regular doses of Osteopathic Manipulative Therapy to the rest of the existing good therapy of the time.

This had a bad effect on the efforts of the allopathic physicians as their statistics could not come close to ours in the flu cases, pneumonias, etc.

The second night, I dreamed that the practice of early ambulation of post-surgery patients was no longer done and the prolonged bed stays again became the norm. As this too progressed, I realized that the Osteopathic Physicians had to revert to pre-1945 methods of combating post-operative pneumonia, lack of appetite, increased use of opiates, sleeping pills and even cases of acute Ileus. This was to add daily doses of Osteopathic Manipulative Therapy to the rest of the existing good therapy of the time, starting the day of surgery.

This had a bad effect on the allopathic physicians as their statistics could not come close to ours in the area of post-op pneumonia, return of appetite, return of bowel movements without enemas, use of narcotics, and in the incidence of Ileus.

When I awoke, I remembered two specific cases of post-of Ileus, which received appropriate OMT on the 3rd and 4th post-op days which aborted the Ileus and thereby spared the patient from a second operation.

The third night, I dreamed that neither saddle back nor caudal analgesia were available to patients in active labor, and longer, more painful labor became the norm. As this progressed, I realized that the Osteopathic Physicians had to revert to the pre-1946 introduction of caudal analgesia in combating length of labor and amount of pain. This was to add doses of Osteopathic Manipulative Therapy to the rest of the existing therapy of the time at regular intervals during labor, and daily after delivery.

This had a bad effect on the M.D.'s as their statistics could not come close to ours on the length of labor, the spontaneity of the newborns cry, and on the length of stay in the hospital.

When I awoke I remembered Garden City Maternity Hospital (now 360 bed Garden City Osteopathic Hospital) with 950 plus deliveries per year. For two years, every newborn had an Osteopathic cranial examination with therapy if indicated as part of its stay in the nursery. The result was a marked diminution in the development of feeding problems, or a marked improvement if such a problem existed before the bi-weekly evaluations.

The fourth night, I slept right through, so have nothing to report.

The fifth night, I had my fourth dream. In this one, the Osteopathic Physicians who consulted and managed patients admitted to the Intensive Care Cardiac Unit of their hospitals with a diagnosis of Acute Myocardial Infarction ordered Osteopathic Manipulative Therapy suitable to their needs and to the bed confinement of the patient. These were started as soon after admission as feasible and at least daily thereafter.

This too had a bad effect on the efforts of the M.D.'s as their sta-

tistics could not equal ours in these admissions.

When I awoke, I remembered the multiplicity of articles written by numerous D.O.'s over the last 93 years which made reference to the results of properly applied Osteopathic Manipulative Therapy in various cases of Cardiac Pathology. I also remember the article written by Ed Stiles, D.O. in 1977 in the *Osteopathic Annals* about his experience as the Osteopathic Service in the Osteopathic Hospital in Waterville, Maine. In writing about patients with acute M.I.'s, he stated that results were showing a lessened use of opiates, of sedatives, a lessened number of arrhythmias (and what mechanism kills cardiac patients?), and a shorter stay of surviving patients. I also remember the patient admitted to the cardiac unit of Tri-City Hospital in Texas for multiple P.V.C.'s. Shortly after admission, he received 2-3 minutes of rib raising, T1 to T7, on each side and 2 minutes stretching of the cervical muscles on each side. When finished, he had a pure sinus rhythm.

Now! As a follow-up! My day dreams come up with the following.

I. If OMT was so effective during the first half of this century, why should not the addition of OMT to today's best medical care add an extra benefit to the patients recovery, well being, and length of stay?

II. This has been mentioned frequently in Osteopathic literature since 1898 but has never been put to the test in a manner that will dispel all possible doubts as to its value.

III. Therefore, why does not the osteopathic profession put together, and undertake some clinical research designed to do just that; to prove the real value of OMT given to the hospitalized patient, or show that it is valueless.

IV. Our central controlling body, the Board of Trustees of the American Osteopathic Association should:

a) Endorse the need to do just that;

b) Appoint a new Committee to oversee and coordinate existing actions aimed at this that now exist, as well as to establish a viable beginning program with a follow-up and widening of the collection of meaningful statistics.

c) Suggest that the Committee should gather statistics through a double blind study involving a single disease element to start:

1. Consider the M.I. for this beginning;

2. Involve any hospital approved by the AOA for Intern training that is willing to join the study;

3. Keep on gathering statistics until the total is so large that there can be no criticism possible of the results;

4. Then spread statistic gathering to other disease entities admitted to hospitals continuing to do double blind studies.

My day dreams are now showing a marked increase in the use of appropriate OMT on most patients admitted to Osteopathic hospitals whether ambulatory or long stay.

They also show a resurgence of the number of patients admitted to Osteopathic hospitals.

They show a strengthening of our Post-Doctoral training programs.

They show a strength in our profession never seen before.

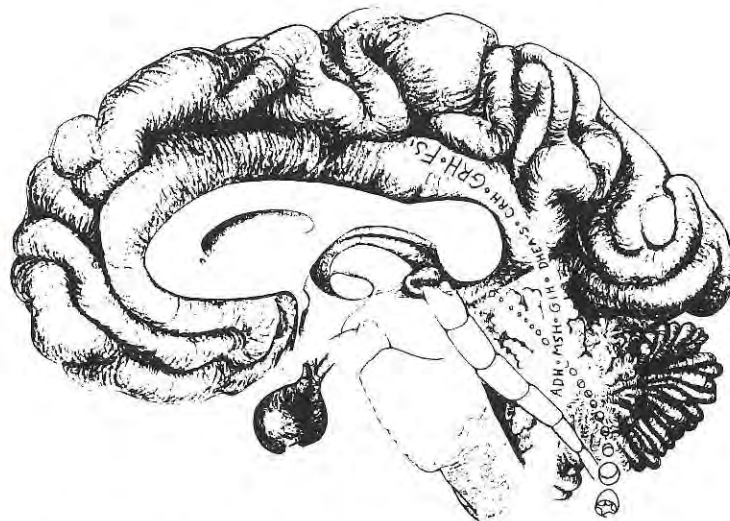
In my non-dreaming moments, I agree that this could happen. ■

Presents

NOCICEPTION AND THE NEUROENDOCRINE-IMMUNE CONNECTION

An International Symposium
The Omni Netherland Plaza

June 19-21, 1992 Cincinnati, Ohio



Who should attend: DOs, MDs, DCs, Physical Therapists, students of the health professions, and others interested in the latest information on the effects of nociception on the neuroendocrine and immune systems, and how manipulative therapy can affect these interactions.

Participants will learn: How nociception is initiated in the periphery and how it interacts with the immune system at this level; how the neural code for nociception is processed at the spinal cord, brainstem and hypothalamic levels; how the central pain pathways can influence the endocrine system in the hypothalamus; how endocrine and immune systems respond to nociception; how this stress response influences the function of the whole body; and how manipulative treatment may be dealing with these interactions.

Accreditation by: American Osteopathic Association: 18 hours of 1-A CME credit applied for.

Registration fee: Physicians \$335; Ph.D.s \$150; Students \$75.

Special events: June 18 — Faculty dinner, 7 pm; Faculty reception, 9 pm; June 20 — General reception, 6 pm; Banquet, 7 pm

Synopsis: By bringing together the world's leading authorities on nociception, and its effects on the neuroendocrine and immune systems, the symposium will serve as a unique forum for the identification of mechanisms which may underlie the longer term effects of manipulative treatment on total body function and health restoration.

Speakers, Discussion Leaders and Co-Chairs

Frank Willard, Ph.D., Co-Chair
College of Osteopathic
Medicine
University of New England
USA

Michael M. Patterson, Ph.D.
College of Osteopathic
Medicine
Co-Chair
Ohio University
USA

William C. deGroat, Ph.D.
University of Pittsburgh
USA

Josef Donnerer, M.D.
Experimental and Clinical
Pharmacology
University of Graz
Austria

David Felten, Ph.D.
University of Rochester, School
of Medicine
USA

Bruce McEwen, Ph.D.
Rockefeller University
USA

Ronald Glaser, Ph.D.
Ohio State University
USA

Janice Kiecolt-Glaser, M.D.
Ohio State University
USA

John Harakal, D.O., FAAO
Texas College of Osteopathic
Medicine
USA

Philip Gold, M.D.
NIH Clinical Center
USA

Donald Payan, M.D.
University of California
USA

Glenn Giesler, Ph.D.
University of Minnesota
USA

Gary Aston-Jones, Ph.D.
Hahnemann University
USA

Peter Morgane, Ph.D.
Worcester Foundation for
Experimental Biology
USA

Discussion Leader

Murray Goldstein, D.O., MPH,
Director
National Institute of
Neurological Disorders
and Stroke
USA

Discussants 1992 AAO Symposium

Myron C. Beal, DO, FAAO
Richard van Buskirk, DO
Anthony G. Chila, DO, FAAO
Murray Goldstein, DO, MPH
Jill L. Hendra, DO
Raymond J. Hruby, DO, FAAO
William L. Johnston, DO, FAAO
Albert F. Kelso, Ph.D.
Michael L. Kuchera, DO, FAAO
Harold I. Magoun, Jr., DO, FAAO
Joyce Vetterlein, DO
Robert C. Ward, DO, FAAO
William E. Wyatt, DO

Program Schedule:

THURSDAY, June 18, 1992

7:00- 9:00 pm Faculty Dinner
9:00- Faculty Reception

FRIDAY, June 19, 1992

9:00- 9:30 am Opening Remarks (Drs. Chila, Willard, Patterson, AAO Pres.)
9:30-10:30 Paul Gold, M.D. "Neurobiology of Stress"
10:30-11:30 John H. Harakal, D.O. "The Osteopathic Clinical Experience"
11:30-12:00 Questions and Discussion
12:00- 1:30 pm Lunch
1:30- 2:15 Don Payan, M.D. "Peripheral Neuropeptides, Inflammation, and Nociception"
2:15- 2:30 Questions and Discussion
2:30- 3:15 William C. deGroat, Ph.D. "Spinal Cord Processing of Visceral and Somatic Nocioceptive Input"
3:15- 3:45 Questions and Discussion
3:45- 4:30 Glenn Giesler, Ph.D. "Spinal Projections to Brainstem and Hypothalamus"
4:30- 4:45 Questions and Discussion
4:45- 5:30 General Discussion and Audience Participation

SATURDAY, June 20, 1992

9:00- 9:45 am Gary Aston-Jones, Ph.D. "Locus Coeruleus and Nociception"
9:45-10:15 Questions and Discussion
10:15-11:00 Peter Morgane, Ph.D. "Hypothalamic Connection with Autonomic and Endocrine Systems"

11:00-11:15 Questions and Discussion
11:15-12:00 General Discussion and Audience Participation

12:00- 1:30 pm Lunch

1:30- 2:15 Donald Felten, Ph.D. "Sympathetic Modulation of the Immune System"
2:15- 2:30 Questions
2:30- 3:15 Bruce McEwen, Ph.D. "Adrenal Steroid Modulation of the Immune System"
3:15- 3:45 Questions and Discussion
3:45- 4:30 Josef Donnerer, M.D. "Nociception and Neuroendocrine-Immune System Modulation"
4:30- 4:45 Questions and Discussion
4:45- 5:30 General Discussion and Audience Participation
6:00- General Reception
7:00- Banquet

SUNDAY, June 21, 1992

8:30- 9:15 am Robert Glaser, Ph.D. "Stress and Body Physiology"
9:15- 9:30 Questions and Discussion
9:30-10:15 Janice Kiecolt-Glaser, M.D. "Stress and Body Psychology"
10:15-10:45 Discussion on Research Directions — Murray Goldstein, D.O., MPH
10:45-11:15 Synthesis (Frank Willard, Ph.D. and Michael M. Patterson, Ph.D.)
11:15-12:30 General Discussion and Audience Participation
12:30 pm Adjourn

To register, call or write:

**American
Academy of
Osteopathy**

P.O. Box 750
Newark, Ohio 43058-0750
(614) 366-7911

 **American
Academy of
Osteopathy**

Return address:
1127 Mt. Vernon Road
P.O. Box 750
Newark, OH 43055

NON-PROFIT ORG.
U.S. POSTAGE
PAID
PERMIT NO.1028
SAN DIEGO, CA.