

Instructions to Authors

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

The AAO Journal welcomes contributions in the following categories:

Original Contributions

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

Case Reports

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

Clinical Practice

Articles about practical applications for general practitioners or specialists.

Special Communications

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

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

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

Book Reviews

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

Note

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

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Submit all papers to Anthony G. Chila, DO, FAAO, Editor-in-Chief, Ohio University, College of Osteopathic Medicine (OUKOM), Grosvenor Hall, Athens, OH 45701.

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2. Submit original plus three copies. Retain one copy for your files.

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

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

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

6. For human or animal experimental investigations, include proof that the project was approved by an appropriate institutional review board, or when no such board is in place, that the manner in which informed consent was obtained from human subjects.

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

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TRADITION SHAPES THE FUTURE • VOLUME 13 NUMBER 1 SPRING 2003

The mission of the American Academy of Osteopathy is to teach, advocate, advance, explore, and research the science and art of osteopathic medicine, emphasizing osteopathic principles, philosophy, palpatory diagnosis and osteopathic manipulative treatment in total health care.

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Component Societies'
CME Calendar
and other Osteopathic Affiliated Organizations

May 2-4

Intermediate Face Course
Course Director: Doug Vick, DO
Philadelphia, PA
Hours: 16 Category 1A (anticipated)
Prerequisites: 2 Basic Courses one being SCTF, and 3 years Clinical Practice
Contact: Judy Staser
817/926-7705

May 3-4

Using the Powers Within the Patient's Body (Sutherland's techniques for the trunk and extremities)
A Still Sutherland Study Group
Contact: Andrew Goldman, DO
860/364-5990

May 14-17

Osteopathic Contributions to the Health Perception: The Art and Science of Osteopathy as it applies to the use of optometric lenses, visual dysfunctions, and perceptual strains.
Course Director: Joseph Field, DO
Kennebunkport, ME
Hours: 32 Category 1A (anticipated)
Prerequisites: 2 SCTF approved basic courses in Osteopathy in the Cranial Field
Contact: Joseph Field, DO
207/967-3311

May 30 - June 3

Osteopathy in the Cranial Field
Course Director: Andrew Goldman, DO
Philadelphia, PA
Hours: 40 Category 1A (anticipated)
Contact: Judy Staser
817/926-7705

June 9-10

Addressing Medical Issues Conference:

**OIG Compliance, *Stark Rules, *HIPPA Regulations, *Center for Medicare and Medicaid.*
Pinellas County Osteo Medical Society
Las Vegas, NV
Hours: 12 Category 1A (anticipated)
Contact: Kenneth E. Webster, EdD
717/581-9069

June 14-18

Basic Course
The Cranial Academy
Founders Inn
Virginia Beach, VA
Hours: 40 Category 1A (anticipated)
Contact: The Cranial Academy
317 594-0411

June 19-22

Annual Conference
The Cranial Academy
Founders Inn
Virginia Beach, VA
Hours: 40 Category 1A (anticipated)
Contact: The Cranial Academy
317/594-0411

October 4

Outcome-Based Osteopathy
Arizona Academy of Osteopathy
Poco Diablo Resort
Sedona, AZ
Hours: 8 Category 1A (anticipated)
Contact: William Devine, DO
623/572-3350

October 10-13

Research Symposium/SCTF Continuing Studies Program
Indian Lakes Resort
Bloomington, IL
The Cranial Academy
Contact: The Cranial Academy
317/594-0411

AOA Convention 2003

AAO Program

"Integration of Care: From the specialist to the primary care physician"

Edward K. Goering, D.O.
Program Chairperson

October 13-15

Topics:

Temporomandibular Joint Dysfunction: An ENT Perspective
Treatment of the Temporomandibular Joint: A Practical Solution
Northup Memorial Lecture
Female Pelvic Floor Anatomy: A Laparoscopic Review
Treatment of the Female Pelvic Floor
Scoliosis and OMM
Evaluating Structural Effects of Manual Medicine
Carpal Tunnel Syndrome & OMM
Low Back Pain & OMM
Male Sexual Dysfunction
Osteopathic Approach to Male Sexual Dysfunction
Hands-on Workshop on Treatment of Male Sexual Dysfunction
Osteopathic Considerations in End of Life Care
Cultural Differences in End of Life Care
Role of the Hospice in End of Life Care
End of Life Care – A Personal Reflection
Orthopedic and Osteopathic Evaluation and Treatment of the Knee
Neuromuscular Evaluation and Treatment of the Knee Utilizing Strain/Counterstrain
Hands-on Workshop on Treatment of the Knee



Echoes

The farther Andrew Taylor Still's system of Osteopathy moves along its spectrum of time, the more it seems that questions arise about the nature of his thought and teaching.

Still's philosophy and practice largely followed the principles of modern research. Observation helped establish a premise, which was subjected to investigation and discussion, with the resultant formation of conclusion. Still's adherence to this method was reflected in his study of the skeletal structures of humans and animals. He postulated that adjustment of the osseous framework of the body would facilitate the proper function of the various body systems. He sought to apply this line of reasoning to the alleviation of many disease conditions. In effect, Still was able to obtain beneficial results through the use of manipulation by eliminating barriers to the patient's state of wellness. Clinical evidence and success notwithstanding, investigations of Still's theories were deemed imperative if the new profession would establish its disciplinary uniqueness and distinctness.

Cole (1987) reviewed several of the early research efforts. William Smith, DO, utilized skiagraphy in a study of circulation in 1898. The cause and effect of stimulation and inhibition in relation to spinal manipulation was studied at Kirksville in 1898-99. F.J. Fassett, DO, attempted the use of cardiography in the evaluation of manipulative treatment in 1901. Dain L. Tasker, DO, demonstrated the effect of stimulation of the vagus nerve, using three engravings of pulse tracings, in 1901. Suffice it to say that even these few examples indicate the use of cadaveric, animal and human subjects for the study of Still's theories in the earliest years of the profession.

The *Journal of the American Osteopathic Association* (JAOA) appeared in 1901. In 1902, Edythe Ashmore, DO, was appointed by the AOA Committee on Publication to seek improvement in the quality of osteopathic case reporting.

Early clinical investigators were often very altruistic in their efforts regarding issues of experimentation and documentation. Between the years 1907 and 1911, Doctor Louisa Burns prepared volumes of studies in the osteopathic sciences, which discussed basic principles, nerve centers and the physiology of consciousness. In 1908, three committees were appointed by the Council of the A.T. Still Research Institute: Spinal Lesions (Doctors Carl P. McConnell and Louisa Burns); Diet and Metabolism (Doctors Nettie A. Bolles and C.W. Proctor); Neoplasma (Doctors J.M. Littlejohn and C.A. Whiting). All of the appointees were involved in private practice. No funds were available for compensation for the time and labor associated with systematic research work. Condensed reports of their work appeared in the Institute's Bulletin No. 1, August 1910. Bulletins 2-5 appeared during the years 1915-1917.

At the time of Still's death in 1917, 5000 osteopathic physicians were engaged in the practice of his philosophy of medicine in a country, which often failed to listen during his lifetime. Lane (1918) reviewed at length the impact of Still's role as a scientist and reformer. Particular emphasis is placed on the need to realize that until Still was fifty years of age, American medicine had cut itself adrift from medicine in Europe. The infant stages or total absence of the basic sciences of pathology, bacteriology, physiology, histology, embryology placed many of Still's primary conceptions abreast or years ahead of Europe and his age. The philosophy of osteopathy enunciated by Andrew Taylor Still has stood the test of time very well indeed. The abundant sources and forms of validation, which relate to his contentions about the human body in health and disease have not diminished the foresight associated with his philosophy. If anything, the process of validation, even though incomplete, has enhanced the visionary qualities of the man.

ANTHONY G. CHILDS D.O., F.A.O.

Contributors

Tettabel, MA. Osteopathy: Comprehensive Health Care. In this 2002 Thomas L. Northup Memorial Lecture, comprehensive health care is addressed by acknowledging the dis-integrated approach to contemporary care on the part of both patient and physician. Not least in this scenario is the absence of faith. Recognizing six basic fears which undermine confidence, a proposal is offered for the realization of osteopathic confidence building. The inference is directed toward the reapplication of osteopathic palpation in developing a care plan. The emphasis is placed on the perceived lack of confidence of practitioners in utilizing systematic analysis in palpation and manipulative care. The direction suggested by the author recalls the earliest of admonitions from the profession's founder, A.T. Still. (p. 17)

Danto, JB. Etiological Factors in Sacral Somatic Dysfunctions. A conceptual framework is offered for use in addressing etiological factors, which result in sacral somatic dysfunctions. Multi-etiological considerations include: ligamentous laxity of the sacroiliac articulation; somatic dysfunction of the multifidus, piriformis, erector spinae and biceps femoris muscles. The author places major emphasis on ligamentous laxity and multifidus somatic dysfunction. Definitive diagnosis is held to be the key to treatment, and recognition given to the need for further study. (p. 19)

Jordan, TA. Conceptual and Treatment Models in Osteopathy I. The use of manipulative interventions for the treatment of "hip lesions" is discussed in its historical context and its relation to the early development of osteopathic theory and practice. By selecting a clinical entity recognized in orthodox medical texts published prior to the beginning of osteopathic teaching and practice, the author establishes a fundamental argument: the necessity to insure the differentiation between conceptual and treatment models. Osteopathic practice has made extensive use of a clinical approach in the development of treatment models based on subjective clinical findings. Success has given rise to conceptual models. Longer term, however, the validity of any conceptual model must be judged in the light of knowledge reflected in ongoing scientific literature. (p. 25)

Regular Features

Dig On. The role of cerebrospinal fluid in the body's economy is reviewed through Andrew Taylor Still's basic contentions about this fluid and the elaboration of Still's thought provided by some of his early students. (p. 8)

From the Archives. John Martin Littlejohn was a patient, student and colleague of Andrew Taylor Still. A contemporary of William Garner Sutherland in the study of Osteopathy, Littlejohn contributed academically and administratively to the American School of Osteopathy. Differences of opinion between him and Still regarding curricular development were likely responsible for his move to Chicago, where he and his brothers founded the American College of Osteopathic Medicine and Surgery. After serving as Chief Executive Officer from 1900-1913, he returned to his native Great Britain, where he founded the British School of Osteopathy in 1917, the same year in which Still died. Littlejohn lived until 1947. In this selection, Littlejohn's student and prominent advocate, John Wernham, provides his assessment of Littlejohn's contribution to osteopathy. (p. 10)

Elsewhere in Print. A new German journal *DO Deutsche Zeitschrift für Osteopathie 1/2003, January 2003* (Hippokrates Verlag) offers a multi-focused (Life, Science, Focus, Service) and multi-lingual format, which may facilitate broader access by its readers. (p. 35)

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AAO 2003 CME Calendar

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March 17-19

Visceral Manipulation: Manual Thermal Diagnosis
in Ottawa, Ontario, Canada

March 19-23

*2003 Annual Convocation: Education and Research: The Backbone of
Osteopathy* in Ottawa, Ontario, Canada

April 26-27

Dr. Fulford's Basic Percussion in Chicago, IL

May 2-4

Prolotherapy: Above the Diaphragm in Biddeford, ME

June 27-29

*Manual Medicine/Manipulation for Physicians: Upper Back, Neck and
Upper Extremities* in Chicago, IL

July 18-20

OMT for Common Organic and Clinical Problems in East Lansing, MI

August 21-24

*13th Annual OMT Update "Application of Osteopathic Concepts in Clinical
Medicine plus Preparation for Certifying boards"* at Walt Disney World in
Buena Vista, FL

September 19-21

Unlocking the Cranial Sutures I: Development and Release
in San Francisco, CA

October 11

One-Day Pre-AOA Convention Workshop: OMT in Geriatrics
in New Orleans, LA

October 12-16

AAO Program at AOA Convention in New Orleans, LA

November 7-9

Prolotherapy: Below the Diaphragm in Biddeford, ME

December 5-7

Visceral Manipulation: Urogenital in Fort Lauderdale, FL



Exposition of Still's Thought

As an author, Andrew Taylor Still wrote three volumes which addressed philosophically the causes and treatment of diseases. He contended that his writing was free of quotations from medical authors. Despite this, numerous references to standard authors of the time are found throughout his texts: Dunglison, Gould, Gray, Moris, Gerrish, Osler and others. The fund of general knowledge is the fertile ground for the development of ideas. Observations, casual and reproducible, singly and collectively, require synthesis and intuitive interpretation for change and improvement. Still wrote, taught and practiced from this perspective. With respect to his contention about cerebrospinal fluid that "He who is able to reason will see that this great river of life must be tapped and the withering field irrigated at once, or the harvest of health be forever lost", it is necessary to include Still's view of the body as its own drugstore. In his autobiography (1897), Still makes the following statements (p. 219):

" I proclaimed then and there that all nerves depended wholly on the arterial system for their qualities, such as sensation, nutrition, and motion, even though by the law of reciprocity they furnished force, nutrition, and sensation to the artery itself, and further proclaimed that the brain of man was God's drugstore and had in it all liquids, drugs, lubricating oils, opiates, acids, and anti-acids, and every quality of drugs that the wisdom of God thought necessary for human happiness and health".

The revised edition of Still's autobiography (1908) contains these statements verbatim (p. 182).

The writings of students whom he trained bear adequate evidence of his thought.

N.H. Motsinger, DO (1922) wrote two articles considering the invisible force of cell activity. Kirk's Physiology and Gray's Anatomy are significant references for his consideration of the electric potential current normally acting on all matter and cell life. He comments that "The old doctor used to explain to our class that the quick cures obtained from osteopathic cerebral and spinal adjustments following a 'general treatment' was because the treatment had stimulated the cells to secrete a natural 'immune fluid' from the tissues of the body that eliminated or destroyed all poisonous matter and bacteria rendering the patient immune from disease....."

Motsinger's description of cerebrospinal treatment is worth noting as a depiction of osteopathic treatment taught by Still. His general comment is that "Cerebro-spinal treatment is a vitalizing treatment, and should never be classed as a "general treatment" and abandoned for the profiteering claims of so-called "expert specifics". The treatment itself proceeds as follows:

"The adjustment of the cerebro-spinal fluids is best accomplished with your patient on his back and as comfortable as possible. Notice the beat of the heart then proceed to adjust the bones, muscles and nerves of the neck and occiput, with the end in view of opening the cerebral drainage and restoring the automatic reflexes of the medulla and cerebellum. When the drainage begins a sleepy sense of restful gravity comes over the patient followed generally by a restful sigh or a healthy yawn. Then proceed to

adjust the vertebrae and heads of ribs in the upper dorsal region and note as a result the restful condition of the shoulders and warmer hands as you restore the functioning of the heat center located between the shoulders, by the presence of fresh cerebro-spinal fluid from the brain. If the hands remain cold and the shoulders pinched and stiff, the brain surplus of spinal fluid has not followed fully your work to the heat center. Do a little more work to effect results by raising the head and making a fulcrum of the region of the heat center and get good motion from side to side of the upper dorsal and the muscles of the neck and occiput.

Follow the spinal adjustment of each vertebrae on down, carefully testing the patient's sense of gravity reflexes by gently rocking the patient from side to side till you reach the enlarged bulb of the spinal cord at the second lumbar vertebrae. Here the distribution of the cerebro-spinal fluid ends in an enlarged closed sack or bulb and the branches of the cauda equina distribution of nerves begins and it sometimes takes extra work to be certain that a refreshing supply of cerebro-spinal fluid has been sufficiently induced to enter the bulb. Gently but firmly loosen the muscles and fascia above the capsule of each kidney stimulating these important organs to increase their functions. Examine the heads of the floating ribs for contractures and congestion of tissue. Test the reflexes of the feet – noting whether the right toes naturally fall toward the right and whether the toes of the left foot hang loosely to the left. Do not permit the patient to cross the feet or cock one or both knees up.

During this adjustment of the cerebro-spinal fluid no conversation at all should be carried on with the patient. Urge the patient to rest, to relax. When completed all headache, or nervous tension and generally even fever will be gone, and your patient rests perfectly tranquil and the heart beat is firm and normal, for the vital cells and vital fluids have resumed their normal functions. The vitalizing force of the electric currents of the earth have been set to work carrying on normal metabolism as will be manifest by a gentle peristalsis of the bowels and digestive organs. You are now ready to adjust with your patient in any convenient position any misplacement of grosser tissues which your previous work has readily revealed as bony lesions or contractions.

It is not well to abandon this cerebro-spinal treatment for so-called 'specific treatments' of 'learned osteopaths'. The specific treatment that abandons the unity of cell action and vasomotor nerve and blood harmony, is akin to the 'eye, ear, nose and throat' fakirs among the drug doctors".

Written less than five years after Still's death, this description must surely be regarded as a gem in its portrayal of the old doctor's attitude toward the adjustment of the body and the role of cerebrospinal fluid in maximizing the effects of adjustment.

The mechanics of the lymphatic circulation with consideration for drainage of the cerebrospinal fluid were discussed by Miller (1923). Hazzard (1930) remarked upon technic for the control of intracranial pressure, circulation of the cerebrospinal fluid, and anemia of the cerebral cortex. Considerations of cranial articular mobility piqued the curiosity of William G. Sutherland in 1899. Following his graduation from the American School of Osteopathy, Sutherland's lifelong studies reached a major level of fulfillment with the publication of *The Cranial Bowl* (1939). Sutherland continued to develop his thought about cranial articular mobility and corrective technical approaches until his death in 1954.

In 1892, Andrew Taylor Still wrote about releasing cerebrospinal fluid as the means of providing irrigation of the body sufficient to prevent the loss of the harvest of health. In 1897, he referred to the brain as the body's drugstore. When seen as complementary and not mutually exclusive considerations, these descriptions have been significantly verified in subsequent research studies across many disciplines. On the other hand, despite nearly a century of study and an extensive accumulation of literature, relatively few studies have focused on the ultrastructure of final cerebrospinal fluid pathways in human arachnoid villi.

From the Archives

The Contribution of John Martin Littlejohn to Osteopathy

T. Edward Hall and John Wernham

It has been said that to know a man only in his working life is to know only half a man. It was my special privilege to come into contact with Dr. Littlejohn and to know him, not only as a great teacher, but as a neighbour and friend. I remember him as a patriarchal figure, an eloquent preacher, a local councillor and a generous host to innumerable friends and visitors to his home at Badger Hall, Benfleet, in Essex.

Of Scottish and Presbyterian descent, his quiet character and firm resolve was expressed in a life of relentless activity that was the concern of those near to him, and often aroused the admiration, and, at times, the envy of his contemporaries. A keen observer of the stream of life around him, Dr. Littlejohn possessed a penetrating discernment that always commanded respect but, it was his kindly tolerance and gentle manner, especially to younger people, that lingers more in the memory. Of his academic attainments it can only be said that his breadth of learning covered a range of subjects that few men have encompassed. In 1952, I was asked to give my views on Dr. Littlejohn's greatest contribution to Osteopathy; I wrote as follows:

"John Martin Littlejohn possessed an unrivalled knowledge of physiology and anatomy which he translated

into osteopathic practice and taught his students. I think his students are subconsciously endowed with an insight into osteopathic problems which is not given to those of a later generation; a clinical sense, not perhaps

"Littlejohn was unique in his osteopathic concept and technique; it is in this that he was at his greatest and if the true value of his work is to be preserved, no effort must be spared to bring his recorded lectures to the notice of present and future students."

immediately understood, but worked out in accordance with the teaching of a life's research and, in the earlier years with the Founder himself. There is evidence to support these conclusions. Already a tradition is growing up and I venture to suggest that John Martin

Littlejohn, with all his so-called imperfections, will one day emerge as the Great Pioneer in this country

and all other claims to that distinction will disappear. In the field of education (as he would say) no one has attained such a stature, which may be the reason for much of the misunderstanding and even antipathy to his teaching, which appears to be so fashionable nowadays. Littlejohn was unique in his osteopathic concept and technique; it is in this that he was at his greatest and if the true value of his work is to be preserved, no effort must be spared to bring his recorded lectures to the notice of present and future students."

The passing of many years has only served to amplify the underlying truth of these statements and the steady revival of the early teaching has been constantly under review. At the present time, the teaching of the Institute of Classical Osteopathy is firmly based on the Principles and Technique of Osteopathy laid down by Dr. J. M. Littlejohn during his lifetime and preserved in his recorded lectures. Much yet remains to be done and the labour is not inconsiderable. It is refreshing, however, to share in the re-kindling of the old discipline, at this time of educational experiment, and to observe the renewed interest of the modern student in a system and method of teaching that was long since thought to be outmoded.

John Wernham

Osteopathy in Great Britain

The first introduction of Osteopathy to Great Britain goes back to the beginning of the century. William Smith, a graduate licentiate of Medicine and Surgery of Edinburgh, and the first lecturer in anatomy at the American School of Osteopathy, returned to Scotland in 1901, practising there until his death. Following the discussions in London concerning the establishment of Osteopathy in Great Britain with Doctors Horn and Walker in 1903, Dr. Littlejohn returned to America, resuming his appointment as the president of the Chicago School of Osteopathy. In 1913, he made the final trip across the Atlantic and settled permanently in London where he at once began to practise. At the outbreak of war in 1914 the British Osteopathic Association applied for the registration of the Association under the Companies' Act as a Scientific Society but this was opposed by the General Medical Council and the Board of Trade refused the application. In private correspondence with the General Medical Council, Dr. Littlejohn discussed proposals relative to a School of Osteopathy to which the following reply was received from the President:

"Anyone who pursues the course of study and examinations prescribed by any of the licensing bodies in this country may obtain a qualification, admitting him to the Medical Register, and so bringing him under the jurisdiction of the General Medical Council. Moreover, by Section 23 of the Medical Act of 1858, the Privy Council has power to prohibit the imposition by licensing bodies of restrictions as to any theory of Medicine and Surgery. It would, therefore,

appear that the legislature has already provided for the registration of the practitioners you have in mind on the conditions that they offer the statutory guarantees that they possess the knowledge and skill required for the efficient practice of Medicine and Surgery and Midwifery".

This recognises that the right to practise the Art of Healing is based on qualification and that no restriction can be imposed upon any theory of Medicine.

In March 1915, an attempt was made to incorporate the British School of Osteopathy but this was delayed until 1917 owing to financial restrictions in the time of war, and then only on the condition that not more than two shares of Stock, valued at £2, be issued; these were held by Doctors Littlejohn and Horn. After the war was over and the Company was liberated from its ban, one share was placed in the British Osteopathic Association, representing the united profession of Osteopathic practitioners at that time. An attempt was made to follow this up by cooperation between the British Osteopathic Association and the British School of Osteopathy; the offer was repudiated because the Association insisted on its ownership of the School. This was rejected on the ground that it is not the province of any association to own schools. Schools and Colleges are regulated and controlled by governing bodies responsible to the law and under legal authority conformable to legal standards of education. At this stage, Dr. Littlejohn reorganised the School on a new basis as "a perpetual trust on behalf of the system and science

of Osteopathy." Provision was made in the original Charter that the School must be a "non-profit" organisation, the original clause reading: "The income and property of the Company wheresoever derived shall be applied solely towards the promotion of the objects of the Company set forth in the Memorandum of the Association, and no portion thereof shall be paid or transferred directly or indirectly by way of dividend, bonus or otherwise, howsoever by way of profit to the Members of the Company."

The British Osteopathic Association appointed a committee to investigate the British School of Osteopathy and for this purpose a meeting was arranged with Dr. Littlejohn at his address in Dover Street, on June 26th 1925. The report is as follows:

"The School originally obtained its charter in 1917. (1) From the outset the whole school was financed by Doctors Horn and Littlejohn at their own expense. (2) A schedule is published giving the hours of instruction in the various subjects to be taught in the School. It is the object of the School at present to insist on a satisfactory standard of pre-college education before students are allowed to matriculate. It is the object of the School to have preliminary College Education given at the Chelsea Polytechnic and other Institutions in connection with the London University and the remainder of the course taught at the School building erected at Dr. Littlejohn's residence; at 48, Dover Street and at clinics at Southend-on-Sea and Enfield. At present the only person teaching Osteopathy is Dr. Littlejohn. (3) Up to date no exami-

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nations, other than finals, have been set to students under the auspices of the British School of Osteopathy, but Dr. Littlejohn assured us that it was his desire to accept the Chelsea Polytechnic and other Institution class certificates only as certificates of work done and superimpose periodically examinations of the Students. As regards this examination it was suggested and approved by Dr. Littlejohn that the British Osteopathic Association should appoint for a period of two years a co-examiner to assist the examiners appointed by the British School of Osteopathy, and that the students attending this School would have to satisfy this Board of Examiners that their knowledge was sufficient before certificates or diplomas of any sort be granted. The Committee added that it was favourably impressed with the attitude of Dr. Littlejohn towards the whole question of teaching Osteopathy in this country. It is an essential condition of receiving a Royal Charter that this School should actually be in active existence and the fact that it is so is due Practically entirely to Dr. Littlejohn's efforts. The Committee recommends that the British Osteopathic Association do all they can to assist in furthering the British School of Osteopathy and further recommend that they associate themselves with the College Staff of Instructors and generally do all they can to make this College a creditable Institution."

In 1929, Dr. Littlejohn published the *Journal of Osteopathy*. Characteristically, practically the entire contents were written by himself until February, 1935, when it was enlarged from a simple four-page folder to eight pages and other contributors began to make their appearance. There was a further enlargement in

1938 to 26 pages but, after a life of ten years, the Journal ceased publication at the outbreak of war. Following the publication of an account of the British School of Osteopathy in the New Era for October, 1926, there was a growing demand for literature on the School and the principles it represented but, owing to an arrangement between the American and British Osteopathic Associations, no such information was available from

"We reverence and respect the memory of A. T. Still and often think of the happy days spent with him in Kirksville and those hours in the early dawn of day when I opened my window to let him into my bedroom where we sat and talked Osteopathy. He was the father of our science. But the science he gave us is like truth itself, ever evolving and appearing in fresh gleams."

America and it became necessary to publish an independent magazine. Much of the early history of Osteopathy in Britain is recorded in its pages and it is fitting, perhaps, that the events of those vital years should be re-examined and re-assessed, from the point of view of its founder and editor.

In June 1930, a practitioner complained to the Editor that "You haven't, up to date, thought much of Osteopathy beyond that taught by Dr. Still." In his reply, Dr. Littlejohn wrote:

"We reverence and respect the memory of A. T. Still and often think of the happy days spent with him in Kirksville and those hours in the early dawn of day when I opened my window to let him into my bedroom where we sat and talked Osteopathy. He was the father of our science. But the science he gave us is like truth itself, ever evolving and appearing in fresh gleams. In the October 1900 is-

sue of the *Journal of the Science of Osteopathy*, of which I was the Editor, we wrote 'At the suggestion of one of the oldest members of the Royal College of Surgeons in London we began the investigation of the history of medicine to find confirmatory scientific testimony in favour of Osteopathic principles. We were surprised to find a number of these. Of course we do not mean that Osteopathy as a School or a system existed in those days. Our object was to show that scattered over the field of medical history there were the fundamental principles of mechanico-physiological therapy, practised individually, sometimes in a crude form, sometimes in a more perfect form by isolated individuals, and even by systemic schools. These are not political endorsements but stable and undeniable facts in the history of medical treat-

ment. The search for this scattered data has been in operation for the past thirty years and is still progressing."

In March of that year the British Osteopathic Association wrote to Dr. Littlejohn in the following terms:

"At the last meeting of the Advisory Committee of the British Osteopathic Association, a motion concerning the British College of Osteopathy was made. This motion was in effect that you will be asked if you will give the British Osteopathic Association details of the subjects taught, and the names of the members of the teaching staff of the College. It was also suggested that it would be advantageous if you would include a list of the equipment and the physical properties of the College. Would you be good enough to include a list of graduates and their places of practice. We would like the names of the persons not graduates who have

diplomas given to them or degrees granted.

“The British Osteopathic Association will appoint a committee ready to examine the College. We suggest that on this committee will be an outside representative appointed by a leading newspaper. This representative can be a layman or a professional man. If we can have an immediate reply this committee would be willing to wait upon you at any time you suggest. This move, we feel, will hasten a mutual understanding and agreement which has been lacking for so long a time.”

This letter was referred to the Board of Directors of the British School of Osteopathy and the Graduate Association and it was on their behalf that Dr. Littlejohn made the following points in his reply:

“The School is now a perpetual Trust dedicated to Osteopathy and Osteopathic Education and is under the control of Statutory Trustees. The Graduate Association, like the School is a Corporate body. Both corporations are legal persons and as such are responsible to the law. Hence, in whatever conferences or negotiations they take part you will understand there is a legal responsibility attaching to the School and its graduate body which must be taken account of.”

Dr. Littlejohn then made reference to the common law and statutory basis of the position of the British School of Osteopathy as an Institution of Osteopathic Education and that, as from September 1930, the School would be brought into line with education in the basic sciences, to build thereon the professional curriculum in Osteopathy. He continues:

“On this basis we are in negotiation with the Associated Colleges of Osteopathy to establish a reciprocal affiliation which, without making us members of the Association Colleges of Osteopathy, will establish a basis for reciprocal recognition. If you are will-

ing to take account of these conditions, I, personally, am willing to recommend our Board and Graduate Association to confer with your Committee.”

This exchange of letters brought the negotiations to a close and the only response from the British Osteopathic Association was the publication of a manifesto “Osteopathy and its Aims” in which the claim was made that only graduates of the American schools were entitled to consideration. It was thus plainly evident that the door of co-operation was closed.

*“He who would command
nature must first learn
to obey her”
is one of the first precepts
of Nature herself.”*

From the early post-war days at 48, Dover Street, the British School of Osteopathy was established at addresses in Vincent Square and in nearby Victoria Street, London, SW1. In the Autumn of 1930 the School was removed to a permanent address at No.16, Buckingham Gate, London, SW1. At this stage in its development some sixty three students had graduated. In the “Announcement Number” of the Journal of Osteopathy published in July, 1933, Dr. Littlejohn gives a full account of the aims, objectives and methods of instruction employed at the School.

We quote the following extracts:

“The British School of Osteopathy opens its 17th year on September 25th, 1933. The British School of Osteopathy is the only School of Osteopathy in the British Empire, which has tried to comply with the requirements of the Laws regulating Osteo r to avoid in-

jury and to use the “coax” method so as to create the least possible friction in the corrective adjustment.

Disease is considered from the standpoint of its causation, the etiology being the principal consideration, symptomatology being valuable only in tracing the historical development of a disorder and to make it possible at any stage to palliate, even check, the progress of the disease. We teach that the Osteopathic lesion is a predisposing condition in disease, on account of the obstruction or interference with the nerve and blood supply to the structures involved, thus producing if continued a lowered resistance in the body and thus opening the doorway to infection, irritation and other exciting causes.

Following up this line of argument emphasis is laid on the correction of lesions, the palliation of symptomatic developments, the common sense use of diet, hygiene, exercise, rest, open air and every other method of nature, because immunity is natural to the body and nature provides the ways and means for its preservation. In this way and from this standpoint the entire body, with all the various diseases to which it is subject is considered. “He who would command nature must first learn to obey her” is one of the first precepts of Nature herself. Hence, all the vital actions and reactions of the body to nature must be an essential part of Therapeutics. Hence, while emphasising the spine as the pivot around which the etiology of disease revolves, we do not forget to consider the relation of the organs and tissues to native forces, dietetic supplies and other natural means of support and nourishment. Biological adaptations contribute to disease and these must be studied if we are to over-bear the disease process and develop health.

The Parliamentary Bill

The failure of the Parliamentary Bill to regulate the practice of Osteopathy in Great Britain in 1935, is a matter of history. There can be little doubt, and it is generally agreed, that the Bill was premature. The real cause, however, was to be found in the discord and disunity among the members of the osteopathic profession and the lack of accord between the four separate organisations that represented Osteopathy at that time. Graduates of the British School of Osteopathy formed the nucleus of the Incorporated Association of Osteopaths; membership of the British Osteopathic Association was drawn exclusively from American trained osteopathic practitioners; The Osteopathic Defence League was sponsored by an American practitioner who was not a member of either of these associations.

Perhaps the first point to be established in attempting to give a true account of the events that led up to the defeat in the House of Lords is that the bill was prepared by one man, Dr W.A. Streeter, without any consultation with the British School of Osteopathy. The following is an extract from the Journal of Osteopathy for June-August, 1935:

“When the Bill was first introduced in the House of Commons, following a petition on behalf of the Osteopathic League, a copy of the Bill was sent to the School and its opinion asked regarding it. That opinion was given with certain criticisms, which are preserved in the form presented. No attention was given to these suggestions. As a matter of fact, the British School of Osteopathy was never considered beyond the fact that

the possibility of its support and help was projected. Its help was asked, was offered and accepted on the basis of unity in defence of Osteopathy, subject to suggestions of certain changes at the later stages, if and when the first stages were completed. The British School of Osteopathy recognises that Dr. Streeter has worked unselfishly for Osteopathy for many years, and has done his best to try and get legislation to recognise the Osteopathic profession and Osteopathy as a system of healing. Recognizing this, the School told Dr. Streeter that it was willing to follow his leadership in legislation, as the School was devoted to the educational side of Osteopathy, provided the Osteopathic profession as a whole and its educational aspects were safeguarded by a united front.”

At a meeting in a committee room of the House of Commons under the Chairmanship of Mr. Robert (later Lord) Boothby, the British School of Osteopathy, the British Osteopathic Association and the Incorporated Association of Osteopaths were asked to give their support on the basis of unity for the sake of Osteopathy. This was agreed and a spirit of harmony and goodwill apparently prevailed throughout. When the Select Committee was appointed by the House of Lords the spokesman for the British Osteopathic Association (Dr. MacDonald) announced that the association did not recognise the British School of Osteopathy. Dr. Streeter said that “He did not know and the British School of Osteopathy could speak for itself.”

Quoting again from the Journal of Osteopathy:

“This opened the door for all the insinuations presented by Counsel for the British Medical Association. The purview of this is best expressed in the language of the B.M.A. supplement to the B.M.A. Journal, June 22nd, 1935.

“Counsel for the Bill indicated in his opening speech that the principal argument of the supporters of the Bill was that the public was going in increasing numbers to Osteopaths for treatment, and that therefore whether Osteopathy has a sound or scientific basis or not, it was in the interests of the public to enable it to distinguish the Osteopath who had received some training from the Osteopath who had received none. It was no part of his case, he said, that Osteopathy was founded on scientific truth and he submitted that the Committee was not concerned with this aspect.

“This in short compass is the true statement of fact and the basis of united support of the supporters of the Bill. In fact, the Committee of the House of Lords was not instructed or empowered to investigate under the Bill, either the scientific basis of Osteopathy or the Schools to be recognised. After the Bill was passed, if successful, a Board of Control was to be established which was to determine the standard of Education and then determine the Schools or School to be recognised. The British School of Osteopathy was not mentioned in the body of the Bill but a British School of Osteopathy. Hence when The British School of Osteopathy was blackballed it was ULTRA VIRES and it was done on the principle of bullying and blustering to defeat the Bill by side-ventures.”

This is confirmed by the later sections of the B.M.A. Council Report.

“In opening the case for the Association, Sir W. Jowett pointed out that, although the purpose of the Bill was to enable the public to distinguish the qualified from the unqualified, it proposed to place 2000 unqualified persons on the Register. That was a matter for the Board to determine, nor Counsel, or even the Select Committee.

“Of the 160 qualified persons that remained, 90 were “old boys” of the British School of Osteopathy who, he VENTURED to SUGGEST were not worthy of consideration.

That was the sneer and personal opinion and statement of Counsel. In the Journal of Osteopathy for July-August 1936, the Editor has this to say:

“Lord Chief Justice Hewart recently in a case before the King’s Bench Division made an interesting statement regarding professions and professional status; ‘Persons practicing a skilled profession had to subject themselves to tests and had to be, in a strict sense, qualified. That was the case with barristers, solicitors, accountants, doctors and almost every branch of the skilled professions, where men practised their calling in relation to the health, mind and, it might be, the fortunes of their fellow men.’ (Daily Express, June 19th, 1936). He might and should have added, Osteopaths.

“That is the reason why the British School of Osteopathy, for 20 years, when the law lays down no standard of qualification and no test for fitness to practice Osteopathy, has been formulating and building up a standard of education and providing the course of education necessary for such a practitioner. This explains why we refuse to acknowledge the pretender, whether he pretends to learn by inspiration or to have a title from a diploma mill. And we claim that only those are qualified who have

completed the standard course of education essential to be expert in the art of healing. We are ready at any moment to collaborate with the authorities to lay down such a definite standard, to provide the facilities for working it out in detail and to establish a standard authoritative examination which everyone must pass, before he or she can claim to be qualified. All our graduates support us in this position. Then we can demand the necessary facilities to provide the course of study. In this we are neither dishonest nor lawless. The dishonest ones are those who scurrilously denounce us and at the same time neither try to solve the problem nor help to provide the facilities for complying with our desired curriculum of study, standard of education and official examination tests.”

In conclusion we reprint an extract from a letter written in 1959 by Miss Elsie Wareing, the first osteopathic graduate in this country, and originally published in the Year Book issued by the Osteopathic

Institute of Applied Technique.

“It is now ten years since the death of Dr. J. Martin Littlejohn and, in remembrance of his kindness and patient teaching, I would like to take this opportunity of reminding all practising osteopaths of what he did for them and for osteopathy in Britain.

“Dr. Littlejohn became both a student and a lecturer at the Kirksville College of Osteopathy and, shortly afterwards founded the Littlejohn College which is now known as the Chicago College of Osteopathy. Later he returned to Britain and started in a very small way to develop osteopathic education in this country. He had to fight every inch of the way and to carry on his shoulders the educational and financial burden, for he received very little assistance from the osteopathic profession as a whole, though one or two members of it gave their names in support of the school which he founded. Only after the first

hard years did a few come forward to help in teaching; some of these were not trained teachers, but they gave of their best. Gradually a very flourishing school and clinic were established, and Dr. Littlejohn pursued his course in spite of much criticism.

“There was no-one who could challenge his knowledge of osteopathic diagnosis and his ability in technique and treatment. His technique was based on a thorough knowledge of the anatomy and physiology of the body and the natural use of his hands which he considered of more value than the use of any mechanical contrivance. I worked with him in his private practice for several years and saw many of the wonderful things that he did.

I am sure that if Dr. Littlejohn were alive today he would deprecate the fact that many osteopaths are not carrying out the true theory of osteopathy as practised by Dr. Still and later by himself. We cherish the memory of all the wisdom, kindness and patience shown to us all in our days of training. No one understood better than he the intolerance of the student mind and the students’ belief that they know better than their teachers. After ten years he is still sadly missed and undoubtedly there is no-one to take his place.”

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Letters to the Editor

Dear Dr. Chila:

Recently I performed a literature search on J. Martin Littlejohn, PhD, MD, DO, LLD. Dr. Littlejohn and Dr. William Garner Sutherland were students together at ASO at the turn of the 20th Century. He was the first Dean of ASO and went on to found the Chicago College of Osteopathic Medicine and the British School of Osteopathy. My search led me to The Meridian Institute. There, they have an electronic library with an excellent collection of writings under the heading of "Early American Manual Therapy." Of particular interest to me, and the reason for this letter, was an article by Dr. Littlejohn, entitled "The Physiological Basis of the Therapeutic Law" originally published in *The Journal of the Science of Osteopathy*, Volume 3, Number 4, August, 1902. Parts of this article are strikingly similar to my article "The Primary Respiratory Mechanism" published one hundred years later in the Winter 2002 issue of the AAO Journal. I would like to share the following quotes from Dr. Littlejohn's article with you.

"All life and life forms vibrate and pulsate in cycles. The arterial blood builds up and develops to function the nervous system, but the nervous system furnishes stimulus and even nutrition to the artery in order that it may pulsate in harmony with the master tissue of the body in the supply of food to the entire organism. Thus in the cycle of health, arterial control and nervous direction stand preeminent, and the law of cure must be that of uninterrupted arterial blood supply and unimpeded nerve control."

"In this organic unity, heart and brain seem to be in a special sense

vital organs, – the brain is the great generator of force and fluid and heat, using as its accessories in this work all the organs of the body; while the heart, under the stimulus of the brain, which is a mass of neuron cells, rhythmically distributes the fluids, with all nutritive and medicinal substances, to the remotest parts of the organism."

"After centuries of physiological vagaries concerning the circulation, Harvey discovered that the blood can flow only towards the heart and when flowing away from the heart is in the direction backward toward the heart again. For a long time it has been practically taught in the physiologies that the arterial blood flow is caused primarily by the heart contraction, the systolic influence causing it to move out and onward through the vessels. But experiment has shown the force of the heart to be insufficient to drive the blood through the tubelet system of capillaries. Attempts to inject the capillaries have demonstrated that a force sufficient to drive fluid through the capillaries, (1) must be greater than the heart force, and (2) such a force would increase the pressure to such an extent as to produce capillary rupture. Hence the key to the systemic circulation does not lie in the heart."

"What is the cause then of the circulation? Between the outer layer of areolar tissue and the inner membrane wall lies the coat of muscular tissue. The circulation through the arteries depends upon the peristaltic contraction of these arterial wall coats of muscle. These walls act as a series of plates, sensitive and motile, so that the pulsation of the arterial system represents the pulsating current of vitality in the peristaltic contraction

of the arteries."

"The capillaries are not the terminals of the circulating system but the beginning of it. The heart is the terminal, just as it is the last part of the circulatory system to be developed. Hence it is subject to and dependent on the circulatory phenomena of the capillaries. The capillaries represent ramifications in the structure of every organ and tissue of the body. Here the great fundamental work of nature is carried on, including heat generation, vital activities, body repair and renewal, the vitalizing processes in the different tissues. Here the pulsating rhythm of vitality takes origin, the heart being a general center within the continuous structure of the circulatory apparatus, where activities are coordinated, influences combined and made to co-operate. Hence the heart is not a force pump but a general co-operating center in connection with which the general vitality and life forces concentrate for distribution through out the entire vascular and tissue system.

"The neural impulses which produce this harmonious contractile action of the entire vascular system originate from the C. S. & S. [cerebrospinal & sympathetic] systems, all the different parts of the vascular system being supplied by fibrils from these two systems. These fibers are aroused in connection with the center activity, the center activity depending especially for stimulation upon the oxygen taken into the system in respiratory activity, upon the food furnished to its nerve tissue as a result of digestive, metabolic and secretory activities in the respective organs, and especially upon thought, emotion, and will when in active operation from the

psychic side of life.”

“The heart then does not act as the great pumping force in the circulation, does not even regulate this action. It is simply a general reservoir and distributor which unites the various parts of the vascular system, coordinates their activities, the real stimulation of the circulation depending upon the peristaltic action of the minute blood vessel system called the peripheral system. This peristaltic action depends for regulation on the nervous system under “the guidance of vitality.” The peripheral circulation thus becomes the *key to the circulatory function*. This explains the relation of the arterial wave of peristaltic action to the circulatory phenomena. It explains the failure of success in the use of cardiac stimulants and depressors, and indicates the only rational system of reaching the circulation, even the heart, by the action upon the peripheral blood system and this especially through what is called the vaso-motor nervous system. This accounts for the success of osteopathic procedure when these are directed to the vaso-motor mechanism.”

“The theory of our therapeutics depends on, (1) the vital force, which represents the sum of all vital activities and processes in the body organism, the cosmic energy in man, the energy of understanding and will; and (2) on nutrition, the tissues and organs depending for their vitality and vital activity upon nutritive conditions. Both of these are controlled from the brain. The brain centers represent the higher life, and the different paths from the brain to the body along the nervous system are pathways of distribution in connection with vital force and nutrition. In this we must take account of brain nutrition, in connection with which we get (1) the production of a secretion, the cerebro-spinal fluid, and (2) the generation of nerve energy that passes outside of the brain in the form of waves of vibration.”

“The nutrition of the brain depends

on definite changes in the brain, these being regulated by certain movements in which the lymph and blood play a most important part. In the case of the other body organs like the liver, these organs receive in all their parts an equal supply of blood when normal. It is different in the brain, because all parts of the brain are never acting simultaneously. Hence the difference in function forms the basis of the difference in blood supply to the different parts of the brain. The demand regulates the supply. The skull is an immobile structure and it limits the capacity of the cerebral blood supply.”

“The brain substance does not entirely fill up the cranium, lymphatic channels and reservoirs being within the brain in order to form a yielding base for the brain, not a solid structure like the cranial roof. In this yielding substance we find certain rhythmical movements. The brain acts on the body and controls the body, but body reacts on brain. We find brain movements corresponding, (1) with systole and diastole of the heart, (2) with inspiratory and expiratory changes, and (3) with vascular variations of vaso-motion. [K.E.N.’s NOTE: This 3rd component most likely refers to the Traube-Hering-Mayer oscillation, which was well known at turn of the last century.] Brain movements and blood pressure in the brain depend upon these three forces. Thus the variations in blood supply to the brain depend upon anatomical structure and physiological movements. Brain activity represented by these brain movements regulates blood distribution and brain nutrition. These movements are peristaltic, and when brought into relation to the mechanical motor power generated by the cranium give rise to the lymphatic and cerebro-spinal fluid circulation. The brain is nourished in connection with its blood supply, and at the same time metabolic changes give rise to lymph and cerebro-spinal fluid found in the subarachnoidal

spaces and in the ventricles, passing down into the spinal canal, thence along the path of all the spinal nerves, and also along the cranial nerves.”

“Hence the brain exerts a three-fold influence over the body, (1) *nutritive*, through the influence it exerts upon the vaso-motor system, in virtue of which it selects the food materials from the blood that circulates through all the tissues and organs; (2) *trophic*, direct from the cerebro-spinal system by the cerebro-spinal fluid, which passes out along the paths of the cranial and spinal nerves. This makes all tissues and organs trophic. If this is not normal, then the tissues or organs are in a state of mal-nutrition and liable to all sorts of diseases. These nutritive and trophic conditions are controlled by the neuron cells of the brain. Tissues that are non-trophic may grow by accumulating substance but do not develop by assimilation. Normal tissues are trophic when they are under the trophic control of the cerebro-spinal system, and are in this condition immune from disease. When non-trophic they are susceptible to disease; (3) the brain generates impulses that pass out to all parts of the organism through the nervous system to maintain the tonic rhythmic, peristaltic or vibratile condition of tissues and organs. This mobility which, is the characteristic of every tissue and organ is maintained by the perpetual stream of vibratile impulses from the brain towards every part of the body. Here we get the vibratility of the vital force.”

“The great medium of therapeutic action is the cerebro-spinal and sympathetic systems, these systems being co-ordinated, each system contributing an independent functioning to the united nerve mechanism. The former contributes control, especially in connection with its trophic function, exerted over all parts of the organism through sympathetic channels. The latter, vaso-motorly, regulates the blood

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supply and therefore the nutritive condition of the cerebro-spinal system. Any weakening of these united and coordinated nerve mechanisms renders therapeutic action less certain and may render it impossible.”

“The fundamental theory of physiological life is that of co-ordination, co-operation and adjustment. The structural framework is functioned in relation to the rhythmic activities of soft tissues and these in turn are regulated by the coordinate activities of four distinct motive powers, representing four definite planes of vital manifestation: (1) the reflex, (2) the automatic, (3) the voluntary, and (4) the volitional center activities.”

“The vitality of the nerve tissue is the basic life of the physiologic organism and this manifests itself upon these four planes of activity in connection with all the organs and organic expressions of life. The co-ordination of these within the physically and physiologically conditioned material body constitutes what we know of actual life, the expression of the deeper life principle and the life force.”

“There are certain forces, - sound, light, heat, electricity, etc. The physical basis of all these is vibration. In man this vibratile characteristic also predominates, for within his organism he combines the higher and lower grades of vibratility in connection with mind, brain, bone, muscles, blood. So long as these combined vibratilities are in harmony the organism enjoys life and health.”

“The principle of this vital force is the *power of fluxion or of vibration*, which, as in the physical forces, can permeate the substance without affecting or modifying its substance. There are thus three planes, the pure *material*, the pure *spirit* or psychic, and the plane which originates in connection with the union of these other two, the *vital force* plane.”

“*In the therapeutic plane* we are dealing with the nexus of spirit and

body, and, therefore, with those vibrations or fluxions that lie at the foundation of the force called vital. On this plane crude materials cannot be of any service, because they are foreign to the force to be affected, and as such cannot enter the field of the vital force.”

“In the crude drug substance, (a) there is nothing refining, but everything is crude and material body substance, and as it is not the material we are curing, as it is the vital force we are adjusting, there must be a refinement compatible with the force to be affected; (b) increased vibratility is the principle of adjustment.”

“The *vital cycle* depends upon vibration. Waves of vibration pass along the tissues, especially from the nerves and the brain to and along the muscle tissues. There is no function of the body that does not have peristaltic or rhythmic vibrations. How are we going to affect these? By affecting vibration in the substance used or in the treatment given.”

“The time may come when we can measure the vital force by measuring its vibratility. We must approximate to this normal vibratility. There can be no life manifestation, except in relation to vibration. As the vibratility becomes less intensive man becomes less capable of reactive power, mental and physical decline follow. Some call it magnetism, electricity, life or vital potentializations. Is there anything to lead to determine potentialization. Sympathetic life or visceral life is cruder and represents a lower plane of vibratility, although higher in the scale of rhythmic pulsation. The cerebro-spinal is more refined and represents a higher plane of vibratility, although more inhibitory in its nature. Therefore, the higher vibratilities appeal to the cerebro-spinal system. As most, if not all, functional activities represent co-ordinated sympathetic and cerebro-spinal activity, the medium vibratility represents the normal, changes de-

pending on the capacity to react.”

“The primary movements that affect every part of a mass of bioplasm are undulatory or wavelike, producing continual changes in the mass of the bioplasm.”

“The most essential movements in the tissue when developed are: (a) *the movement of living matter from center to circumference*, and as a result of this, (b) *the movement of nutrient, non-living matter from circumference to center*.”

“In the most minute particle of bioplasm there is a center of vitality. To this center nutrient matter comes from the circumference to be vitalized and to enter the cycle of perpetual movement from center to circumference.”

“Here lies the secret of that medicinal action based on food and oxygen and the principle of adjustment, which appeals to the centers of the vital force, because only in this way can the circumference of vital matter be reached.”

“In the highest form of tissue in the body, nerve tissue, we find all of these principles illustrated. Behind the simplest nervous action there lies a nerve current and this can be set free in connection with chemical change. Before such chemical changes take place the material must be formed in connection with the central bioplasm. The current that passes along the nerve fiber is generated in the cell and in its nature it is analogous to electricity. These currents are undoubtedly associated with *nutritive acts*, these being governed by nerve force. The minute nerve filaments to the capillary blood vessels represent an automatic nerve apparatus connected with blood distribution. If the nutritive process becomes too active, these fibers in the capillaries communicate with the trophic nerve centers in the spinal cord (anterior horns), resulting in the transmission of efferent impulses to the circular muscle fibers of the arterial walls. This diminishes the caliber of the blood vessel and checks

the flow of blood to the capillaries, diminishing the amount of nutrition allowed to pass to the tissues. The same nerve apparatus restores nutritive harmony, equalizes the blood supply and balances the nerve force. In this way the supply of nutrition, the regulation of temperature and the balance of nutrition are preserved - all in connection with the arterial wave action."

"The vital force never decreases, never increases, therefore it can restore order only by an orderly distribution of that vibratile activity which from the center of life keeps every organ and tissue in rhythmic relation to the organism."

"In the preservation of the organism it is well to remember that the great balance wheel of life is around the spine, the spinal cord and the spinal column representing the mediat-

ing influences between brain and body. In the brain the peristaltic variations are regulated by the vaso-motor influences that center in the dorsal spine. In the systemic circulation stasis or equilibrium between the two blood circulating streams is prevented by vaso-motor activity. Hence the key to the continuous blood circulation is found in the vaso-motors. Probably everywhere in the body the vaso-motor system holds the balance, acts as the moderating influence or represents the regulative action. This is in line with the idea of the body life as a cycle, complete in itself. Self preservation consists in the due and proper balance of the different cycles we have already referred to."

I present these quotes to you in the sequence they occur in Dr. Littlejohn's article with essentially no

editing. I selected them because of their startling consistency with the conclusions we have drawn regarding the primary respiratory mechanism and the Traube-Hering-Mayer oscillation. I recommend the reader go to the Meridian Institute website, www.meridianinstitute.com, and read the entire article.

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Dear Dr. Chila

After reading "A Discussion of Spirituality and the Teaching of Spirituality in an Osteopathic Medical Curriculum" by William W. Lemley, DO appearing in the summer 2002 issue of The AAO Journal, I want to express how pleased I am that consideration is finally being given to this area of medicine, and to add my personal opinions as to why I think Dr. Lemley is absolutely on the right track. I have also had the opportunity to read the fall issue of The AAO Journal containing comments from Drs. James and Rene McGovern in response to Lemley's paper. I will briefly comment on their statements.

I will preface this letter by stating that my comments are based on, for the most part, personal observations and experiences as a patient, as an osteopathic medical student, and for the past 13 years as a physician. Be-

cause of my interest in this aspect of healing, and because of its prevalence among many of my patients, I have been following various studies that address spirituality and prayer, as well as attending seminars that strive to remind seasoned physicians, physicians in training, and medical students that tuning in to, and responding to a patient's spiritual needs is an important part of that patient's healing process.

It would be most fitting to include the teaching of spirituality as part of the osteopathic medical curriculum since much of A.T. Still's teachings are spirit filled and emphasize healing. The precise definition of the osteopathic philosophy includes addressing the spiritual part of a patient, as well as the behavioral, chemical, physical, and biological areas. As osteopathic medical students, we are taught very well to recognize the un-

healthy states in the latter four areas, but spiritual "sickness" is merely hinted at during discussions of osteopathic philosophy. I personally do not believe that enough is being done to develop the osteopathic medical students' awareness skills to recognize the importance of spirituality as part of health maintenance. This type of course would not be about any particular religion and would not be about trying to evangelize the student. Rather, it would expose the student to spiritual belief systems among various cultures of patients he will encounter during his training years and as a practicing physician. It would bring about an awareness of why patients place an emphasis on their spiritual belief as part of their healing process, and give us, the caretakers, an understanding of how to include this as part of the medical history.



As I read Dr. Lemley's paper, it reminded me of patients who have inquired about my spiritual beliefs, and let me know the importance of addressing their concerns in this area of their care. Some patients have similar spiritual beliefs that I have: some do not. It does not seem to matter. The important and most significant point is that each one knows that I accept them as a person, and am open to include their beliefs as part of their overall treatment plan. I personally believe that the patient and I are in agreement that we are both defining spirituality as being connected to something greater than the self or any particular region. For some of my patients and for me, that means being connected to God. For others it is Allah, a Higher Power, the Light, etc. To me, it is having that inner knowing that God is in control and is the ultimate healer, and when one remains connected spiritually, he is able to have a peace and acceptance of the outcome of his disease process, whether it is a cure, a continuous chronic condition, or death.

I was also reminded that it is not always when a patient has a physical illness or is on his deathbed that he wants to include spirituality in his care. They are not necessarily looking for a "cure" from something, but at times, they are looking for someone to believe with them that they have self-worth and can become spiritually reconnected if this is the area that is most "sick" in them. I am strengthened and encouraged by encounters from patients who discuss the importance of their spiritual needs, if for no other reason to remind me that I am simply a person who happens to be blessed with the privilege of caring for others in a unique way; therefore, I must take time to do what is necessary for me to stay spiritually connected and healthy.

As I read the comments of Drs. James and Rene McGovern in the fall issue, they defined the term "spirit"

from the psychological realm that is more focused on thoughts, emotions and feelings; those labile and ever changing parts of us. While the health of this area is just as important for overall wellness, I do not believe that this is the same spirituality that Dr. Lemley discussed in his paper, nor do their comments address his point of whether spirituality needs to be part of the osteopathic medical curriculum. As I stated above, one's spirituality has to do with being connected to something more meaningful and having the assurance and acceptance that all is well, no matter what.

I think Dr. Lemley's point was to invite discussion as to whether it is important to include a course, possibly as part of an ethics course on spirituality since this issue comes up on a regular basis with patient encounters. Physicians often do not acknowledge this particular need in their patients, either because they are uncomfortable doing so, or because they simply do not have any background that would help them to recognize this need and its importance to patients' healing. We need to begin, as osteopathic medical students, to understand why certain practices are important to our patients, and why they choose to have or not have procedures done when it conflicts with their spiritual convictions. By forcing our wants and wishes and our "we know best" attitudes upon them may do more harm than good in some cases. It would be ideal to have an understanding of their spiritual needs and be able to relate to them in that way, or to consult with someone of the patient's own belief system. It would be very inappropriate to order a psyche consult as I have witnessed when I was a student and resident, just because the physician disagrees with the patient's choice in these instances. It is not necessarily the patient who "doesn't get it", but just maybe the doctor is not tuned in.

During the academic years and postgraduate training years, we some-

how arrive at the point of believing that we must have all of the answers, that we must be the final answer, the ALL KNOWING. Hence, another reason a course is so important; to teach physicians that they are not the Ultimate Healer, but rather, a facilitator of healing.

So, forge ahead, Dr. Lemley! Start including this important area that has been neglected, ignored, or misunderstood for too long. It is sure to be a welcomed addition to the osteopathic medical curriculum.

Thanks for all me to comment.

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Osteopathy: Comprehensive Health Care

Melicien A. Tettambel, DO, FAAO

Dr. A.T. Still exhorted osteopathic physicians to treat the entire person - body, mind, and spirit. The mission of the American Academy of Osteopathy is to “advocate . . . palpatory diagnosis and osteopathic manipulative treatment in total health care”. The Osteopathic Association has adopted its new motto of “treating people, not symptoms”. Health care consumers tend to see their providers for a “fast fix”. I do not recall the last time someone scheduled an appointment to be evaluated for a “spiritual” ailment. During the clinical encounter, one hopes to receive something (usually in tablet form) that mends the mind (anxiety, depression) as well as the body (weight loss, wrinkle eraser, acne cure). If a few minutes remain, a quick osteopathic treatment to “undo” that back kink would be nice. Before the consumer departs, pamphlets may be shoved into his/her hands regarding “additional” resources for time management, smoking cessation, or stress reduction – to round out the office visit.

If we treat the human being merely as a complex chemical/physical system, then we are bound to regard “illness” as a technical defect. The solution must contain “better living through chemistry; look good – feel good; and a chance to crunch is a chance to cure”. Unfortunately, this

*“Health is not a matter
of the physical body alone;
and if health care is
to be truly comprehensive,
it cannot be limited
to mind or body.”*

does not mean that health has been restored. Some people may not feel “well” after rapid recovery from serious illness or surgery. A thorough exam may fail to identify anything “wrong”. Antidepressants are recommended, or the patient may be dismissed as “mental” or a complainer.

Health is not a matter of the physical body alone; and if health care is to be truly comprehensive, it cannot be limited to mind or body. In medical training we learned about epidemiology, pharmacology, and surgery. Our curriculum lacked significant education regarding nutrition, positive life style, prevention, and faith in our ability to find health, not just disease. However, our OMT course instructors may have tried to teach us how to access “non-physical” problems through palpation. Tissue texture changes may be the result of “stress”, which has not originated in the physical body, but has ultimately manifested there. Touching a tender

area may arouse local pain or evoke a memory of a life event that the patient has “forgotten about” until the present palpatory episode.

Spiritual medicine, or the practice of faith in finding health, is almost unknown. Most physicians may not arrive at the idea that illness may have started in the spiritual realm before manifesting in the mental or physical realms. How does a practitioner respond to a chief complaint of “I do not feel like myself, especially since 9-11”? Did the patient know who he or she was before September 11, 2001? How do we treat patients who see or hear dearly departed family members and friends and feel that some of their daily activities are guided by “spiritual” communication? Sleeping pills may help him or her get some sleep, but not rest.

Perhaps in some of our earlier times we started or ended the day with reflective prayer or meditation. Then, throughout our busy lives, other time commitments have crowded out this activity. “Modern” people do not cultivate a sense of wonder, but seek a “scientific” explanation for all life’s events. Human achievements are admired, but nature and creativity are suppressed ideas. The most advanced technology cannot reproduce or “de novo” manufacture a lymphocyte. Nor does technology “cure” a technical

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defect of illness. We create illness. We also create health! Every requirement for perfect health exists in our being - not the pill or the procedure. Our being has to assimilate the intended beneficial effects of proposed treatment. As osteopathic physicians who treat patients, we strive to find health in our patients and assist the innate body wisdom with faith and self-confidence. This practice of spiritual medicine is the expectation of success and cooperation from a universal consciousness (or your own definition of God) to create or restore health.

Confidence and competence should not be confused. Competence means that someone does something well. Not all competent people are confident. Some worry that they may occasionally fail, and therefore waste time trying to become perfect. Is perfection possible if limited opportunities for assistance and experience are not utilized? You, patient, and faith are the perfect team.

Napoleon Hill's LAW OF SUCCESS enumerates six basic fears that stand between you and self-confidence (faith): Fear of poverty, Fear of old age, Fear of criticism, Fear of the loss of love of someone, Fear of ill health, and Fear of death.

Overcoming these fears leads directly to being able to build the foundation of self-confidence for yourself or your patient. Those who have a high level of self-confidence are not afraid to go out and "do it now". They may have no more skill or competence than their neighbors. "Doing it now" is no problem because of the expectation of success. They are less fearful of making mistakes and utilize any path to success. Self-confident people may make more mistakes than those with little confidence, but they may experience more success than the norm because of their certainty in assistance from God.

I would like to offer an approach to osteopathic confidence-building to provide comprehensive health care.

After taking the history, performing the physical exam, ruminating about recommending something pharmaceutical or herbal, and giving an osteopathic treatment, you may want to consider the following: As the patient rests on the treatment table, the fears and concerns about diagnosis and treatment with related consequences are confided to you. You may not yet be absolutely certain of the diagnosis or treatment, but you are palpating your patient with the expectation of finding health somewhere on the treatment table. As you note somatic dysfunction, you muster confidence in your ability to enlist the inherent body wisdom of your patient and the universal consciousness to address the problem - spiritually, mentally, and physically.

1. Think of someone whom you know who has great confidence. This should be someone you would like to emulate in some ways. Close your eyes and think of that person now. See your mentor in your mind's eye examining and treating the patient, using your hands.
2. Observe how your mentor interacts with the patient on a spiritual, mental, and physical level. Notice how the patient cooperates with the treatment and assists the mentor to correct any dysfunction. Visualize union of your hands as a hologram and "walk" into this shared space.
3. Confidently enjoy assisting the patient back to all dimensions of "health" within his or her mechanism. Notice any additional insight that you may have acquired about what else may be of further benefit to your patient.
4. Decide if this is how you would like to practice osteopathic medicine. If so, feel your new experi-

ence of self-confidence permeate your whole being. Also know that your mentor may suggest someone else from time to time to assist you with particular "problem" patients.

5. When you open your eyes, you can bring these feelings and knowledge with you into your practice. You may also release this mentor's confidence by simply visualizing yourself "disconnecting" all the acquired experiences, at will.
6. Now, open your eyes. BE as confident as you now are and desire to be. Continue to be a co-creator of health!

By engaging these suggestions, you cooperate with the patient's needs in developing a care plan. In the course of an osteopathic treatment, you assist your patient in locating health and confidently spreading that health with faith and wonder - to feel like him or herself again. Your teachers are ever with you. Also recall that you improve your skills by "doing", not watching. In the distant future, if someone should come upon this lecture and try the above "recipe" for comprehensive health care, YOU may be the mentor the student wishes to emulate!!!

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Etiological Factors in Sacral Somatic Dysfunctions

Jay B. Danto, DO

Abstract

This paper presents a conceptual framework for the etiological factors that result in sacral somatic dysfunctions. The author points to the likely multi-etiological factors that result in sacral somatic dysfunctions. These factors include ligamentous laxity of the sacroiliac articulation and somatic dysfunction of the multifidus, piriformis, erector spinae and biceps femoris muscles. The most important factors seem to be the ligamentous laxity and the multifidus somatic dysfunction. Definitive diagnosis of the etiological factors of sacral somatic dysfunctions is key to their treatment. Further study is obviously needed in this area.

Introduction

Recently, I had the unfortunate experience of being asked a question about a topic in which my mind was changing. The topic was sacral torsions. The reason for the change was I had recently attended the AAO sponsored course, Prolotherapy: Below the Diaphragm and read *The AAO Journal* article on “iliacus dysfunction”.¹ However, I was motivated from the challenge of changing my perceptions of a problem to explore and consequently benefit my patients in more definitive treatment.

According to my colleagues teaching the prolotherapy course there was

no such thing as a sacral torsion dysfunction as such. . .it was all really just physical signs of loose ligaments. I have had some time to reflect and integrate the role of ligamentous laxity into my conceptual understanding of sacral dysfunction.

This is quite different from the explanation that I was provided in medical school that conceptualized:

“...as the patient walks forward the center of gravity shifts from side to side and is over the stance limb at about the cranial limb of the sacroiliac joint. At the middle of the stance and swing phases the swing side iliac crest is lower than the stance side and the lumbar spine has a curvature convex on the swing side. As the swing continues the sacrum moves about an oblique axis the superior end of which is on the stance side. As the walk continues the alternate oblique axis is involved. It is postulated that at some point within the walk, or trunk movement standing still, the continued alteration of the oblique axes is restrained and asymmetry appears at rest.”²

This was acceptable for a naïve medical student, but is no longer acceptable as a physician with patients that depend on you for pain relief. Naïveté aside, I now realize that there are several aspects to a sacral dysfunction. These include:

- 1) Ligamentous Laxity
- 2) Multifidus somatic dysfunction
- 3) Piriformis somatic dysfunction
- 4) Biceps femoris somatic dysfunction
- 5) Erector spinae somatic dysfunction

Iliacus Dysfunction

First, let us discuss why an iliacus dysfunction doesn't cause a sacral torsion and should never be mistaken for one by the distinguishing osteopathic physician. It is necessary to understand how this faux paw arrived in the literature. The assumption was that a hypertonic iliacus would cause the ilium and the rest of the hemipelvis to rotate anteriorly around the sacrum. This would result in the findings on palpatory examination of shallow sacral sulci on one side and consequently a deep one on the other side. However, upon performing a seated flexion test these findings would most likely disappear since the iliacus would be put in a position of relative rest. This is exactly why we perform a seated flexion test. . .to identify anomalous findings!

Ligamentous Laxity

Next let us examine the theory of ligamentous laxity. According to this theory, ligamentous laxity of the SI

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(sacroiliac) articulation cause reflexic myofascial tightening and this consequently locks the hypermobile joint into a guarded position to achieve stability. This is a very plausible and a probable culprit in the formation of sacral somatic dysfunction. However, unlike many of the proponents of this theory, I believe that not everyone with a sacral somatic dysfunction needs prolotherapy.

Ligaments given the proper circumstances will heal. None other than William Garner Sutherland pioneered *balanced ligamentous tension* technique. In this technique muscles and fascia are given the chance to function properly by aligning the joint and its surrounding tissues along vectors that result in a state of mechanical balance. This mechanical balance also allows the nervous system to achieve a more settled state and diminishes facilitation. The consequence of this newly balanced joint is diminished ligamentous strain, diminished facilitation, and healing of the ligament.

For instance, a 16-year-old gentleman presented to my office with right knee pain 6 months after his original basketball injury. He had been taken for exploratory knee arthroscopy and the minor tears in his medial meniscus were trimmed. Upon examination he clearly had ligamentous laxity upon a valgus stress placed upon the right medial collateral ligament. He was treated with balanced ligamentous tension technique and acupuncture every 1 to 2 weeks. After 2.5 months of treatment along with glucosamine sulfate (1500 mg a day) and a multivitamin the ligamentous laxity resolved. This example demonstrates the ability of ligaments to heal when motion, nutrition and qi are restored in an otherwise healthy young man.

Multifidus Muscle Somatic Dysfunction

Multifidus hypertonicity/spasm is a likely part of sacral torsion. It is a very large muscle extending the entire length of the spinal column (see Figure 1). Since our concern is mostly the lumbosacral portion of it that will be our focus. Its fibers actually originate on either side of the sacrum surrounding the 1st through 3rd sacral foramina (see Figure 2) and the mammillary processes of L5 to T12 vertebra.^{2,3} As its name indicates the muscle is divided into many bundles of muscle fibers. The bundles of multifidus fibers pass 2 to 5 vertebral segments and then insert **medially** and **above** near the base of a vertebral spinous process and **laterally** and **below** to the transverse processes.⁴ They have even been found to insert upon the posterior capsule of the lumbar facet joints.⁵

Pain from the multifidus muscle group can present in many different ways. Travell, et al describes severe aching “bone” pain that can be persistent, worrisome and disabling.⁴ The attachment to the posterior capsules of the facets can result in a tensioning, effect on the capsule.⁵ Multifidus trigger points located from the lumbar vertebra level may project pain anteriorly to the abdomen, which may be mistaken for a visceral nature. Multifidus trigger points at the level of S1 project pain downward toward the coccyx and result in hypersensitivity of the coccyx. This condition is often identified as coccygodynia.⁴

It is easy to hypothesize that depending on which fibers originating on the sacrum are involved may dictate which type of sacral somatic dysfunction a patient has. Deep fiber hypertonicity of the multifidus unilaterally is likely to cause the sacral base to be restricted anteriorly resulting in a unilateral sacral flexion or forward torsion on the ipsilateral side. Superficial or full thickness fiber hypertonicity of the multifi-



Figure 1 The Multifidus Muscle: The bundles of fibers pass 2 to 5 vertebral segments and insert medially and above near the base of the spinous processes & laterally and below to the transverse processes and even the posterior capsule of the lumbar facet joints. From Grant's Atlas Images - Complete Collection. Williams & Wilkins, A Waverly Company. 1998: BUL07007

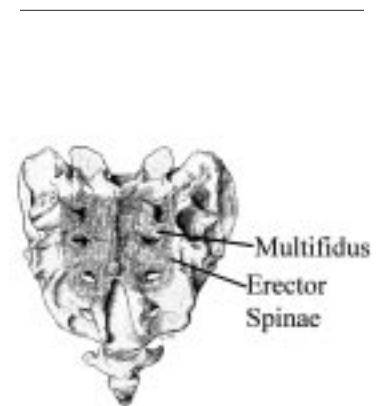


Figure 2 - Muscle Insertions Upon the Sacrum: Fibers originate on the sacrum surrounding the first through third sacral foramina. Modified from Manual Medicine 2. Williams & Wilkins, A Waverly Company. 1997: MM211016

dus unilaterally is likely to cause the sacral base to be restricted posteriorly resulting in a backward sacral torsion on the ipsilateral side.

Clinically, since recognizing the association between sacral somatic dysfunctions and multifidus hypertonicity, I have yet to find a patient in which the multifidus did not play a role. In addition, it is very easy to recognize that in every osteopathic treatment imaginable for sacral somatic dysfunction we are addressing this deep rotator of the lumbar spine. Furthermore, I have found that isolating the multifidus for trigger point injection or more often for dry needling the patient responds far more favorably than with OMT alone. Multifidus somatic dysfunction and backward sacral torsion seems to have a near 100% concurrence of occurring together.

The Piriformis Somatic Dysfunction

The piriformis has long been thought the major muscular culprit in sacral torsions. It is often singled out in manipulation textbooks as the target of treatment in muscle energy for sacral torsions.^{1,6,10} The piriformis originates on the anterior aspect of the inferior lateral angle (ILA) of the sacrum and inserts upon the medial side of the superior aspect of the greater trochanter (see Figure 3).⁷ Trigger points from the piriformis refer pain to the sacroiliac region, to the buttock, posteriorly over the hip joint, and to the proximal two-thirds of the posterior thigh (see Figure 4).

Hypertonicity of it, theoretically, may create the diagonal axis of rotation for the sacrum. Therefore, a hypertonic right piriformis causes a left axis and vice versa. As a result of this association I had tried to use counterstrain, dry needling and even trigger point injection to address this muscular component of sacral torsions. However, after searching for trigger points in this muscle, I had

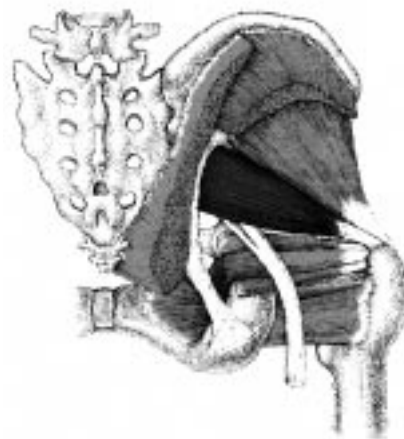


Figure 3 - The Piriformis Muscle: *Originates on the anterior aspect of the ILA of the sacrum and inserts upon the medial side of the superior aspect of the greater trochanter. From Manual Medicine 2. Williams & Wilkins, A Waverly Company. 1997: MM206023*

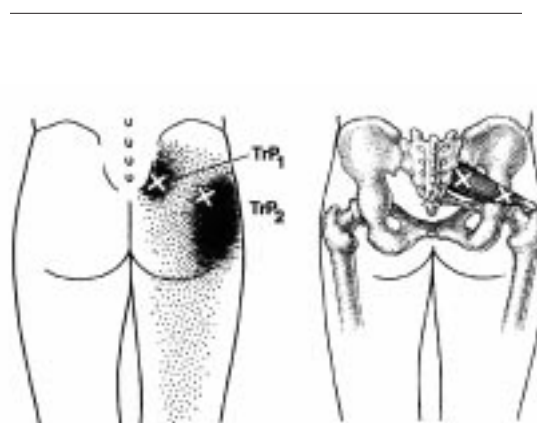


Figure 4 - The Piriformis Muscle Trigger Points and Referred Pain Pattern: *Pain is referred to the sacroiliac region, to the buttock, posteriorly over the hip joint and may also extend upward in the posterior thigh as high as the crease of the buttock. From Manual Medicine 2. Williams & Wilkins, A Waverly Company. 1997: MM209010*

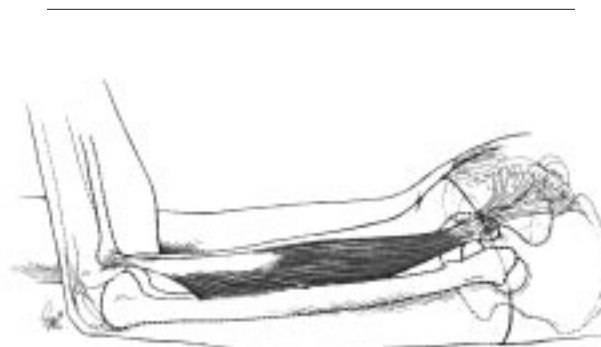


Figure 5: The Biceps Femoris and the Sacrotuberous Ligament Continuity: *Seen here from the lateral aspect one can appreciate the continuity between the tendon of the biceps femoris muscle and the sacrotuberous ligament. From Manual Medicine 2. Williams & Wilkins, A Waverly Company. 1997: MM211005*



Figure 6 - The Erector Spinae Muscle Group: Originating partially from the heavy tendons that surround and interdigitate with the origin of the multifidus and having a broad insertion. From *Manual Medicine 2*. Williams & Wilkins, A Waverly Company. 1997: MM201019

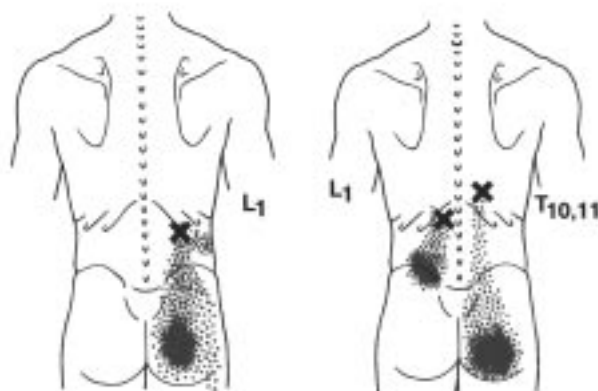


Figure 7 - Trigger Points & Pain Referral Pattern of the Iliocostalis Lumborum & the Longissimus Thoracis: The iliocostalis lumborum refers pain from the upper lumbar area concentrating downward to the midbuttock. The longissimus thoracis T10 & T11 trigger points refers pain strongly to the low buttocks and at the L1 level will refer just lateral to the high buttocks just lateral to the PSIS. From *Manual Medicine 2*. Williams & Wilkins, A Waverly Company. 1997: MM204002 & MM204006

frequently been disappointed to not find a 100% association. Even when present I did not have the experience of it being a cure all for the back pain associated with a severe backward sacral torsion.

Long Head of the Biceps Femoris and the Sacrotuberous Ligament

Originating from the posterior aspect of the ischial tuberosity is the long head of the biceps femoris muscle. It inserts upon the lateral aspect of the fibular head.⁹ The significance of this muscle is that it there is probably a fascial continuity with the sacrotuberous ligament (see Figure 5). This ligament attaches from the inferior lateral angle of the sacrum, and runs to the ischial tuberosity.

The pain pattern of the trigger points from the biceps femoris is to the back of the knee. Spillover referred pain extends downward a short distance below the knee into the calf and may also extend upward in the posterior thigh as high as the crease of the buttock.⁹ Recognizing this fascial continuity often helps to understand the sciatic pain associated with sacral torsions and imbalance between the sacrotuberous ligamentous laxity.⁸

Erector Spinae Muscle Somatic Dysfunction

The erector spinae muscles originate partially from the heavy tendons that surround and interdigitate with origin of the multifidus (see Figure 1).² It has a broad insertion that is beyond the scope of this article to elaborate upon. It is composed principally of 3 muscles with several parts and we are going to discuss only the iliocostalis lumborum and the longissimus thoracis (see Figure 6). The iliocostalis lumborum trigger point pain pattern may refer pain from the

upper lumbar area concentrating downward to the mid-buttock (see Figure 7). The longissimus thoracis trigger points at T10 and T11 will refer pain strongly to the low buttocks and at the L1 level will refer pain to the high buttocks just lateral to the posterior superior iliac spine (see Figure 7).

Clinically, while erector spinae muscle somatic dysfunction is often involved in low back pain, I have not found it to be a significant causal factor in sacral somatic dysfunction.

Conclusion

Sacral somatic dysfunction is an interesting topic whose treatment and origins seem to be founded mainly on theory and tradition. I believe that this article may at least begin some needed discourse in this area of osteopathy. William Garner Sutherland, DO referred to the sacrum as "the anchor". Without its proper function many osteopaths, including myself, believe that the musculoskeletal system would be prone to imbalance, somatic dysfunction, pain, and the possible impact upon the other organs through somatovisceral reflexes.

Since research in the cause and effect relationship of somatic dysfunction has inherent problems, I believe the next logical step would be outcomes studies and evidence-based medicine. It would be particularly interesting to see if other physicians observe the near 100% association between sacral somatic dysfunction and multifidus somatic dysfunction. Also, it is interesting to note that the piriformis somatic dysfunction is not as frequently associated with sacral somatic dysfunction as would be expected. I have not been looking at connection between the sacrotuberous ligament and the biceps femoris to make any judgment as to its involvement, but theoretically there should be either involvement of the sacrotuberous ligament and/or the piriformis in nearly all sacral torsions.

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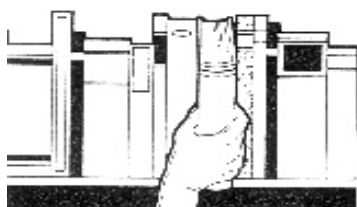
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Conceptual and Treatment Models in Osteopathy

Theodore Jordan, DO, CSPOMM

Introduction

Model: a description, a collection of statistical data, or an analogy used to help visualize often in a simplified way something that cannot be directly observed.

Webster's Third New International Dictionary

Osteopathy utilizes two types of models: conceptual models and treatment models. Although the two seem to be linked, there are fundamental differences between the two that make them independent from one another. A conceptual model may turn out to be false, but the related treatment model may remain valid, as will be demonstrated.

The validity of a conceptual model is dependent upon outside knowledge. The conceptual model is an attempt to explain physical reality, but it attempts to explain something that cannot be directly or accurately observed. As technology progresses we are able to measure and scientifically observe processes that were previously hidden. Therefore, scientific knowledge may disprove a conceptual model, necessitating a revision that incorporates current scientific knowledge. For example, the transversus abdominus muscle was commonly thought to always contract with the external and internal oblique. Once a technique was developed to

guide a fine needle electrode discretely into the transversus, a distinctly different firing pattern was recorded for the transversus than that from the obliques. This new knowledge, with other findings, has revolutionized the concept of low back rehabilitation and therapeutic exercise. This is the natural progress or development that should occur within conceptual models and with advancing scientific knowledge.

Treatment models, conversely, can be purely pragmatic, and do not have to accurately reflect physical reality. For a treatment model to be successful it must be internally consistent; thereby it must (1) provide a framework to interpret physical findings, (2) prescribe a treatment to treat the findings, and (3) give predictable results with the prescribed treatment. Even if the underlying physiologic concept is wrong, a successful treatment model is internally consistent and gives predictable and successful results. The human body is extremely complex and the totality of all factors in a dysfunction may be too complex to conceptualize. Therefore, a treatment model can provide a simplification and practicality to diagnosis and treatment. Manual medicine treatment models are based primarily on subjective findings. Therefore, manual medicine treatment models, without scientific validation, should always be recognized as simply a model, not as an accurate reflection of reality.

Prudent caution must be exercised to ensure the differentiation between the conceptual and treatment models, their respective definitions and utilization. Just because a treatment model is successful does not mean that the treatment model represents an accurate conceptual model. The validity of the conceptual model must be judged against the latest scientific knowledge. Therefore, the profession must stay current with scientific literature and must be willing to revise conceptual models accordingly.

Osteopathy has traditionally followed a clinical approach to understanding physiology; subjective clinical findings lead to treatment models. From the successful treatment models arose conceptual models. Sometimes research followed, that validated the conceptual model. The development of the concept of the osteopathic lesion and facilitated segment exemplify this process. By embracing new knowledge, our conceptual models will evolve and lead to better treatment models; leading to more efficient and effective treatments. The ongoing search for more effective treatments should be our ultimate goal and unifying force.

Recent scientific studies have been published which should give the osteopathic profession cause to debate some fundamental conceptual models. Several of these studies suggest

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that some of our basic osteopathic concepts may not be accurate. This clearly does not contradict the positive clinical results that we achieve through osteopathic treatments, but it is possible that the underlying physiology that we assume to be true is actually occurring through different mechanisms than we had imagined.

Members of the American Academy of Osteopathy (AAO) must stay informed and debate the most current scientific studies in order to maintain a current and valid explanation of osteopathic manipulation affects physiology. The danger is holding

onto old and outdated concepts while other manual therapists around the world are rapidly advancing in their understanding.

In this series of articles discussing conceptual models, it is my intent to stimulate professional discussion among the members of the AAO. *The AAO Journal* has been a receptive venue for such a discussion. I am not an expert regarding the scientific literature, but I have become aware of several studies raise more questions than answers, and need to be discussed. All opinions, insights, and discussions are welcomed.

The first article of this series will be a review of a past concept which was widely accepted, but that appears to have been a misinterpretation of physical findings. This will illustrate how Andrew Taylor Still accepted and taught a model of treatment popular in his day. Even though the treatment model achieved excellent clinical results, it was later found to be an invalid conceptual model. Future articles will discuss modern studies and their potential implications on other current models.

Conceptual and Treatment Models in Osteopathy I

Setting Hips:

An historical look at the evolution of an early treatment model

Theodore Jordan, DO, CSPOMM

“The importance of injuries to the hip are too much overlooked, “A. T. Still wrote in 1910;”¹ To the osteopath it should be a subject of the deepest thought.” Indeed the hip was the focus of much early osteopathic thought by Dr. Still and his students. Perceived lesions of the hip and their treatment played an important part in the growth and acceptance of osteopathy in its formative years. Interestingly, the practice of “setting hips” was borrowed from the allopaths and bonesetters. Later, many began to question the nature of these “hip lesions” and this created a controversy that evolved to encompass new models of dysfunction. By examining the role of the hip in early osteopathy, we can gain a better understanding of the

influences that shaped A. T. Still’s thoughts and practice. It will also demonstrate how misguided treatment models are sometimes adopted, and how these conceptual models evolve as better medical information is made available.

Hip dislocation was discussed in the medical literature before A. T. Still developed Osteopathy, and laid a groundwork on which he based much of his early practice. An important orthopedic study of the hip appeared in 1869 when Henry Bigelow, MD published: *Dislocations and Fracture of the Hip; with the reduction of the dislocation by the flexion method.*² This book describes dislocation of the hip from clinical cases and autopsies from fatal traumas. Described are the

essential maneuvers to reduce a grossly dislocated hip. Not published until 1896, the classic text regarding hip dislocation, *An Inquiry into the Difficulties Encountered in the Reduction of Dislocations of the Hip*, was written by Oscar Allis, MD. Dr. Allis’ text established in great detail the anatomic basis of dislocation and reduction.³ During that time, certainly many cases of congenital hip dysplasia were never treated and later lead to chronic hip joint displacement. Moreover, one can see by reading Dr. Allis’ case studies, that during the time when horses provided the primary source of transportation there were many traumatic injuries of the hip. This was an era before X-ray technology, and diagnosis of hip “dis-

location” was made by physical examination. Unfortunately, many other pathologic processes were widely mistaken for dislocation by the medical community, especially where there was abnormal posturing of the pelvis and lower limb (see Dr. Hazzard’s description below). Cases that were clearly not complete dislocations, but had similar physical findings, were thought to be “partial dislocations” of the hip joint. Some of these patients did benefit from the manipulation designed to reduce the assumed dislocation. In this way the diagnosis of dislocated and “partially dislocated” hips, based solely on subjective clinical findings, became a common but misguided practice. This practice of setting hips created a successful treatment model, even though it was based on a false premise.

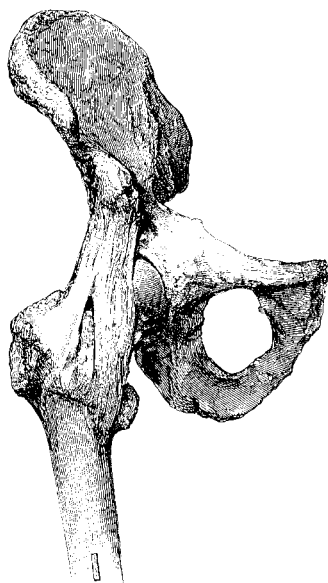


Figure 1: Y-ligament of the hip. From *Dislocations and Fracture of the Hip*. Henry Bigelow, MD, 1869.

The earliest experience that was to shape Andrew Taylor Still’s ideas concerning the role of the hip in disease was to occur in Kansas when A. T. Still was 25 years old. The Still family moved to the Wakarusa Indian

Mission in 1853. There young Andrew saw how the Indians crudely set hips: “If a hip came out of joint they (the Indians) put that man on his back astride of a small tree trunk, and hitched a horse to his ankle and put whips to the horse.”⁴ Later, Andrew and his father, Abram Still, were tending to the health of the Native Americans when a cholera epidemic broke out. There, Andrew witnessed “the cramps which go with cholera and which dislocate hips and turn legs out from the body.” He continues that, “I sometimes had to force the hips back to get the corpse in the coffin.”⁵ These early experiences, no doubt, left a lasting impression on young Andrew Taylor Still and later influenced his thoughts on the role of the hip in disease.

After the tragic death of his children from meningitis, A. T. Still spent many years searching for the true nature of health and disease. As Dr. Still began to explore manual medical techniques, he possibly came across allopathic texts describing the setting of hips. Then, a publication in the 1870’s, likely furthered A. T. Still’s formulation of his philosophy and practice of osteopathy. This was a description of a traditional English bonesetter’s manipulations, published in a series of articles during 1871 in the prestigious journal, *Lancet*.⁶ Writ-

ten by the English Physician, Wharton Hood, M.D., these articles described the work of an itinerant English Bonesetter by the name of Mr. Hutton. These writings—later also published as a book—described and illustrated Mr. Hutton’s manipulations to many parts of the body, including manipulation of the hip: (see Figure 2)

In dealing with the hip-joint, the leverage afforded by the length of the limb was used by Mr. Hutton with great ingenuity, and in the manner shown (Figure 1). The twist being given by the grasp of the operator’s hands, the flexion was accomplished, and with almost irresistible force, by raising his body so as to bring the patient’s limb into the position of the dotted lines. When this position is reached, the right or left hand, according to the limb, is shifted down so as to make pressure upon any painful spot in the groin while the flexion is completed. In this way the pelvis of the patient is fixed to the couch; and any tilting of his body upwards is prevented. As with other joints, the twist was made in the direction in which it was

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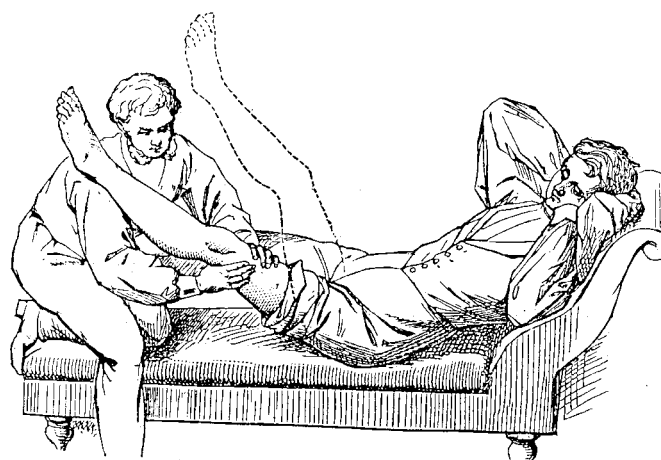


Figure 2: Setting a hip. From “So-called Bone-Setting: Its Nature and Results.” Wharton Hood, MD, *Lancet*. 1871.

most painful; and if the limb was elongated, it was carried outwards from the median line—if shortened, inwards, during the act of flexion.⁷

It is generally accepted that A.T. Still was probably either aware of these writings, or in some way influenced by them. For merely three years after their publication in 1874, Dr. Still “flung to the breeze the banner of osteopathy”; announcing a new system of healing that heavily relied on methods similar to the bonesetter. Indeed, A. T. Still even advertised himself as a “Lightning Bonesetter” on his business card as he began practicing his new science.⁸ It was Still’s treatment of hip dislocations that played a key role in the early success and development of osteopathy, and it probably is no coincidence that descriptions of his treatment closely resemble the descriptions from Dr. Wharton Hood’s articles. Being trained in mechanics, A. T. Still often used mechanical allegories when discussing the body. He reasoned that the body was a marvelous machine, and the hip joint a mechanical part capable of mechanical derangement:

I knew that if a hip was dislocated and the femur kept out of its articulating socket, that a man would have an unnatural, wobbling gait. I knew that the way to correct this was to put the thighbone back into its socket. So long as it staid [sic] out of its socket, just so long the man would not walk properly and would present an unnatural appearance while in motion.⁹

Furthermore, as Still studied the anatomy of the hip joint, he reasoned that the dislocation of the hip plays a causative role in many diseases. This is demonstrated in his book, *Research and Practice*, where Dr. Still repeatedly writes of the importance and ef-

fects of hip injuries. In a subchapter entitled “Relation of Bones to Diseases”, he reasons why widespread pathology that can result from a hip dislocation:

I took up the thighbone with its rounded head, and the socket in which Nature intended it should stay, and studied them for years. After critical examination, I found that a dislocation of the head of the thigh bone from the socket would produce tightening of the muscles and flesh in that region and stop the venous return producing congestion, stagnation, fermentation and varicose veins of the whole limb from socket to sole of foot. I find that fermentation extends to the degree of inflammation; that the inflammatory process will extend from hip joint to the occiput producing most all of the effects known as neuralgia, sciatica, lumbago, hardening and stiffening of the spine.¹⁰

A. T. Still thought that hip dislocations would affect the circulation and health of the whole body, which lead him to focus much of his effort into treating hips.

It is not surprising then that during the formative years of osteopathy, A. T. Still apparently set many hips. “If there is one disease more than another that has placed Osteopathy where it is at the present time it is the treatment of dislocated or partially dislocated hips,” his son Charlie Still said in a lecture in the 1920’s; “I remember some 15 or 16 years ago that osteopathy was almost exclusively confined to the reduction of dislocated or partially dislocated hips.”¹¹

A. T. Still also recounts an anecdote in his autobiography wherein tells of his demonstrations and efficiency: “I set three hips in the presence of Dr. W. O. Torrey, ex-presi-

dent of the Missouri State Board of Health. He had diagnosed all three cases, as being those of complete dislocation of the head of the femur from the socket. He timed me, and I reduced all three of them in four minutes and a quarter, and he being the authority before and after the operations.”¹²

A. T. Still clearly had a special interest in both the femur and the hip. Not only did the Old Doctor have his most famous picture taken holding a femur, but, he devoted an entire article in the *Journal of Osteopathy* to an allegorical discussion which displays his deepest thoughts concerning the “Thigh Bone.”¹³

There are few descriptions of how A. T. Still set hips. The best description is found in, *The Lengthening Shadow of A. T. Still*, by A. G. Hildreth. Note the similarity of this description to that given by Dr. Wharton Hood: [A. T. Still’s] technic used in setting dislocations of the hip was marvelous and it is questioned whether it could be described in a manner that it could be fully comprehended.

Dorsum Dislocations of the hip, Dr. Still claimed, could only be reset by working with the tissue around the hip joint and at the point where the dislocated head of the femur lay until the tissue softened to the extent where the head of the femur could be thrown down, around, below, and into the socket. For years, the old accepted theory was that when a hip was completely out of the normal socket and thrown up and back on the dorsum of the ilium, it formed a new socket; and after a certain length of time it would become so fixed it would be impossible to reset it or put it back in normal position

One case had been reported. . . herein the above theory was not true and proved beyond a

shadow of a doubt that Dr. Still's reasoning was correct. His manipulation for this purpose consisted of flexing the limb as far up on the abdomen as possible with one hand, and with the other on the greater trochanter, bearing down and out until the head of the femur was thrown low enough, so that by pulling down and forward to reach the cotyloid notch into the acetabulum and, through normal function of the muscles around the joint, the hip would drop into place. Should the dislocation be down and forward into the obturator foramen, the same loosening process was necessary until the tissue was completely normal, or as near normal as possible, and the head of the femur in its new position; then again the limb should be flexed on the abdomen until pried loose from its obturator position, and by the movement of the limb as a lever, with the hand on the head of the trochanter, lifted toward the center, throwing the knee in a position which pried the head of the trochanter through the cotyloid notch, the muscles again would exert normal function and pull it into normal place. Dr. Still's manipulation in a case of this kind was to take the ankle in one hand; hold pressure on the trochanter or upper portion of the femur with the other hand; and throw the foot across the well limb, thus throwing the head of the femur in such a position it would virtually be pried through the cotyloid notch into place. Those cases of complete disarticulation were rare, but occasionally found.¹⁴

Dr. Hildreth describes treatment of "partial" dislocations, and states that "complete disarticulations" were rare.

Diagnosis of "partial dislocations" were made from subjective palpatory findings, and were apparently not dislocations at all, but probably dysfunctions of the pelvis spine and lower extremity.

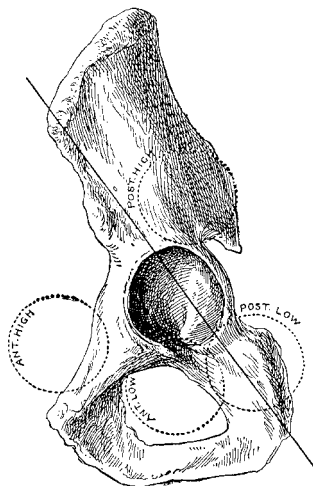


Figure 3: Diagram illustrating the position of the head in high and low dislocations on the anterior and posterior planes. From Davis' **Applied Anatomy**, Gwilym Davis, 1926.

Charles Hazzard, an instructor at the A.S.O. with A. T. Still, gave a more descriptive explanation of hip dislocations and treatments in a lecture. The following description is taken directly from medical books such as Oscar Allis' and Henry Bigelow's:

As to the Hip. There are four dislocations described for the hip. One is upward and backward upon the dorsum of the ilium, in which case the leg is shortened and the toes are turned inward. Another is backward into, or near the sciatic notch, in which case also the limb is shortened, though not so much, and the toes are turned inward. The third is forward into or near the obturator foramen, and is called

the thyroid dislocation. It is the most difficult with which we have to deal, and when such is the case the knee is bent, the toes point to the ground and may rotate inward or outward. In the other case the head of the femur is forward upon the pubic arch, and the turn of toes is invariably outward. So you have two in which deflection of the toes is always inward, one in which it may be inward or outward, and one in which it is invariably outward. Dislocations when they are new are fairly easy to reduce, but the Osteopath gets them almost always when they are old.

Your treatment must first be directed to softening all the ligaments and the muscles, removing the unnatural tension, and thus get the hip ready to set. These old cases are almost always slow to set, though I have seen some long standing cases set in a few treatments. You always have two factors of great aid to you, one is the anterior "Y" ligament of the hip joint, and the other is the action of the small muscles, the pyriformis, obturator internus and externus, the two gemelli, and the quadratus femoris. They are attached in such a way as to draw on the great trochanter. When it is up, they are below, consequently they are of great importance to us in setting a hip. If the hip is up and back, you flex the thigh still more, turn it inward strongly until you get the tension of those muscles, and then rotate the knee outward, and get the head of the femur to travel over the edge of the acetabulum. That looks easy, but I will assure you it is not. When it is dislocated backward into the sciatic notch, the idea is to flex the thigh, work the knee inward to disengage the

head of the femur from the notch, and then rotate it outward and forward, and you get the head of the femur drawn toward the acetabulum. When the dislocation is forward into the obturator foramen you are usually in difficulty. The motion described for that is to flex the knee and to rotate it inward, using the attachment of the “Y” ligament as a fulcrum against which the limb works. Flex the thigh and work the head of the femur outward, or toward the cotyloid notch. In the fourth dislocation, where the head of the femur is over the brim of the pelvis, considerable tension is exerted backward, long enough to stretch these ligaments, and then try to lift the head of the femur over the arch.

In diagnosing of the hip dislocations you frequently find it very difficult. If the dislocation is backward into the sciatic notch, the limb will be a little shorter, the toes will be turned in, and when the patient sits up you have a shorter limb. While if it is forward it always lengthens the limb for the patient to sit up upon the table. As I have said, the hips get out and stay out for a great length of time, and we have a great deal of trouble in getting them back. Of all the dislocations, the most difficult to treat is the one into the obturator.¹⁵

The above description is an excellent method of reducing a completely dislocated hip, but the concept of partially dislocated hips was common, and osteopaths (and MDs) used the same methods thinking that they were reducing “partially dislocated” hips.

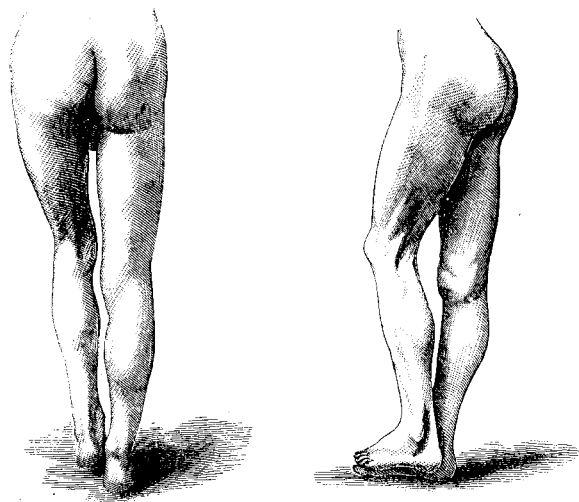


Figure 4: “Spontaneous Luxation” with leg demonstrating slight flexion, shortening, and inversion. From, **Dislocations and Fracture of the Hip**, Henry Bigelow, MD, 1869

A. T. Still’s son, Charlie Still, followed his father’s example of setting hips. In a lecture regarding the setting of hips, he explained that:

We find that about 80% of all dislocations of the hip are back of the acetabulum - about 50% on the dorsum of the ilium and 30% sciatic- about 11% is the obturator, and about 7% the pubic, and about 2% is the central dislocation, which last is the dislocation that we are unable to do anything for.¹⁶

He then related the following story of how he tried to set a hip once:

... I want to show you one of my blunders. I had a case some 15 years ago, before there was any school of osteopathy. I thought the hip was out of joint, because at that time everything was hips, hips, hips. I had pulled that man’s leg until I was ashamed to meet him, and finally gave it up, and he was going home.”¹⁷

Charlie Still then goes on to describe how his father, A. T. Still, met the man on the road, saw the limp, examined the man and found that the injury was actually to the big toe; that the man had “kicked something and in doing it he had bent his toe forward, which stretched the ligaments between the sesamoid bones out of position.”¹⁸

Later osteopaths began to reason that the acetabulum was mechanically not able to be lesioned in this manner without significant trauma, and that the commonly diagnosed “partially dislocated” hip actually represented dysfunction of the Sacroiliac joints, spine, or lower extremity.

As interest in the mechanics of the sacrum and sacroiliac joints increased, more osteopaths began to think that hip technique was, in reality, simple adjustment of the sacroiliac articulations. This is documented in a 1929 paper by H. E. Litton, DO:

My purpose is, quite frankly, to incite either a riot or a discussion, preferably the latter. There seems to be a great deal of confusion regarding what can hap-

pen to the articulation between the femur and the acetabulum. Some claim that a definite bony lesion can occur at this joint and proceed to diagnose quantities of such cases, apply a specific manipulation, and pronounce the patient cured.

Then there are those who say that nothing of the sort happens as the joint is too large and the shape of the articulating surfaces is such that it automatically adjusts itself.

Others contend that there is bound to be a temporary change in the articulation in the presence of either a sacroiliac lesion or a lumbosacral lesion, but that is strictly temporary and disappears when the primary lesion (or lesions) is corrected.

** However, I cannot convince myself that there can be a primary lesion at the hip joint....

Techniques which supposedly correct hip joints also correct sacroiliac joints.¹⁹

As more began to question the validity of hip dislocation, sacroiliac dysfunction became a prominent topic and subject of osteopathic research. There were sacroiliac study groups such as the "International Society of Sacro-Iliac Technicians"²⁰, and prominent writers such as H. H. Fryette, DO published on the anatomy and lesioning of the sacroiliac joint. ²¹ This mass of work culminated in 1958 by Frederic Mitchell, DO, who proposed the "Muscle Energy" model of sacroiliac dysfunction that is still widely used today.²² In fact, the elegance and utility of the muscle energy model have lead to its acceptance and teaching around the world.

By 1930, hip dysfunctions disappear from most of osteopathic literature, except for their notable appearance in the descriptions of William G. Sutherland's techniques from the

mid 1940's. This is not surprising, remembering that Sutherland graduated from the American School of Osteopathy in 1901 where A. T. Still routinely taught, and while hips were commonly "set". Dr. Sutherland explains the acetabular lesion with a new understanding to ligamentous-articular strain, instead of gross dislocation:

In many cases of low back lesions occurring in the standing or stooping posture a twist or rotation of the head of the femur within the acetabulum is often the primary one at fault. This lesion limits either external or internal rotation of the leg and causes leverage through the acetabulum affecting the sacroiliac articulation as well as tension on the psoas major and iliacus muscles, with consequent rotation throughout the lumbar area. This lesion should have primary attention.²³

It is interesting to see again the emphasis on this area as needing "primary attention," just as A. T. Still advised. Also interesting is the manner in which Sutherland modified the hip technique in his characteristic manner:

The femoro-acetabular lesion, having been sustained during a standing or stooping posture, responds easily if the technique is applied in the same posture. The writer usually places a chair on the operating table and the patient may rest his arms on this while in the standing posture. The patient should face the table while the technician sits in a chair at the lesion side.

The fingers of one hand fixate the back of the trochanter and the fingers of the other hand grasp the common tendon of the psoas major and iliacus near its

insertion. The patient is then instructed to turn the opposite side of the pelvis forward and backward. The method is like the turning of a nut on a bolt rather than the turning of the bolt on the nut; or the turning of the head of the acetabulum on the head of the femur rather than the laborious task of turning the head of the femur within the acetabulum. Old timers at the American School of Osteopathy will remember the method of turning the head of the femur within the acetabulum wherein the patient reclined on the table while the leg was fixed on the abdomen and rotated externally and then held in external rotation with the operator's chin on the knee during extension of the leg.

The technician will find it an easier task to turn the acetabulum on the head of the femur in the standing posture wherein the patient furnishes the effective maximum and the physician the minimum by fixing the bone and tendon and guiding with trained, tactile skill."²⁴

The femoro-acetabular lesion is described as a fascial-ligamentous dysfunction without mention of partial dislocation. Clearly, the model of partial hip dislocation had evolved

The hip, or acetabular joint, is the largest in the body. It seems odd then, that this one joint possibly receives some of the least attention from osteopaths today. The old notion of Dr. Still's era—that the acetabulum could be grossly dislocated in many cases—is actually a rare, traumatic occurrence. But Dr. Sutherland brings out an aspect of the joint that deserves greater attention: that fascial ligamentous strains of the acetabulum can cause dysfunction in surrounding structure such as the psoas, iliacus, ilia, sacrum, and lumbar spine. Fascial-ligamentous

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dysfunction of the acetabulum should therefore play a greater role in our diagnosis and treatment.

There are deeper lessons to be gleaned from this historic review. Examining the role of the hip illustrates the acceptance and evolution of treatment models. Clearly, A. T. Still, and many other physicians extensively used a flawed model based on a false concept of the underlying pathology regarding partial hip dislocation, but these treatments met with great clinical success by reducing pain and disability. Although these practitioners believed that they were reducing partial hip dislocations, the vast majority of the time they were actually manipulating the muscular, fascial, and skeletal complex of the pelvis and lower extremity. Because the clinical results were so positive, this model remained viable until well into the 1920's. X-ray technology eventually illustrated that few patients actually suffer hip dislocations, and so the "partial hip dislocation" model died away. The understanding of the hip joint and pelvis evolved to encompass the sacroiliac model of dysfunction and the fascial-ligamentous model. The adoption of these newer models had the positive effect of creating many more treatment approaches and techniques; many of which remain popular today.

However, the fact remains that many of the explanations as to how manipulations work are simply models based on subjective interpretations of palpatory findings, subjective clinical tests and assumed physiologic processes. The treatment model of setting partially dislocated hips was a valid treatment model. Unfortunately it was based on an invalid conceptual model of the partial dislocation of hips a concept derived from the combination of knowledge of complete hip dislocations and the incorrect interpretation of subjective physical findings (e.g. a leg appearing slightly shortened and turned in).

As scientific knowledge progresses, we must allow our models to evolve to incorporate the most current scientific findings. This will, undoubtedly, cause us to challenge many of our most cherished and established ideas. Unchallenged ideas become dogma. But a willingness to challenge ideas and models with an open mind will certainly lead to greater understanding, and will allow us to develop even better methods to reduce the suffering of our patients.

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Elsewhere in Print

DO Deutsche Zeitschrift für Osteopathie: 1/2003; January 2003

This publication is a new German journal (Hippokrates Verlag), which serves as the official organ of the German groups VOD and DAOM and the Luxembourg association A.L.D.O. Personal interviews, literature reviews, practice discussions and case reports, and service considerations are represented. The effort is made to present various languages in order to offer broader access to the content of the journal. Representative selections of content are given below.

Van Baar ME, Dekker J, Oostendorp RAB, Bijl D, Voorn TB, Bijlsma JWJ: Effectiveness of exercise in patients with osteoarthritis of hip or knee: nine months' follow up. *Annals of the Rheumatic Diseases*. 2001; 60 (12):1123-1130

In a study of chronic degenerative knee or hip-joint pain, 201 patients from 4 cities of The Netherlands received from their family physicians-according to a randomized selection-either "patient instructions" or additionally 1-3 individually tailored separate physiotherapeutic treatments per week for up to 12 weeks. Therapy was shown to have a clinically relevant positive influence on the pain in cases of osteoarthritis of the hip joint or gonarthrosis (depending on patient compliance). However, it was noted that the effects disappear after some time.

Summaries

Among all the joints of the body, the knee joint plays an exceptional role. Seen in terms of the high level mechanical load carried by the knee, the contact surface area of this joint is relatively small. Its complex biomechanical structure establishes a delicate balance between the demands for sufficient stability and the greatest possible mobility. Injuries to the joint can result in a long-term disturbance of this balance. The multiplicity of anatomical structures involved, combined with the potential presence of both functional disorders and structural defects, present a considerable challenge to osteopathic diagnostics and therapy.

Breul R: General structure of the knee joint (16). The anatomical structures of the knee, their functions and the biomechanics of this largest and most complicated of the human body's joints.

Seider R: The post-traumatic knee joint (21). Practical examination and treatment of the knee, post trauma or surgery is discussed. Typical post-surgical knee joint lesions are described as well as essentials of osteopathic treatment.

Schwerdtner H-P, Schallier F (25). A focus on palpation, meniscus diagnostics and the examination of ligamentous instabilities is directed to traumatological presentations.

Schallier F, Fuhrmann M (29). A case report discusses knee symptoms resulting from the function of the knee as a compensatory joint.

OMT for Common Organic and Clinical Problems

July 18-20, 2003

East Lansing, Michigan



**MICHAEL L. KUCHERA,
DO, FAAO
PROGRAM CHAIRPERSON**

TESTIMONIAL:

Osteopathy shines in the hands of the primary care practitioner who utilizes it for non-musculoskeletal conditions, as well as musculoskeletal. The concept of using the musculoskeletal system as a "handle" to effect visceral functioning is a legacy Dr. Still has left to the world through the osteopathic profession. The sicker the patient, the more they need osteopathic manipulative care and the more important is the treatment dosage. This course synthesizes the thought process of the osteopathic legacy and applies it to distinct clinical conditions. The registrant should expect to leave knowing not only a protocol for treating these specific clinical entities, but a protocol that he or she can then apply to their osteopathic care of any patient.

Karen M. Steele, DO, FAAO, Associate Professor, WVSOM

COURSE DESCRIPTION: LEVEL II

This 20-hour course (Category 1A) presents a practical hands-on OMT approach to everyday patient systemic complaints ranging from sinusitis to pneumonia, from gastritis to irritable bowel syndrome, and from headache to angina. The program centers on designing rational osteopathic care which can be delivered in a clinically-effective, time-efficient manner.

Clinicians will be taught to seek regional and segmental diagnostic somatic clues to enhance and speed differential diagnosis. Participants will learn to integrate: Chapman's reflexes; Collateral abdominal ganglia; and Segmental diagnosis of the entire spine and sacroiliac joint.

In treatment, the course will center on skills used to enhance homeostasis. Skills to be mastered during this course include: Sphenopalatine ganglia technique; Collateral ganglia inhibition; Spleen pump; Myofascial spray and stretch; Ischial rectal fossa technique; Mesenteric lifts; Rib raising; Lymph pumps; Liver pumps; Diaphragm redoming; and Direct and indirect OMT of cervical, thoracic, costal, lumbar and sacral regions.

While a number of techniques will be taught, emphasis is focused on developing skills and strategies to speed diagnosis and recovery. Residents, residency trainers and DMEs will be accorded special tips for maximizing integration of these skills and strategies into their specific program.

PROGRAM TIME TABLE:

Friday, July 18 8:00 am – 5:30 pm
 Saturday, July 19 8:00 am – 5:30 pm
 Sunday, July 20 8:00 am – 12:30 noon
 (Friday & Saturday include (2) 15 minute breaks and a (1) hour lunch; Sunday includes a 30 minute break.)

COURSE LOCATION:

Michigan State University, College of Osteopathic Medicine
 East Fee Hall, East Lansing, MI

HOTEL INFORMATION:

Call "Room with a View" for assistance in finding a hotel/motel that most fits your needs. 800/780-4343

The program anticipates being approved for 20 hours of AOA Category 1-A CME credit pending approval by the AOA CCME.

REGISTRATION FORM

OMT for Common Organic and Clinical Problems July 18-20, 2003

Full Name _____

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AOA # _____ College/Yr Graduated _____

I need AAFP Credit I require a vegetarian meal

(AAO makes every attempt to provide meals that will meet participant's needs. However, we cannot guarantee to satisfy all requests.)

REGISTRATION RATE

	ON OR BEFORE 6/18/03	AFTER 6/18/03
AAO Member	\$550	\$650
Intern/Resident	\$450	\$550
AAO Non-Member	\$1,000	\$1,100

AAO accepts Visa or Mastercard

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13th Annual OMT Update

*“APPLICATION OF OSTEOPATHIC CONCEPTS
IN CLINICAL MEDICINE*

PLUS PREPARATION FOR CERTIFYING BOARDS

August 21-24, 2003

Buena Vista, Florida



ANN L. HABENICHT, DO, FAAO
PROGRAM CHAIRPERSON

The program anticipates being approved for 22.5 hours of AOA Category 1-A CME credit pending approval by the AOA CCME.

COURSE OBJECTIVES: LEVEL III

This Academy program was designed to meet the needs of the physician desiring the following:

- OMT Review - hands-on experience and troubleshooting
- Integration of OMT in treatment of various cases
- Preparation for OMT practical portions of certifying boards
- Preparation for AOBNMM (American Osteopathic Board of Neuromusculoskeletal Medicine) certifying boards
- Information on CODING for manipulative procedures
- Good review with relaxation and family time

PROGRAM TIME TABLE:

Thursday, August 21 5:00 pm - 10:00 pm
Friday, August 22 7:00 am - 1:30 pm
Saturday, August 23 7:00 am - 1:30 pm
Sunday, August 24 7:00 am - 1:30 pm
(Each day includes (2) 15 minute breaks)

COURSE LOCATION:

Disney's Contemporary Resort



HOTEL INFORMATION:

Disney's Contemporary Resort

Lake Buena Vista, FL
1-407-824-3869 (Reservation line)
Reservation Deadline: July 21, 2003

Room Rate: \$149.00 single/double
\$25.00 per person each additional

(Identify yourself as attending

American Academy of Osteopathy's Conference)

TESTIMONIALS

- Faculty is great, excellent course, well organized, "I will be back". Can't wait to take another course.
- I always learn several new ideas and approaches at every AAO course I attend, even though I have been in practice for several years.
- Excellent Review! I appreciate how useful the handouts are to teach and improve the OMT skills of my house staff and med students

REGISTRATION FORM

13th Annual OMT Update
August 21-24, 2003

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AOA # _____ College/Yr Graduated _____

I need AAFP credit I require a vegetarian meal
(AAO makes every attempt to provide meals that will meet participant's needs. However, we cannot guarantee to satisfy all requests.)

REGISTRATION RATE

	ON OR BEFORE 7/21/03	AFTER 7/21/03
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AAO Member	\$630	\$730
Intern/Resident	\$530	\$630
AAO Non-Member	\$1,000	\$1,100

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Basic Course: Osteopathy in the Cranial Field

Course Director: Andrew Goldman, DO

May 30 – June 3, 2003 • Old Westbury, New York • CME: 40 hours 1-A
Contact (2 above courses): Judy Staser – phone: 817-926-7705 fax: 817-924-9990

Osteopathy: Vision, Optometrics and Perceptual Strain

Course Director: Joseph Field, DO

May 14 – 17, 2003 • Kennebunkport, Maine • CME: 32 hours 1A
Prerequisites: 2 Approved Courses, one being SCTF
Contact: Joseph Field – phone: 207-967-3311 • PO Box 7256, Cape Porpoise, ME 04014

PRM Research/SCTF Continuing Studies (In Cooperation with the Cranial Academy)

Course Directors: Mike Burruano, DO and Tony Chila, DO

October 17 – 20, 2003 • Indian Lakes Resort, Bloomingdale, Illinois

Contact: The Cranial Academy – phone: 317-594-1411

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