FROM THE ARCHIVES

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The osteopathic concept after a century

The osteopathic philosophy of medical practice was announced on June 22, 1874, by Dr. Andrew Taylor Still. Like Martin Luther, who had no intention of founding a new church, Dr. Still did not desire to found a new profession. However, 18 years of personal abuse, ridicule and frustration convinced Dr. Still that his philosophy would not be accepted by allopathic medicine. To satisfy the demand by others to learn about osteopathy, he founded a new school in 1892 at Kirksville, Missouri. He elected to grant a new degree, Doctor of Osteopathy (D.O.), and this fact alone has led to legislative and licensing battles with allopathic medicine ever since. Although other physicians such as Pottenger[1] and MacGraw[2] have also seen the necessity for a new viewpoint in medicine, it remains for the independent osteopathic profession to keep the osteopathic concept alive and vital.

One hundred years of osteopathic practice have shown that the osteopathic concept with its broad viewpoint of the human body is not only a guide to the practice of total medicine, but also an essential factor in the maintenance of health. The D.O., as a physician in the fullest sense, must relate to total patient care and must understand the key role of the musculoskeletal system in this care.

More emphasis in medicine needs to be placed on the musculoskeletal system, which comprises over 50 percent of the body's mass. It is the primary machinery of life[3] and the means by which we express ourselves at work or play. The niceties of the mechanisms involved in the musculoskeletal system do not seem to be well appreciated. The D.O. should be well versed in the function of the human spine in health and disease. Frost[4] makes an intriguing statement about a function or mechanism and then ends it with the exclamation: "neat, eh?" Watching a ballet dancer or figure skater evokes the same reaction: a feeling of awe at the diversity of human movements.

The body represents a functioning being. Structure was created around function because structure that does not allow function is pointless. In therapy a modification of structure may be acceptable if adequate function is maintained. Organs have a large reserve of structure to maintain function. The musculoskeletal system responds to sensory input from the skin whether the stimulus be chemical, thermal or physical; it also responds to what one sees or hears and to emotional demands placed upon it.

The role of the thoracic and abdominal viscera is supportive to the

Editor's Note

This is a reprint of Dr. Mackenzie's article in the publication "1976 Year Book of the American Academy of Osteopathy, and is a re-publication of Dr. Mackenzie's FAAO thesis.

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musculoskeletal system. It is the supportive machinery[3] which supplies energy and removes wastes and maintains homeostasis with changes in circulation, respiration, digestion, excretion, heat control, et cetera, when demands are placed upon it by the musculoskeletal system.

The autonomic nervous system correlates the demands and responses of the external and internal environment. The basic body functions are programmed during development and need no conscious thought. The sensory input to the nervous system from the external environment as we perform our functions requires an adjustment of the internal environment (viscera) to these demands. The ability to respond and manner of response depends on the state of health of this body.

The importance of osteopathic medicine to the maintenance of health can be verified by research which has substantiated the clinical findings and treatment by osteopathic manipulative medicine. Korr has summed up the neurobiologic mechanisms as follows:

1. Facilitation (lowered thresholds) of motor pathways in lesioned segments.
2. Disturbed sensory inputs to lesioned segments.
3. Facilitation of sympathetic pathways.
4. Experimental induction of facilitated segments.
5. Learning and memory in the spinal cord.
6. Trophic influences of nerves and their basis.
7. Changes in somatic tissues as basis for palpatory diagnosis.[5]

Medical education should emphasize the key role of the musculoskeletal system in osteopathic medicine. Within the profession, proponents of the various mechanisms explain the role of musculoskeletal system, as follows:

The postural structural viewpoint deals with the skeletal system and its adaptation to the forces of gravity.[6] A focal point is the pelvis at the sacroiliac joints where forces from the trunk and extremities meet. Predisposing causes may be a short lower extremity or a sacral base tilt with production of a lumbar tilt or scoliosis, and secondary scoliosis in thoracic or cervical spine. Articular positioning and mobility is a point of emphasis with this group.

The neurological viewpoint' deals with reflex patterns of the nervous system.

1. Viscerosomatic reflex, which is a referred pain from a viscus such as the appendix to the soma, such as the anterior abdominal wall.
2. Somatosomatic reflex, which is a referred pain, for example, from the lower thoracic and upper lumbar spine to anterior abdominal wall as in chronic iliac pain.[8]
3. Somatovisceral reflex is demonstrated by the abdominal distention following a low-back strain.
4. Viscerovisceral reflex is seen with a dilated duodenal loop in pancreatitis and also as a cut-off sign in the transverse colon with the same problem.

The neurological viewpoint correlates the symptom complexes with primary or secondary disease in the musculoskeletal system or with primary or secondary disease in the thoracic or abdominal viscera.

The bioenergy viewpoint deals with the energy changes taking place in the soft tissues. Rollin Becker states:

> At the very core of total health there is a potential within the human body manifesting itself in health. At the very core of every traumatic or disease condition within the human body is a potency manifesting its interrelationship with the body in trauma and disease. It is necessary to become award of and use this potency. Within it is the key to reverse the pathology that is present and to allow the basic potency that is health to remanifest itself.[9]
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> The physician places his hand or hands upon the tissues and then establishes a fulcrum through which to read the functioning or dysfunctioning from within the living body of the patient.[8]

Diagnosis and treatment is of a more subtle type in changing the energy response in soft tissues. It is concerned more with functional technique and tissue changes rather than with thrust techniques.

The circulorespiratory viewpoint considers the dynamics of circulation and respiration which are absolutely essential to life.[6] All the tissues need perfusion, and body physiology is involved with cardiorespiratory dynamics. Emphasis is placed on respiratory exchange as it affects cardiac output and peripheral circulation. Actual treatment is provided through a combination of deep fascial release, increasing articular range of motion, soft tissue massage, and cranial manipulative therapy with treatment following a basic sequence.

The craniosacral viewpoint concerns itself with the primary respiratory mechanisms and includes the following phenomena:

1. The inherent motility of the brain and spinal cord.
2. The fluctuation of the cerebrospinal fluid.
3. The mobility of the intracranial and intraspinal membranes.
4. The articular mobility of the cranial bones.
5. The involuntary mobility of the sacrum between the ilia.[10]

Finally, the clinical syndromes viewpoint considers the large group of syndromes mainly related to the musculoskeletal system and the response of the syndromes to manipulative therapy. Here the group of symptoms as presented by the patient are easier to classify. Stoddard

gives a list of 24 clinical spinal syndromes which could be broken down even further; for example, under acute episodic syndromes he lists traumatic type, disk protrusion type; muscular type, inflammatory type, and a miscellaneous group including such disorders as gout and herpes.[11]

As in the parable of the elephant and the blind men, what one feels may be what one perceives.

There is some overlapping in these viewpoints, but overall one could say that the patient presents with a group of symptoms (clinical syndrome) such as circulorespiratory distress which may represent reflex patterns from soma or viscera (neurological) or palpable soft tissue changes (bioenergy) from altered articular mobility and position of cranial (craniosacral) or vertebral (postural skeletal) segments induced by a response to stress, whether somatic or psychic in origin. Where do you break up the cycle of somatic dysfunction? Apparently at a number of points, depending upon your viewpoint and skills. However, it seems the appropriate treatment should be applied to the primary source, somatic or visceral.

In the maintenance of good health, more is required than sanitation, immunization, hygiene, and an adequate constitution. Emphasizing the musculoskeletal system does not mean ignoring the fact that pathologic states may exist in any body system. Changes may be due to inflammation, infection, neoplasm, degenerative process, trauma, et cetera. Osteopathic manipulative medicine plays a positive role in keeping normal musculoskeletal function. Manipulative techniques may include soft tissue, long-lever, articulatory, thrusting, functional and release-by-position, isometric, isotonic muscle contraction (muscle energy), inherent force and fluid fluctuation, all with the purpose of correcting adverse somatic dysfunction.[12] With this wide choice, a particular technique can be selected for the problem at hand.

The D.O., as a physician, literally has at his fingertips all these manipulative techniques as well as the other proven forms of therapy. His self image depends on his motivation and understanding of osteopathic philosophy. If he is convinced that he has more than the allopathic physician to offer his patient, he will be happy and satisfied in his work.

The general practitioner is very important to medicine. The great amount of knowledge that he needs to comprehend the scope of medicine makes him the equal of any specialist. It is important that he coordinate the workup, tests, interpretation, and treatment of the patient. What could be more important than to see the patient as a whole person?

Of course the specialist should be consulted for judgment and skills where he is needed, but the osteopathic concept should permeate his thinking. There are highly specialized procedures that require teamwork by physicians and paramedical personnel using sophisticated and expensive equipment.

Is the osteopathic concept too overwhelming in scope to be successfully applied by one individual? Or is the amount of knowledge that we now have too much for one individual to cope with? What has 100 years wrought in the concept? It has provided a place in medicine where a physician with a D.O. degree may offer the most comprehensive view of the patient and his health care. The D.O. sees the musculoskeletal system as the primary machinery of life, the viscera as the supportive systems, and their total interrelationship by means of the nervous system as coordinator. He is a physician who appreciates the importance of function and structure, who has a positive approach to health maintenance by means of skilled manipulative therapy, who can relate the symptomatology to physical findings and reflex pathways, and who can appreciate all the ills that flesh is heir to. Do our osteopathic colleges produce this superior physician? Can our osteopathic colleges produce this superior physician? They must if they are to maintain the patient's health care, today and tomorrow.

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