

Editor's note

The pages appearing in this "Special reprints" section have been electronically scanned from the original journals in which they appeared. Consequently, the scanning process at a density to enhance readability has picked up artifacts and other "blemishes" that existed in the original paper on which the text was printed. JAOA regrets these anomalies and hopes that they will not detract from the content of these works published in the osteopathic medical profession's early history.

Future special reprints sections will feature articles categorized as follows:

■ July: The Osteopathic Lesion

- ☐ "Mechanism of Anatomical Structure in Its Relation to Osteopathy" (Bernard, 1948)
- ☐ "Emerging Concept of the Osteopathic Lesion" (Korr, 1948)

■ August: Psychoses and Osteopathy

- ☐ "Osteopathy and Insanity" (Gerdine, 1917)
- ☐ "Comparison of Osteopathic and Allopathic Results in Dementia Praecox" (F. Still, 1933)
- ☐ "Osteopathic and 'Old School' Results in Mental Diseases" (Merrill, 1934)
- ☐ "Schizophrenia: Introduction" (Hildreth, 1939)

■ September: The Cranial Concept

- ☐ "Editorial—Osteopathic Research Imperative III" (1936)
- ☐ "The Cranial Bowl" (Sutherland, 1944)
- ☐ "Osteopathic Cranial Lesions" (Kimberly, 1948)

■ October: The Autonomic Nervous System

- ☐ "Influencing the Vegetative Nervous System Through Manipulation" (Northup, 1945)
- ☐ "Autonomic Nervous System in Osteopathic Therapy" (Waitley, 1948)

■ November: Emerging Osteopathic Education and the War

- ☐ "Streamlining Osteopathic Education During War Emergency" (Peach, 1943)
- ☐ "Educational Fundamentals in Osteopathy" (Thompson, 1946)

- ☐ "Necessity for Emphasizing and Strengthening Manipulative Service Offered in Osteopathic Hospitals" (Peckham, 1947)

■ December: Government and Practice Rights

- ☐ "What Osteopaths Stand for in Legislation" (Hildreth, 1910)
- ☐ "Tendencies in a Social, Political and Governmental Way Which May Influence Doctors" (Thomas, 1937)
- ☐ "The Future in Retrospect" (Swope, 1937)

The editors hope that you find this information informative and helpful in understanding and appreciating the history of our unique profession as it strives toward unity.

—Gilbert E. D'Alonzo, DO, June 2000



PALPATORY DIAGNOSIS

The clinical inception of osteopathy originated from palpatory examination of the spinal and abdominal regions of a child suffering from dysentery; noting spinal soft tissue contractions, varied abdominal surface temperatures, and lumbar vertebral malalignments. Recovery followed correction of these abnormalities.

Palpatory diagnosis confirmed similar conditions in other dysenteric cases. Subsequently various bodily disorders were examined by palpation. And beneficial results were obtained by normalization of the deranged tissues.

Thus palpatory examination revealed a new field of diagnosis; phenomena were elicited different from those found by any other method of diagnosis. These clinical facts, which cannot otherwise be detected, demanded interpretation. They did not fit into the picture of preconceived theories of pathogenesis. In a word, a new aspect of structure was brought to light.

Structural change was found to be an essential part of the functional process. The association of the two, structure and function, depending on mutual interdependence, was shown to be a basic requirement of all like processes.

Dr. Still found no royal road to palpatory attainment. He devoted months and years, and many of them, to constant daily practice. In fact, he made the feel of tissue a part of every day routine, until it was actually a living issue, not something detached or isolated. The art of osteopathy is based upon nothing less than an exact and intimate knowledge of the tones and tensions of living structure and the reasons for them.

Dr. Still insisted that a light touch and gentle handling of the tissues develops the most skillful

and delicate sense perception. Just as soon as one employs heavy or harsh methods, conscious recording of the various shades of physiological reaction is lost. Each normal tissue, skin, muscle, fascia, ligament, gland, etc., has its characteristic feel when palpated, and an equally distinctive reaction when actively but lightly manipulated. And by virtue of the same, each abnormal tissue presents characteristic qualities. The complexity of these qualities constitutes a veritable maze to the novice.

Consequently there should be constant mental contact with the tissues through the tactual corpuscles, and interpretation, or else the feel of tissues will give but little reliable information; this is true of both palpation and therapeutic manipulation. Concentration and practice are the only possible means of attaining to any degree of skill. The importance of this part of osteopathic education cannot be overemphasized. It comprises no small portion of successful art.

It is possible that the refinement of the x-ray has tended to lessen the quality of palpatory effort. The x-ray can only be at best a very helpful supplementary measure. In the hands of a skilled osteopathic interpreter it is invaluable in certain cases; otherwise it may be misleading. The same may be said of laboratory diagnosis. But in any instance, there is always a world of tactual sensing to be recorded. In no other way can the various degrees of the tones and tensions, the mobility, elasticity, and resiliency, and the flexibility and extensibility of living tissues in their varied reactions, be noted. It is essential that the totality of pattern be elucidated. This recorded history is most significant.

It is well known that Dr. Still paid great attention to bony architecture, especially the mechanical form, plan, construction, and operation of each articular unit. This is inclusive of their levers and fulcrums, muscular and ligamentous mechanisms, fascial encasement, and their nerve connections, lymphatic association, arterial supply, and venous drainage. Each articular unit is in a sense, a distinctive system of activity, though definitely correlated with all others. But there is plan, purpose, and beyond all an integrative contribution, in each combined structural and physiological group.

The status of each articulation system is an expression, at any given time, of the dynamic forces of environment reacting upon the body; an expression of the physical concrete, which also reflects its biochemical condition. Mechanical law constitutes no small portion of its operative procedure. The arrangement of the physical mechanism is the counterpart of the associated chemical action. Specific coordination of structure and function is the unit of operation, in which joint activity is indispensable, both locally and to the whole organism. The tactual sense is the one possible means of approach in order to discover the exact condition of skeletal tissue. The wide range of knowledge thereby obtained is a veritable treasury of information. But the tactual sensing must be efficient, and the findings analyzed

and interpreted, before one can attain reliable information. Then the application of this knowledge will prove of the greatest possible importance for it is founded on a basic principle of health.

Disturbances of articulating bony surfaces are always significant. But the palpatory diagnosis should go much further if one is to obtain anything like a complete clinical picture of structure. Osseous framework provides a fundamental aspect from a certain viewpoint. But its observation *per se* may be far removed from the correct angle of clinical interpretation. The dynamic forces engaged act largely, pathogenetically, by way of the so-called soft tissue mechanisms. It is the complexity of these mechanisms which requires no little elucidation, and which challenges the very best efforts of the palpatory diagnostician.

Mention has been made of the necessity of the lightest possible contact when sensing the tissues. The sense of perception should not be dulled by heavy pressure. Care should be taken that additional sensory influences are not initiated. Everything depends upon careful, gentle, but deep, penetration of the tissues. The patient should thoroughly relax. The physician should have complete control of the field at all times. Every bit of conscious tension on the patient's part defeats these very purposes.

The various structural tensions of fascia, muscle, tendon, and ligament, tell a story of absorbing interest and of manifold information. A significant feature, often overlooked, is the elicitation of the small irregularities of abnormal structure which are frequently the very beginnings of irritations to nerves and of obstruction to vessels, leading to diseased processes.

Space permits reference to only two or three illustrations exemplifying the far-reaching importance of palpatory diagnosis. Careful training enables one to identify the status of the tonus and texture of the skin, which reflects to a certain degree the nutritional condition of the body; whether metabolism is normal, that is, nourishment sufficient and tissue elimination adequate. Then the feel of the skin gives a very helpful clue to the probable organic reaction to treatment. For not only is it a covering of the body but also its regulatory mechanisms through environmental influences are associated with both the superficial and deep systems of circulation. It is enervated by the cerebrospinal and autonomic nerves. Hot and cold areas indicate underlying disturbance of circulation and nerve involvement. These are of value in locating structural abnormalities, especially regions of beginning involvement of mobility. The feel of the skin both generally and in circumscribed areas is an indicator of the effectiveness of treatment, not only in its temperature and sweat gland reactions, but also in its status of nerve irritability and character of tissue elasticity and contractility. The degree of vital reaction is commensurate with the efficiency of lesion correction and establishment of improved under-

lying physiological processes. This is most helpful in correctly timing and spacing treatment, so that there is neither insufficient treatment nor over-treatment.

The superficial fascia is closely associated with the skin. Circumscribed edema and relative acidosis are frequently located therein, involving also the subdermal lymphatics, being factors of the osteopathic lesion, and giving a distinctly doughy feel. This condition is not rarely a cause of the locating of toxins and infectious processes in certain regions. In such instances the nearby lymphatics may be involved, presenting a characteristic feel of involvement as well as enlargement.

The muscle feel gives a wealth of physiological and pathological information. Probably it is the most reliable structural index of body welfare. Muscle tissue is richly supplied with bloodvessels, an indication of its constant physiological importance. To enumerate its physiological activities would include, directly or indirectly, all vital processes. Its mechanical phases are of special interest, for they affect nerve impulse and circulation, and the chemistry of the sarcoplasm. The balanced tonus of muscle is an adaptive mechanism intimately coordinated with environment and bodily activity. The feel of tone and tension is always outstanding, a registration of bodily condition constantly available. The local status of each segmental group, as well as configuration and equilibrium, may be revealed, which reflects direct primary injuries, and reflex phenomena from visceral functioning.

Muscle tone, contractions and contractures may be quickly identified, each presenting a characteristic feel, and each revealing an underlying feature of activity. The pathological field is no less characteristic than the one of normality, and the reactions elicited are directly related to the fields of etiology, diagnosis, prognosis, and therapy. Imbalanced tensions, due to inharmonious environment, are a prolific source of osteopathic lesions, which, of course, involve the entire segment. When these abnormal tensions are maintained, pathological contracture rapidly supervenes owing to the cumulative effect. Truly, palpatory diagnosis when carried to completion reveals a physiological vista that is commanding and clinically reliable.

Nothing is more important than to know whether the contracture is physiological or pathological. Then one should have a working knowledge that is able to detect the uneven resistance of deep muscular fibers, showing that fibrous involvement from excessive tension, edema, diapedesis, etc., has taken place. These of course are to be differentiated from the smooth, even but excessive contractions of the upper layers, covering several segments, owing to their widespread innervation, indicative of visceral reflexes. The visceral reflex may be, commonly is, superimposed on the same segment, presenting the two sets of muscular phenomena at the same time. Then it is not rare to find also a tonic type, with doughy, or leath-

ery feel, complicating both of the above. These are illustrative of essential details that can be determined by careful palpatory diagnosis.

Perhaps a more striking illustration is the diagnosing of an edematous or even sclerosed disc. In certain instances it requires considerable ability to differentiate by palpation a deep-seated resistant fascia, due to hemorrhagic areas, from bony displacement. But in certain cases a really difficult problem to elucidate is to determine the component forces acting on an immobilized segment; remembering that pathological information is obligatory, for pathology characterizes many aspects of the lesion; in fact, the lesion is pathology.

The information to be obtained by palpatory diagnosis is practically unlimited, ranging from muscular tones and various physiological reactions to the mechanical arrangement of structure, and from local tissue consistency to the configuration and equilibrium of the entire organism.

Of all the tactual sensing, the one which requires the finest discriminatory ability, is the actual vital response or reaction of the tissues and whole body, wherein is expressed the status of the recuperative properties. This gives invaluable clues to prognosis, progress of improvement, and the efficiency of therapy. It reflects the sum total of the "fighting" qualities, the "come-back," of the organism, which can frequently be sensed before the patient is cognizant of the impending change. This is part of the clinical sense to be attained only by considerable experience. It is a sort of a finished product of tactual sensing, combining all factors which enter into the art of osteopathic palpation* and technique.

CARL P. MCCORMICK.

*Recent articles in this Journal pertaining to this highly important subject: Burns, *Palpation and Palpation*, Nov., 1927; McCormick, *The Tactual Diagnosis Series*, September, 1928; *Palpation: Principles and Practice*, September, 1928; *Palpation: Principles and Practice*, October, 1928.