Role of autonomic nerves in the thinking of the osteopathic medical profession

The function and influence of the autonomic nervous system on health and disease has been a major concern of the osteopathic profession from its beginning. Andrew Taylor Still, MD, DO, realized the power of musculoskeletal manipulation to influence visceral function. Indeed, he seemed to make no real distinction between musculoskeletal and visceral systems, so great was his belief that the body functioned as a unitary whole. In general, medical theory moved away from the concept of body unity during the 1900s as the necessity of reductionism gained sway in understanding various aspects of function. Indeed, the extremely important and tight links between the somatic structures and the visceral organs represented by the viscerosomatic and somatovisceral reflexes were not given much attention until the last 30 years of the 20th century. The power of the autonomic nervous system to influence every aspect of body function is now being more generally recognized in medicine and physiology.

The articles reprinted here give two views of the relationship of manipulation to autonomic function and the role of the autonomic nerves in osteopathic thinking. The first article, written by George W. Northup, DO (AOA Editor in Chief, 1961–1987) and published in 1945, provides a unique view of how the osteopathic physician should view the function of the autonomic nerves. He also presents very interesting comments on the problems to be faced by osteopathic physicians with the end of World War II. He makes the point in the first paragraph that the patient commonly viewed as "neurotic" should instead be viewed from the perspective of autonomic imbalance. This view was well ahead of its time and showed a very sophisticated view of the role of the autonomic nervous system in both mental and physical balance. He stated that no osteopathic diagnosis and treatment should overlook the autonomic nervous system, even to the point that at times, treatment should be guided by visceral symptoms to treat regions with somatic dysfunctions so small as to escape detection.

The second article, by D. D. Waitley, DO, was published in 1948. He makes the point that every tissue of the body is innervated by the autonomic system. This is a view that was lost in the ensuing years. (See diagrams of autonomic innervation by Frank H. Netter, MD,[1] still current today.) His comments on visceral pain, trophic function, and the importance of sympathetic control of blood flow are both interesting and surprisingly accurate for the time.

These two articles provide insights into the thinking of the profession in its mid-term about the importance of manipulation in regulating total body function. Too often today, the emphasis of the profession is on the treatment of the musculoskeletal system, without thought or emphasis on effects on visceral function. Manipulation is not a simple adjustment of the bones and joints. It is a complex structural and functional alteration; however, only if the operator knows about and uses the knowledge of the integrative function of the autonomic system is it a real "osteopathic" treatment. To paraphrase a well-known commercial: Manipulation is not just for the musculoskeletal system.

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Reference

1. Netter FH: *Atlas of Human Anatomy,* 2nd ed. East Hanover, NJ: Novartis Medical Education; 1997.