The evidence of osteopathic research

During the 1920s and '30s I took possession of several volumes describing the osteopathic research work of Dr Louisa Burns and her associates, which began in about 1902 and culminated, in 1948, with the publication of Dr Burns's last magnificent work *The Pathogenesis of Visceral Disease following Vertebral Lesions*, all of which I briefly described in my Littlejohn Memorial Lecture *The Expanding Concept of Osteopathy*. This massive work by Dr Burns and her colleagues clearly confirmed that visceral pathology follows the creation of experimental spinal lesions and the development of lesion pathology in animals, and strengthened the belief held by osteopathic practitioners, that visceral pathology can similarly follow spinal lesion formation in the human, which can frequently be reversed by osteopathic treatment of the lesioned area.

The next great advance in the development of my own concept of osteopathy took place as a result of my study of the details of the research work conducted by J.S. Denslow DO, and Irvin M. Korr PhD, at the Kirksville College of Osteopathy and Surgery in the 1940s. This invaluable pioneer work was brilliantly presented, and the implications discussed, by Korr in two papers *The Neural Basis of the Osteopathic Lesion* and *The Emerging Concept of the Osteopathic Lesion*. In my judgement these two papers were the most significant contributions that had been made to osteopathic principles at that time, and both, together with several other very valuable relevant articles, were included in the 1953 yearbook of the Academy of Applied Osteopathy (now the American Academy of Osteopathy). In these papers the concept of hyperirritability or facilitation of sensory, motor and sympathetic nerve cells was introduced, and the subject was considerably
elaborated in a Symposium on the Functional Implications of Segmental Facilitation presented by the department of physiology of the Kirksville College, and published in the 1960 AAO yearbook.

This research powerfully presents the concept of the role of the nervous system in the development of all disease processes, and should, I submit, be studied deeply by every osteopath. Such study and discussion should strengthen every practitioner’s conviction, not only that osteopathy can be effective in a wide variety of cases, but that in a great number of cases, a complete recovery will not be secured unless the segmental facilitation is successfully dealt with.

In 1961 Dr Denslow and Dr Korr became programme directors of a vascular neurological clinical research centre at the Kirksville College of Osteopathy and Surgery and the Kirksville Osteopathic Hospital, which was set up to study the relationships between the somatic tissues of the body and internal organs as these relationships are transmitted and influenced by the circulatory and nervous systems. This centre thus facilitated the continuation of the research undertaken by Dr Denslow and Dr Korr since the 1940s into the biological basis for osteopathic practice.

Medical corroboration

In addition to these two streams of experience, one from osteopathic practice, and the other from osteopathic research, there has also been presented a mass of evidence from research carried out by medical workers which very cogently supports the hypotheses which have arisen from the osteopathic research.

For example, in 1935 there was published an English edition of a book entitled A Basis for the Theory of Medicine, by a Russian, A.D. Speransky, director of the department of patho-physiology of the All-Union Institute of Experimental Medicine. In his preface the author stated that for a number of years he and his collaborators had been engaged in research on the participation of the nervous system in the genesis of various pathological processes. The following excellent summary of the principal conclusions emerging from this work was given by Korr in his paper The Emerging Concept of the Osteopathic
Lesion:
1. The nervous system not only participates in every disease but plays a dominant role in organising the pathological processes and their various manifestations.

2. Sustained irritation, inflammation or pathology of muscles, skin, bone, viscera or nervous structures initiates processes in the nervous system which may lead to certain functional and organic changes designated as ‘neuro-dystrophy’. Once initiated, the processes in the nervous system do not require the continued action of the irritant, and the neuro-dystrophy may persist long after the primary pathology has healed.

3. The neuro-dystrophy expresses itself through pathological and trophic changes in the various organs and tissues, first usually in the segments related to the primary pathology, and later in other segments. The entire body may thus be affected.

4. The nature of the process, and its final expression, are independent of the nature of the irritation chemical, physical or biological. The biological agents - the toxins, bacteria, viruses etc., act fundamentally in the same way as the chemical and physical irritants; they merely initiate the process, which then becomes independent of the primary pathology.

5. This role of the nervous system appears to be based upon much slower processes than nerve impulses trophic/processes. (Speransky emphasised repeatedly that his approach is distinguished by its different utilisation of the time factor). These trophic functions of the nervous system may well have their basis in the movements of substances along the axon (as well as impulses), as indicated by the observations of Weiss and Schmitt.

6. As a result of the primary lesion, lasting and microscopically demonstrable effects on the nervous system may be produced which may remain latent for long periods of time. The signs of the original irritation may long have disappeared before the first signs of the disease appear.
7. The effect of a given irritation, that is, the disease pattern it evokes, if any, depends largely on the condition of the 'substratum', the patient and his nervous system, rather than upon the irritation itself. The 'substratum' varies from individual to individual, and within the individual from time to time according to circumstances, environmental influences etc. The disease - and the therapy - must be considered in the context of the patient as a whole.

8. These concepts are today providing the basis for therapy. Attention is focused, not on the offending organism, irritant or primary lesion but rather on the nervous system, and more specifically on those parts (e.g., spinal segments) which in each case organise the disease process. In essence, the object of therapy is to alter the balance of nervous factors in such a manner as to provide optimal circumstances for the operation of the normal reparative and defensive processes of the body.