

### **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

“Osteopathy Principles & Practices” Volume 2. by Willis Haycock regarding early research including A.D. Speransky

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.