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The Spine, the Nervous System, and the Cardiovascular System

Recent studies, carried out by chiropractic researchers from different parts of the world, have focused on exploring the relationship between the spine, the nervous system, and the cardiovascular system.

Research led by Bhuta Kaushal, a 1993 graduate of R.M.I.T. University used different nerve tracer dyes and Laser Microscopy to explore the connections between the heart and the spine of rats.

They found that nerves from the joints in the upper back (thoracic region) go to the same part of the spinal cord as nerves from the heart.

The authors conclude that their research may help explain some of the clinical observations related to spinal and chest pain. Furthermore, the authors reveal that it is now possible to perform studies that explore the effects of spinal problems on heart function.

The second study, by chiropractic researchers from the United Kingdom investigated the effects of chiropractic adjustments on blood pressure.

Ninety four male subjects with normal blood pressure were assigned to one of 3 groups. Those assigned to group number one received a chiropractic adjustment. Those assigned to group number 2 received 1 minute of gentle electrical stimulation (TENS) to the upper back area. Those in Group 3 relaxed lying face down for 1 minute without receiving any intervention (this group is called the control group).

It was reported that the group who received the chiropractic adjustment showed a statistically significant decrease in blood pressure when compared to the other two groups.

The authors concluded, "The results of the present study suggest that blood pressure, which is mediated through the autonomic nervous system, can be directly influenced by chiropractic adjustment of the upper thoracic spine."

References:

Kaushal B, Hayek R, Ali S, Holland R. Visualization of the convergence pattern of the sensory afferents from T1-4 facet joints and the pericardium in the rat using confocal microscopy and the neuronal tracers DiI and DiO - a poster presentation. Eur J Chiropr 2002;49:147.

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