

## Update 81

### Improvement in Hearing after Chiropractic Care: A Case Series

#### Background

The first chiropractic adjustment given in 1895 was reported to have cured deafness. A number of case studies have subsequently described improvement in the hearing of a patient during a course of chiropractic adjustments (1-3), or SMT as delivered by other providers (4-6).

Importantly, hearing impairment is associated with important adverse effects on the quality of life of elderly individuals, and these effects are perceived as severe handicaps even by individuals with only mild to moderate degrees of hearing loss (7,8).

A recently published case series (9) described the effects of a single, initial chiropractic visit on the central nervous system by documenting clinical changes of audiometry in patients after chiropractic care.

#### Case presentation

Fifteen patients are described (9 male, 6 female) with a mean age of 54.3 (range 34-71). A Welch Allyn AudioScope 3 was used to screen frequencies of 1000, 2000, 4000 and 500 Hz respectively at three standard decibel levels 20 decibels (dB), 25dB and 40dB, respectively, before and immediately after the first chiropractic intervention. Several criteria were used to determine hearing impairment. Ventry & Weinstein criteria of missing one or more tones in either ear at 40dB and Speech frequency criteria of missing one or more tones in either ear at 25dB.

All patients were classified as hearing impaired though greater on the right. At 40dB using the Ventry & Weinstein criteria, 6 had hearing restored, 7 improved and 2 had no change. At 25dB using the Speech-frequency criteria, none were restored, 11 improved, 4 had no change and 3 missed a tone.

The author concluded,

“A percentage of patients presenting to the chiropractor have a mild to moderate hearing loss, most notably in the right ear. The clinical progress documented in this report suggests that manipulation delivered to the neuromusculoskeletal system may create central plastic changes in the auditory system.”

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