Case Study

Resolution of Chronic Dysphagia in a 73 Year Old Female Receiving Chiropractic Care: A Case Report

Abstract

Objective: To describe the care of a 73 year old female with a 20 year history of dysphagia which resolved while she was receiving chiropractic care.

Clinical Features: A 73 year old female was pain free at the time of presentation but she reported a 20 year history of chronic difficulty in swallowing with a feeling of choking on food. Multiple levels of vertebral subluxations were observed, otherwise her physical examination was unremarkable.

Interventions and Outcomes: The patient was initially scheduled for three chiropractic visits per week for a period of four weeks. The patient noted that after her first adjustment visit her chronic dysphagia resolved. A full progress evaluation was performed after 12 visits to determine further clinical changes. Her dysphagia remained in remission and she was now able to eat a normal diet without a feeling of choking on her food.

Conclusion: This is the first case study to report complete resolution of chronic dysphagia in an older patient that is temporally associated with the provision of chiropractic care.

Key Words: Dysphagia, swallowing disorder, chiropractic, vertebral subluxation, adjustment, spinal manipulation

Introduction

Swallowing is a coordinated operation of the mouth, pharynx, and esophagus. Dysphagia, literally meaning “difficulty swallowing”, may refer to either a patient’s awareness of the impaired transit of swallowed contents, or as an umbrella term relating to all aspects of difficulties with swallowing. Other common experiences associated with dysphagia include coughing or choking during eating, difficulty, discomfort, or pain when swallowing, and a sensation of food sticking in the throat or chest.

It affects millions of individuals worldwide, with an estimated 1 out of 17 people suffering from a swallowing disorder. It is a common problem amongst older people, with Khan et. al. describing an incidence of swallowing disorders as high as 50% in nursing home residents, whilst Tews and Robinson reported the incidence to be 75%.

Disorders of swallowing may result from problems with neural control, muscular coordination, inflammation, and most seriously neoplasia. When dysphagia presents in older adults as a new symptom it is important to investigate thoroughly, as it is the most common presenting symptom of neoplasm of the esophagus.

A wide range of clinical specialties are involved in the evaluation and management of swallowing disorders and as a result it is often difficult to determine which specialty should be involved in the care of a patient. At the time of this writing we could find no literature describing the effects of chiropractic care on dysphagia. The purpose of this case study was to provide foundational research in this field by reporting on improvements in chronic dysphagia in an older patient who was receiving chiropractic care.
Case Study

History

A 73 year old female presented for care at a chiropractic practice in Auckland, New Zealand as a part of her participation in a clinical trial that investigated the effects of chiropractic care on sensorimotor function in older adults. A full history of the patient was undertaken. The patient reported that she had no presenting complaint and her motivation to seek care was simply to participate in a clinical trial.

Her history revealed a hysterectomy in 1976, and more recently a chronic mild nagging cough that had persisted for the past two years. The patient had recently seen her medical doctor regarding this matter but no pathology was discovered and her medical doctor was not concerned about the cough.

The patient also reported that for the preceding 20 years she had experienced dysphagia in the form of feeling that she was choking when swallowing food and that it would stick in her throat. To avoid this feeling she would cut her food up into very small pieces and she ate a diet that was relatively soft and easy for her to swallow.

Examination

Examination comprised of an evaluation of the patient’s history, neurological examination, orthopedic tests of the spine, spinal assessment, thermography and static electromyography. A full set of spinal x-rays was taken to evaluate for spinal degeneration, postural alignment, chiropractic analysis and to rule out any pathology that would prevent her from receiving chiropractic care. A chiropractic examination revealed vertebral subluxations at the levels of C1, C2, C7, T4, T5, L5 and the sacrum and ilium. Subluxation listings were established based on radiographic misalignment, muscular tension, edema, and motion dysfunction.

Interventions

The patient began care at a frequency of 3 visits per week for 4 weeks. Chiropractic adjustments were made mainly to subluxations of the right ilium, right sacrum, and 2nd cervical vertebrae. Adjustments were made over the next 12 visits, with a progress evaluation completed on visit number 8. Techniques used included instrument and table assisted adjustments and high velocity low amplitude manual adjustments.

Outcomes

The patient returned for her second visit and expressed to the chiropractor that the day following her first adjustment she had been able to swallow and eat food normally again without having to cut food into ‘tiny pieces’.

At the progress evaluation completed 12 visits later, the patient stated that she had experienced an overall improvement in her health, with increased energy, breathing, motivation, and most noticeably she was no longer choking on her food. The patient decided to continue chiropractic care but the frequency of care was decreased to 2 visits per week.

A further progress examination was performed 20 visits later and it was noted that she was still asymptomatic in regards to her ‘dysphagia’ and that she could now ‘swallow much better’. Nine months later the patient decided to discontinue her care stating she was ‘feeling better’ and no longer required chiropractic care. A further follow up of the patient was undertaken a year later and she reported that no relapse in her dysphagia had occurred.

Discussion

This case study describes the complete resolution in chronic dysphagia in a 73 year old female immediately after her first chiropractic adjustment. The chronic dysphagia had been medically diagnosed 20 years prior and had been continuous in nature since diagnosis. This is the first time a case like this has been reported in the literature.

It is unclear why such a rapid, marked improvement in the patient’s dysphagia occurred following her first adjustment. It is possible that the improvement was related to biomechanical or neurological changes that occurred following the first adjustment visit. The aim of chiropractic care is to correct vertebral subluxations and in so doing improve the function of the spine and nervous system.

The act of swallowing involves both sensory and motor input. Sensory stimuli provides information in regard to bolus location and aspiration prevention, while neuro-motor function assists in pressure formation required to move the bolus during all phases of swallowing. Sensory and motor deficits can therefore lead to many aspects of dysphagia. Chiropractic care has been shown to improve sensorimotor function in older adults. 7

If chiropractic care resulted in an improvement in sensorimotor function in this patient it may explain why an improvement in swallowing was reported. Incidentally most of the measures of sensorimotor function recorded as a part of the clinical trial this patient was involved in improved while she was receiving chiropractic care. These included ankle joint position sense error, a broad measure of sensorimotor function (choice stepping reaction time) and multisensory processing (sound-induced flash illusion).

She also reported a significant improvement in the physical component of her quality of life. This adds some support to an improvement in neurological sensorimotor function as a potential mechanism of action associated with the observed improvement.

As with all case studies natural progression, placebo effects or other confounding variables cannot be ruled out. The diagnosis and improvement in this case was also subjective. However, when the timing and the dramatic nature of the reported improvement in this case are considered it appears that the provision of chiropractic care may have resulted in the improvements in dysphagia that were reported. If similar case studies can be documented further research will be required to better understand how chiropractic care may be associated with improvements in dysphagia.
**Conclusion**

This case study reports the resolution of dysphagia in a 73 year old female following a single chiropractic visit. This is the first case study to document findings like these. Further research is required to better understand potential mechanisms of action associated with this case and whether chiropractors may have a role to play in caring for other individuals with dysphagia.

**References**

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