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CLINICAL EVIDENCE

Rapid Resolution of Craniocervical Syndrome using Sacro-Occipital Technique: A case report describing the resolution of persistent Otalgia, Cervicalgia, Cephalgia, Dysphagia, Hypoacusis, and Upper Limb paresis using Chiropractic care

Max P Bento

Narrative: A 28-year-old male presented to a chiropractor with a two-year history of worsening fullness and pain in the right ear, weakness in the left arm, and diffuse neck pain. The patient had been under the care of both GP and ENT departments but with no notable diagnosis, no treatment plan, and no symptomatic improvement.

Upon questioning, the patient also reported attacks of head pain as well as difficulty swallowing. A clinical and radiographic examination was made of the patient, and they were diagnosed with craniocervical syndrome.

A care plan of four appointments at one- and two-week intervals was made, and subjective reports were collected at each appointment. By the fourth appointment, the patient reported total resolution of the otologic symptoms, the dysphagia, and the left arm paresis, as well as partial resolution of the cervical pain.

Indexing Terms: Chiropractic; Sacro-Occipital Technique (SOT); Otalgia; Cervicalgia; Cephalgia; Dysphagia; Hypoacusis; Upper Limb paresis.

Introduction

A 28-year-old male presented to a chiropractor with a two-year history of worsening fullness and pain in the right ear, a sensation of left arm weakness, and diffuse neck pain. The patient had been under the investigation and care of both GP and ENT departments yet with no resolution in this time.

'... By week 5 the patient reported no arm symptoms, no ear symptoms, no throat symptoms, less neck pain but still intermittently present, no head pain. ...'

To the date of their initial presentation to the Chiropractor, the patient had been medically cleared of middle and inner ear pathology by MRI, and treated with antibiotics.

The patient did not recall an exact mode of onset for the symptoms but did recall significant head trauma as a child (skull fracture and contusion) as well as recent significant worsening of the symptoms following a massage whilst on holiday, which then persisted. Upon questioning, the patient also reported two other distinct neurological phenomena which they had been experiencing over the last two years:

- Frequent attacks of difficulty swallowing.
- Intense occipital pain upon exertion, such as with running.

Clinical diagnosis

Due to the nature of the complaint, a thorough neuro-orthopaedic examination was made, and a summary of the significant findings are given below:

- Generalised weakness and difficulty with fine motor control in the left upper limb. No distinct myotomal deficit was found.
- Single-leg standing-balance deficit bilaterally. The patient struggled to maintain balance whilst on one leg, and this was present and notable bilaterally.
- Reduced Straight Leg Raise at 45° bilaterally.
- Reduced tongue power to the right side.
- Hyperesthesia over the right side of the face and the right side of the neck. The patient was intolerant to light touch in these areas, particularly to light brushing.
- Initiation of a substantial coughing reflex by palpation of the right mastoid fossa.

Chiropractic and spinographic examination

A chiropractic analysis was made using standardised testing and procedures from the Sacro-Occipital Technique (SOT) as well as a straightforward craniopathic examination. The SOT analysis revealed the patient to be residing as a Category 3 with little complication. However, the craniopathic examination found a notable EX listing of the right temporal bone as well as obvious restrictions within the upper cervical spine.

Radiographs were taken of the patient's upper cervical spine, and the subsequent spinographic examination revealed a notable PRI listing of the Axis (C2).

An important consideration at this stage was the conflict of a primary upper cervical, or cranial, subluxation in the face of a Category 3 presentation. Whilst SOT traditionally carries minimal provision for this sort of presentation, the SOT-based works by Dr Jonathan Howat and Dr Donald Francis describe and develop upon these presentations in detail. Since the symptomatology, case history, and work-up fit the post-traumatic cranial-forward Category 3 these chiropractors describe, the patient was categorised and managed as such.

Treatment and outcomes

Week 1:

Procedure: AIR side-lying toggle-recoil and left to rest in sacral base positive.

Week 2:

Report: no change.

Procedure: C2-PRI, sacral base positive procedure, and left to rest on category 3 blocks.

Week 3:

Report: Improved arm symptoms and no issues with swallowing or coughing, but still some difficulty with head pain, neck pain, and the blocked sensation in the right ear. No mastoid fossa sensitivity and no coughing reflex.

Procedure: C2-PRI, sacral base neutral procedure, right temporal addressed.

Week 4:

Report: No arm symptoms, no ear symptoms, no throat symptoms, no head pain, yet still with neck pain.

Procedure: C2-PRI, sacral base neutral procedure, Basic-3 cranial procedure, left to rest on category 3 blocks.

Week 5:

Report: No arm symptoms, no ear symptoms, no throat symptoms, less neck pain but still intermittently present, no head pain.

Procedure: Category 1 blocking procedure, Line 2 Fibre 3 addressed.

Narrative discussion

Interest in upper cervical spine dysfunction and its role in local or distal symptomatology has persisted in both medical and non-medical professions for more than a century. Early references linking upper cervical dysfunction to nervous system interference are often credited to DD Palmer (1906), yet it should be mentioned that osteopaths of the time were also exploring similar ideas. (Littlejohn JM, 1903)

By the mid-20th Century, the Chiropractic focus was centred on B.J Palmer's 'Hole-in-One' technique. (Palmer BJ, 1934) And whilst the biomechanics of the upper cervical spine, as well as physiological changes resulting from their correction, were studied extensively (Palmer BJ, 1951), Chiropractors generally had no interest in classifying the phenomenon as a specific condition, nor in assigning it specific symptomatology.

By the 1960s, German ENT clinicians described the condition Zervikalsyndrom ('Cervical Syndrome'), linking upper cervical dysfunction with changes in vertebral artery flow, direct mechanical irritation of local nervous tissue, as well as concomitant sensory disturbance. (Bartsch et al., 1954) Symptoms included headache, facial pain, balance disturbance, tinnitus, arm weakness, and autonomic dysfunction, and this concept was later standardised in the ICD-10 as Cervicocranial Syndrome (World HealthOrganisation, 2019).

With a purported view to refinement and more straightforward clinical diagnosis, Cervicocranial Syndrome was removed in the ICD-11 and replaced with an array of somewhat adjacent diagnoses such as Cervicogenic Headache, Cervicogenic Dizziness, and Tension-type Headache. (World Health Organisation, 2026) The result is that much of the more fascinating cervicogenic neurosymptomatology has been left out of the picture, symptoms such as otalgia, tinnitus, dysautonomia, and facial pain.

The omission of anatomically plausible phenomena such as these poses a risk, and the risk is that patients presenting with these symptoms, particularly from a cervical origin, may not find resolution in conventional medical pathways.

The case presented in this report represents the population at risk.

Conclusion

The neuroanatomical plausibility for referred head, neck, and limb symptoms as a result of dysfunction at the upper neck has a long history of study across several healthcare professions. Even so, when it comes to clinical practise, there still exists little framework to diagnose and manage these cases. Chiropractors have been treating patients with symptoms referred from the upper cervical spine for over 100 years, yet cases like this demonstrate how patients may still end up misdiagnosed, mismanaged, and spend years with symptoms due to not consulting a chiropractor at the first instance.

This case report contributes to the body of evidence that supports the Chiropractic management of neurological phenomena arising from upper cervical spine dysfunction.

Max P Bento
MChiro, DC
Shaw Chiropractic Clinic, Swindon
Wiltshire
United Kingdom
maxpbento@gmail.com
https://www.shawchiropracticclinic.co.uk/

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Disclaimer

This case report has been prepared in full compliance with the General Chiropractic Council (GCC) UK's Code of Practice and Standard of Proficiency. Written informed consent was obtained from the patient's legal guardian for the documentation and publication of this case, ensuring adherence to all ethical and legal requirements. All personally identifiable information has been anonymised to maintain patient confidentiality following the Data Protection Act 2018 and the UK General Data Protection Regulation (UK GDPR). The purpose of this case report is to contribute to clinical knowledge and professional discourse within the chiropractic profession.

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