## CORTICAL INTEGRATIVE THERAPY EFFECTIVENESS IN THE TREATMENT OF VERTIGO/BALANCE ISSUES

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## **ABSTRACT**

Primary care physicians see a very high incidence of vertigo, dizziness, and balance issues resultant from a broad spectrum of etiologies from vestibular dysfunction, brain injury, neck trauma, metabolic diseases to autonomic dysfunction and psychological conditions. Because dizziness is by definition a subjective condition, self-report questionnaires such as the Dizziness Handicap Index (DHI) are commonly utilized in assessing the impact of vestibular dysfunction in patients. However, objective metrics like Computerized Dynamic Posturography (CDP) can be useful tools for the assessment of dizziness and the validation of diagnoses and treatment effectiveness. In this retrospective study of 50 patients charts, the effectiveness of Cortical Integrative Therapy (PedroCIT®) was evaluated using the DHI and CDP. In particular, the therapy outcome was investigated to determine if it was affected by a vertigo diagnosis, a vertigo comorbidity or by the simple presence of vertigo symptoms. The result of this investigation showed that PedroCIT® is indeed an effective treatment method for vertigo and dizziness: subjects demonstrated and reported improvement in their clinical outcomes, and both CDP and DHI metric in general reflected the significant improvement the subject experienced. For those subjects that still were in the worse categories according to the CDP and DHI metrics, the effect of treatment were potentially influenced by uncontrolled variables such as a change in medications, mental status, or concomitant worsening in the subject's comorbidities, amongst other unknown variables contributing to individual unsatisfying outcomes. Further studies involving larger number of subjects are needed to address these issues.

**Keywords:** Practice based clinical research, Cortical integrative therapy, Computerized dynamic posturography, Dizziness handicap index, Post-concussion, Migraine/headaches

## INTRODUCTION

Medically, dizziness is a general term used to describe a subjective sensation of disturbed spatial orientation and it can be categorized into four subtypes: disequilibrium, vertigo, presyncope/syncope, and dizziness resulting from psychological conditions [1]. It is distinct from the false sense of motion experienced by vertigo patients [2]. However, dizziness and vertigo are often used interchangeably by patients when describing their symptoms.

Dizziness can have vestibular or non-vestibular origin and presents with a diverse set of etiologies including, but not limited to, psychological, metabolic, or cardiac conditions, head trauma, low blood sugar, dehydration, low heart rate, medications, alcohol and illicit drugs [2-6]. Vestibular symptoms can be caused by structural, functional, and/or psychological disorders [7]. In particular, dizziness is thought to be linked to psychiatric illnesses such as anxiety, depression, phobic conditions, and panic disorders

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