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## Introduction

An 11-year-old male presents to a chiropractic neurology clinic with a chief complaint of absent seizures, occurring 15 to 30 times per day.

## Methods

Outstanding physical exam findings included a left anisocoria, as well as a sluggish direct light reflex. Additional notable findings included the absence of the vestibular ocular reflex (VOR) with horizontal, non-volitional head movements, finger-tap test ratings of two bilaterally, and a forced vital capacity (FVC) of 2.8 liters. Upon testing of videonystagmography (VNG), the patient was found to have a saccadic latency of 184 on the left and 190 on the right. A weeklong treatment was implemented to engage the frontal lobe, basal ganglia, cerebellum, and temporal lobe consisting of gyrostimulation with gaze fixation, interactive metronome, and neurosensory integrator with reaction time. Coupled motion cervical and standing rib manipulations were implemented to prime the nervous system upon each visit. The patient was also placed on a ketogenic diet complimenting his neurologic rehabilitation.



## Results

Following one week of treatment, the patient showed significant improvement. The patient now experiences 0 to 5 absent seizures per day, versus the initial 15 to 30 times per day. Additional physical findings that improved included the correction of the left anisocoria and brisk direct and indirect light reflexes, bilaterally. The patient regained his full VOR, including volitional and non-volitional head movements, as well as improving his FVC to 3.2 liters. Upon follow-up VNG testing, the patient improved his saccadic latency to 179 on the left, and 180 on the right.

## Conclusion

Absent seizures can make life challenging and potentially dangerous for anyone experiencing them. Results highlighted by this case provide evidence into the need for further research into the benefits of a ketogenic diet in conjunction with brain-based therapies for the treatment of absent seizures.