

## Non-Pharmacological Approach to the Improvement and Maintenance of the Convergence Parameter

**Authors :** Andreas Aceranti, Guido Bighiani, Francesca Crotto, Marco Colorato, Stefania Zaghi, Marino Zanetti, Simonetta Vernocchi

**Abstract :** The management of eye parameters such as convergence, accommodation, and miosis is very complex; in fact, both the neurovegetative system and the complex Oculocephalgia system come into play. We have found the effectiveness of the "highvelocity low amplitude" technique directed on C7-T1 (where the cilio-spinal nucleus of the budge is located) in improving the convergence parameter through the measurement of the point of maximum convergence. With this research, we set out to investigate whether the improvement obtained through the High Velocity Low Amplitude maneuver lasts over time, carrying out a pre-manipulation measurement, one immediately after manipulation and one month after manipulation. We took a population of 30 subjects with both refractive and non-refractive problems. Of the 30 patients tested, 27 gave a positive result after the High Velocity Low Amplitude maneuver, giving an improvement in the point of maximum convergence. After a month, we retested all 27 subjects: some further improved the result, others kept, and three subjects slightly lost the gain obtained. None of the re-tested patients returned to the point of maximum convergence starting pre-manipulation. This result opens the door to a multidisciplinary approach between ophthalmologists and osteopaths with the aim of addressing oculomotricity and convergence deficits that increasingly afflict our society due to the massive use of devices and for the conduct of life in closed and restricted environments.

**Keywords :** point of maximum convergence, HVLA, improvement in PPC, convergence

**Conference Title :** ICONA 2023 : International Conference on Ophthalmology Novel Approaches

**Conference Location :** Barcelona, Spain

**Conference Dates :** May 22-23, 2023