

## **Efficacy of Thrust on Basilar Spheno Synchronosis in Boxers With Ocular Convergence Deficit. Comparison of Thrust and Therapeutic Exercise: Pilot Experimental Randomized Controlled Trial Study**

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**Abstract :** The aim of this study was to demonstrate that manipulative treatment combined with therapeutic exercisetherapywas more effective than isolated therapeutic exercise in the short-term treatment of eye convergence disorders in boxers. A randomized controlled trial (RCT) pilot trial was performed at our physiotherapy practices. 30 adult subjects who practice the discipline of boxing were selected after an initial skimming defined by the Convergence Insufficiency Symptom Survey (CISS) test (results greater than or equal to 10) starting from the initial sample of 50 subjects; The 30 recruits were evaluated by an orthoptist using prisms to know the diopters of each eye and were divided into 2 groups (experimental group and control group). The members of the experimental group were subjected to manipulation of the lateral strain of sphenoid from the side contralateral to the eye that had fewer diopters and were subjected to a sequence of 3 ocular motor exercises immediately after manipulation. The control group, on the other hand, received only ocular motor treatment. A secondary outcome was also drawn up that demonstrated how changes in ocular motricity also affected cervical rotation. Analysis of the data showed that the experimental treatment was in the short term superior to the control group to astatistically significant extent both in terms of the prismatic delta of the right eye (0 OT median without manipulation and 10 OT median with manipulation) and that of the left eye (0 OT median without manipulation and 5 OT median with manipulation). Cervical rotation values also showed better values in the experimental group with a median of 4° in the right rotation without manipulation and 6° with thrust; the left rotation presented a median of 2° without manipulation and 7° with thrust. From the results that emerged, the treatment was effective. It would be desirable to increase the sample number and set up a timeline to see if the net improvements obtained in the short term will also be maintained in the medium to long term.

**Keywords :** boxing, basilar spheno synchronosis, ocular convergence deficit, osteopathic treatment

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