UNIVERSIDAD NACIONAL AUTÓNOMA DE MÉXICO

Master's and Doctorate Program in Science

Medical, Dental and Health

Statistical data analysis

Randomized clinical trial of electrostimulation therapies with an electromyographic multifractal analysis device for patients with temporomandibular disorders

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Statistical data analysis plan

o A descriptive analysis of the main clinical characteristics of the population studied will be carried out in the case of continuous variables, the mean and standard deviation or the median and its interquartile range will be reported according to its distribution normal and antagonistic as n and percentage (%).

o The muscle effect of electrostimulation therapies within and between groups over time (before and during the 6 weeks of treatment), will be calculated using two-way ANOVA for repeated measures. Furthermore, the significant effect size of the comparison is calculated according to Cohen's effects (small (0.20), moderate (0.50) and large (0.80)).

o To identify the changes in the electromyographic activity of the multifractal analysis (Hurts Index and RMS) recorded by time of the right and left masseter muscles of all subjects, since each subject will be evaluated in 6 instances weekly, multilevel models will be adjusted (56) to describe the effect of the passage of time (T0 = Baseline, T1 = 7 days, T2 = 14 days, T3 = 21 days, T4 = 28 days, T5 = 35 days,

T6 = 42 days) of splint use and electrostimulation therapy and the effect of different explanatory variables on this change as on the initial value.

o All statistical calculations will be carried out in Stata 14 software (StataCorp., 2015).