**Medina LF (2010): Electrophonatory Stimulation of laryngeal paresis with VocaSTIM**

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**Abstract**

**Introduction:**

Phonatory electrostimulation and simultaneous vocal exercise are strategies recently used with the purpose of favouring the re-establishment of the contractile and metabolic properties of a motor unit and the recovery of vocal-articulatory function.

**Objective:**

The aim is to expose the experience of the Santa Paula Clinic of the Santa Paula University regarding the evolution post treatment with the VocaSTIM, in 42 subjects with laryngeal paresis.

**Experimental design:**

The present investigation documents comparative data on 42 subjects (n=42) diagnosed with laryngeal paresis. It aims to describe the evolution of a before and after phonatory electrostimulation with VocaSTIM. Its design fits into a comparative-descriptive type of study.

**Subjects:**

Forty-two subjects (n=42) with a diagnosis of laryngeal paresis freely participated under the modality of informed consent and voluntary attitude to be involved in the study. Subjects without a confirmed diagnosis of laryngeal paresis were excluded.

**Intervention:**

Electrodiagnostic tests were performed by I/T curves to establish Accommodation Quotients. Subjects were recorded while pronouncing the vowels (a, e, i, o, u) before and after each treatment. The geometric shape of the electrical impulse to be applied was determined and the data obtained after 6 weeks of treatment (2 treatments per week) were compared.

**Measurements:**

Electrodiagnostic templates of I/T curves, voice spectrograms and electrotherapeutic records of evolution and parameters were used to establish comparisons.

**Results:**

Significant differences between the initial assessment of the voice recording and its final comparison were observed in 73.78% of the participants. However, 27.18% showed no difference.

**Conclusions:**

The VocaSTIM can produce in most laryngeal paresis a satisfactory functional response but requires a procedural protocol for the orderly use of the VocaSTIM.

**Key words:**

Paralysis, Vocal cord, Electrostimulation, Accommodation Quotient, VocaSTIM.