

Investigating the Efficacy of Paroxetine in Developmental Stuttering

Pierpaolo Busan, MSc,* Piero Paolo Battaglini, MD,* Massimo Borelli, MSc,* Pasquale Evaristo, MD,† Fabrizio Monti, MD,‡ and Giovanna Pelamatti, PhD§

Objectives: Paroxetine has been reported to be useful for management of stuttering symptoms, but only a few reports have examined its effects. We have investigated the efficacy of paroxetine in a randomized, placebo-controlled study.

Methods: Five stuttering subjects received paroxetine at 20 mg once daily at night for 12 weeks, and 5 received placebo. The percentages of stuttered words and stuttering-associated movements during speech were measured at baseline and after 6 and 12 weeks of treatment. Moreover, left primary motor cortex excitability was measured using transcranial magnetic stimulation. Specifically, resting and active motor thresholds and the cortical silent period (CSP) were obtained at the same periods in both groups.

Results: Paroxetine did not affect the percentage of stuttered words between groups. Stuttering-associated movements, however, during speech in facial muscular districts were significantly reduced in subjects treated with paroxetine. Finally, paroxetine administration shortened the CSP with no effect on motor thresholds.

Conclusion: Paroxetine may be useful in qualitative management of stuttering symptoms and may act on the stuttering brain by diminution of intracortical inhibition, as revealed by the shortening of the CSP after paroxetine administration.

Key Words: associated movements, paroxetine, silent period, stuttering, transcranial magnetic stimulation

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Developmental stuttering is characterized by involuntary and involuntary syllable repetition and prolongations of sounds and words, in addition to associated movements and facial expressions.

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From the *BRAIN Center of Neuroscience, Department of Life Sciences, University of Trieste, †Mental Health Department, Azienda per i Servizi Sanitari n.1, and Departments of ‡Clinical and Experimental Medicine and Clinical and Experimental Neuroscience, and §Psychology, University of Trieste, Italy.

Address correspondence and reprint requests to Pierpaolo Busan, MSc, Department of Life Sciences, University of Trieste, Via Fleming, 22, 34127 Trieste, Italy; E-mail: busan@psico.univ.trieste.it
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