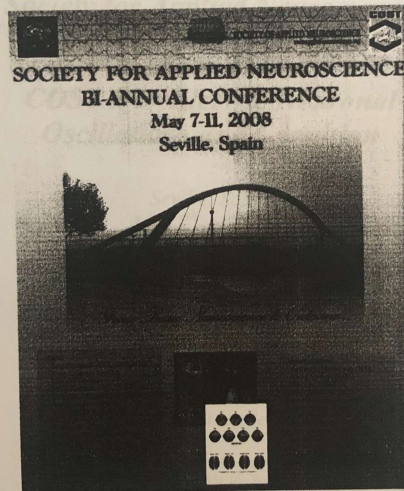


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POSTERS

**EDR biofeedback in the treatment of children with anxiety disorders**

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Childhood-onset anxiety disorders, characterized with excessive, irrational fear and dread, are among the most frequent conditions in children. Epidemiological data estimate a prevalence of 10% in this population. They are also an important risk factor for psychological disturbances in adulthood and require adequate treatment. To be effective, treatment should be combination of cognitive-behavioral and family psychotherapy as well as pharmacotherapy. The central, empirically validated psychotherapeutic interventions include psychoeducation, cognitive treatment of dysfunctional thoughts and systematic desensitization. Anxious children tend to be over-aroused and they have increased activity of the sympathetic nervous system. Modern electronic technology allows patients to learn relaxation more rapidly and efficiently by using biofeedback techniques. This study presents 50 children with anxiety disorders, mean age  $9.8 \pm 1.88$  from both genders. Each child was assessed with psychometric scales (GASC, CBCL) and MMPI for the parents. EDR biofeedback was used for assessment and treatment. QEEG recordings in eyes open and eyes closed condition were performed as well. Psychometric analysis showed moderate level of anxiety (GASC) with significant social withdrawal in girls and lack of communication with mild obsessive-compulsive manifestations in boys (CBCL). MMPI personality profile of the parents was in normal range. After 15 sessions with EDR biofeedback GASC values were in the normal range. Between the first and the last EDR session there is statistically significant difference ( $p < 0.01$ ) in achieving a higher level of relaxation. qEEG analysis showed significant increase of beta waves in frontal and central cortex. EDR biofeedback in combination with cognitive-behavioral and family psychotherapy seems to be an effective approach in solving anxiety disorders in children.