Abstract

The opioid hypothesis suggests that childhood autism may result from excessive brain opioid activity during neonatal period which may constitutionally inhibit social motivation, yielding autistic isolation and aloofness (Panksepp, 1979). This hypothesis has now received strong support and is currently based on three types of arguments: (1) similarity between autistic symptomatology and abnormal behaviors induced in young animals by injections of exogenous opioids, such as increasing social aloofness and decreasing social vocalization; (2) direct biochemical evidence of abnormalities of peripheral endogenous opioids being reported in autism and (3) therapeutic effects of the long lasting opioid receptor blocking agent naltrexone in autism. In this article, we give description of open and double-blind studies of naltrexone in autism. Naltrexone has been tested in several open studies. We performed an open trial with naltrexone in 2 autistic girls, displaying serious self-injurious behavior, reduced crying and a marked preference for salty and spicy foods, symptoms that could be related to a dysfunction of the opioid system. With dosages of 1 mg/kg/day, we observed an immediate reduction of hyperactivity, self-injurious behavior and aggressiveness, while attention improved. In addition, social behaviors, smiling, social seeking behaviors and play interactions increased (Leboyer, Bouvard et Dugas, 1988). Campbell et al. (1988) has also reported a tranquilizing and a stimulating effect in 6 out of 8 children with autism. We did confirm these preliminary results in a double-blind study performed on 4 children with autism. In a cross-over double-blind study, three dosages of naltrexone (0.5, 1 and 2 mg/kg/day) and placebo were compared. (ABSTRACT TRUNCATED AT 250 WORDS)
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