



The relevance of the oxidative stress status modifications in the possible therapeutical effects of oxytocin for most of the neuropsychiatric disorders

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Besides the very well known functions of oxytocin in parturition and lactation, lately there is an increased interest for understanding the possible effects of this peptide administration (mostly by using the intranasal route) in the patho-physiology of most neuropsychiatric disorders and especially those which exhibit a social dysfunction (e.g. autism, schizophrenia, depression, anxiety, frontotemporal dementia etc.). Also, most of these disorders have an important oxidative stress component, as our group previously demonstrated. Even more, the effects of oxytocin administration in the oxidative stress are not completely understood, with previous reports describing both antioxidant and prooxidant actions. In this way, we present here the current literature and two years of original studies from our lab regarding the possible relevance of oxytocin treatment in most of the neuropsychiatric disorders, for both animal models and human patients, as well as the relevance of the oxidative stress status in this context.

Also, main interactions between oxytocin, cortisol, HPA axis and some neuropsychiatric manifestations are presented (please see Figure 1 on the right) (Ciobica et al., 2016 – Acta Endocrinologica).



