PRELIMINARY COMMUNICATION

INTRAAMYGDALOID ADMINISTRATION OF BIBO 3304 INCREASES WATER INTAKE AND EXTENDS ANXIOLYTIC EFFECTS

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The present study was designed to evaluate the effects of BIBO 3304 in the Vogel's conflict drinking test and in the water intake test in non-deprived rats after injection of the drug into the basolateral nucleus of the amygdaloid complex. BIBO 3304 was given at the doses of 25, 100 and 200 pmol/0.5 µl/site. We investigated also the effect of 5-hydroxytryptophan (5-HTP), given intraperitoneally at a dose of 20 mg/kg, which was used as a positive control in the water intake test. Water consumption was measured 1, 2, 4, 6 and 24 h after drug administration. We found that water intake was increased both after 5-HTP and BIBO 3304 administration.

Key words: BIBO 3304, 5-HTP, amygdala, water intake

Neuropeptide Y (NPY) is a 36 amino acid peptide and it is one of the most widespread neuroactive peptides in the mammalian brain. It is concentrated mostly in the hypothalamus, brainstem, cortical areas, hippocampus and the amygdala. NPY can act at several different Y receptors (Y1–Y6), of which Y1 and Y2 are the most extensively characterized. Receptor Y6 has been cloned, but it is supposed that this receptor is inactive. It has been shown that NPY is involved in various functions, such as regulation of blood pressure, circadian rhythms, feeding, anxiety, memory processing and