P-2-5

Effect of pindolol on the neuroendocrine and temperature responses to flesinoxan

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Key words: Flesinoxan; Pindolol; 5-HT1A agonist; 5-HT1A antagonist; Neuroendocrine probe; Serotonin

In a previous placebo-controlled dose-response study (Ansseau et al., 1992), we demonstrated very significant responses of prolactin, ACTH, cortisol, GH, and temperature following the i.v. administration of flesinoxan 1 mg, a highly potent and selective 5-HT1A agonist (Shipper et al., 1991), in 12 healthy male volunteers. The tolerance of flesinoxan was excellent and associated with a pleasant feeling of relaxation and slight drowsiness without any GI side effects.

The objective of the present study was to characterize further the mechanisms of these flesinoxan-induced changes by using pindolol, a 5-HT1A antagonist. Six healthy male volunteers received at 2-week intervals, in double-blind and cross-over conditions, either: (1) pindolol + flesinoxan; (2) placebo + flesinoxan; (3) pindolol + placebo; (4) placebo + placebo. Pindolol 30 mg was administered orally 90 min before the i.v. injection of flesinoxan 1 mg over 10 min and prolactin, ACTH, cortisol, GH, and temperature were measured at times −30, 0, +15, 30, 60, 90, and 120 min. Statistical analysis used ANOVA with repeated measures and Wilcoxon test. Pindolol significantly antagonized the prolaction ($P<0.05$), ACTH ($P = 0.01$), GH ($P<0.01$), and temperature ($P<0.05$) responses to flesinoxan. These results show the role of 5-HT1A mechanisms in the prolactin, ACTH, GH, and temperature responses to flesinoxan. Therefore, they lend support to the flesinoxan test as a neuroendocrine assessment of serotonergic neurotransmission, which could be applied in several psychopathological conditions.

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P-2-6

Effect of ritanserin on the neuroendocrine and temperature responses to flesinoxan

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Key words: Flesinoxan; Ritanserin; 5-HT1A agonist; 5-HT2 antagonist; Neuroendocrine probe; Serotonin

In a previous placebo-controlled dose-response study (Ansseau et al., 1992), we demonstrated a very significant response in prolactin, ACTH, cortisol, GH, and temperature following the i.v. administration of flesinoxan 1 mg, a highly potent and selective 5-HT1A agonist (Shipper et al., 1991), in 12 healthy male volunteers. The tolerance of flesinoxan was excellent and associated with a pleasant feeling of relaxation and slight drowsiness without any GI side effects.

The objective of the present study was to characterize further the mechanisms of these flesinoxan-induced changes by using ritanserin, a 5-HT2 antagonist. Six healthy male volunteers received at 2-week intervals, in double-blind and cross-over