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Erratum

Erratum to: Cocaine sensitization prevents the hypolocomotor effects of high but not low doses of PD 128,907 [Eur. J. Pharmacol. 355 (1998) 19–22] [1]

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Abstract

In this study we examined the effects of the preferential dopamine D_3 receptor agonist *S*(+)-(4*aR*,10*bR*)-3,4,4*a*,10*b*-tetrahydro-4-propyl-2 *H*,5*H*-[1]benzopyrano-[4,3-*b*]-1,4-oxazin-9-ol (PD 128,907) on locomotion in mice sensitized to cocaine. In mice repeatedly treated with saline, PD 128,907 induced hypoactivity over a wide dose range (0.01–40 mg/kg); however, after repeated treatment with 40 mg/kg cocaine, higher doses of PD 128,907 (2.5–40 mg/kg) no longer induced hypoactivity whereas the effects of lower doses (0.01–0.16 mg/kg) were not altered. Because lower doses of PD 128,907 are thought to induce hypoactivity via activation of dopamine D_3 receptors, the present data suggest that, under conditions where cocaine induces marked sensitization to its locomotor effects, the sensitivity of these receptors is not altered. In contrast, because higher doses of PD 128,907 can activate dopamine D_2 receptors, it is conceivable that apparent cross-sensitization to its dopamine D_2 receptor agonist properties is responsible for the lack of hypolocomotor effects at high doses. Overall, the results indicate that altered dopamine D_3 receptor sensitivity does not play an important role in the expression of cocaine-induced sensitization.

Keywords: Sensitization; Reverse tolerance; Cocaine; PD 128,907; Locomotion; Hypolocomotion; Dopamine reuptake inhibitor; Dopamine; Dopamine D_3 receptor

In the above-mentioned article, one of the values on the ordinate of Fig. 1 was incorrect. The correct Fig. 1 is shown below.

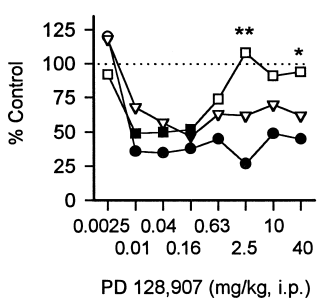

Fig. 1. Locomotor activity in mice measured during the first 10 min after administration of PD 128,907 in animals treated with saline (circles), 20 mg/kg cocaine (triangles) or 40 mg/kg cocaine (squares) for three consecutive days. Values represent mean ($n = 7$) beam breaks expressed as a percentage of the mean value of saline-treated controls within each repeated treatment (Table 1). Standard errors were omitted to improve clarity, but ranged from 5 to 32%; coefficients of variation generally did not exceed 25. Filled symbols denote values significantly different from 100% ($P < 0.05$, based on Dunnett's tests with one-tailed probability). $**P < 0.01$, $*P < 0.05$ vs. repeated saline treatment, based on Dunnett's tests with two-tailed probability.

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