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1. Introduction

C 4 . C 19 , ( ), A 21 A 15 .

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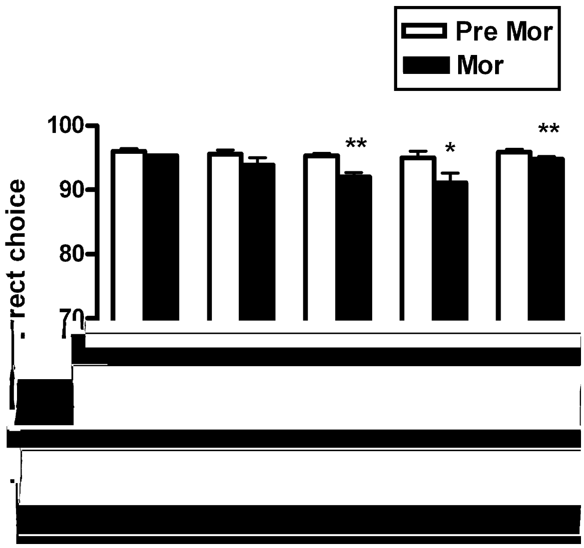

Fig. 1. [illegible] (**$P < 0.01$, *$P < 0.05$).

[illegible] 801 [illegible] 18 [illegible] 235959 [illegible] 1.

[illegible] 29.

[illegible] AC [illegible] B [illegible] AC [illegible]

30 [illegible] 30 [illegible]
[illegible]
30 [illegible] . A 30 [illegible]
[illegible] 0.05 [illegible]
[illegible] 93% [illegible]
2 5 [illegible]

2.5. Statistical analysis

[illegible] ([illegible]). [illegible]
[illegible] A A, [illegible]
A A [illegible]
[illegible] $P \leq 0.05$.

3. Results

3.1. Effects of co-administration of morphine (Mor) and scopolamine (Scop) on spatial working memory in rhesus monkeys

[illegible] ([illegible]
: $F(1,2) = 280.8$, $P = 0.004$, [illegible] : $F(5,10) = 39.5$, $P < 0.001$, [illegible] × [illegible] $F(5,10) = 43.7$, $P < 0.001$).
A [illegible] .2, [illegible] 0.01 [illegible] 0.02 [illegible]
[illegible] 0.02 [illegible]
[illegible] (0.01 [illegible]
[illegible] (0.01)+ (0.001)
[illegible] (0.001 [illegible] 0.01 [illegible]
(0.01)+ (0.01)
[illegible] 0.01 [illegible]
0.01 [illegible]
[illegible] (0.01 [illegible] [illegible] (0.01 [illegible]).
[illegible] (0.01 [illegible] [illegible]
(0.001 [illegible]).

3.2. Effects of co-administration of Mor and MK-801 on spatial working memory in rhesus monkeys

[illegible] ([illegible]
: $F(1,2) = 22.3$, $P = 0.04$, [illegible] : $F(11,22) = 25.3$, $P < 0.001$, [illegible] × [illegible] $F(11,22) = 17.8$, $P < 0.001$).
[illegible] . 3 [illegible] 801 (0.02 [illegible]
0.04 [illegible]
[illegible] 801 [illegible]
0.005 [illegible] 0.01 [illegible]

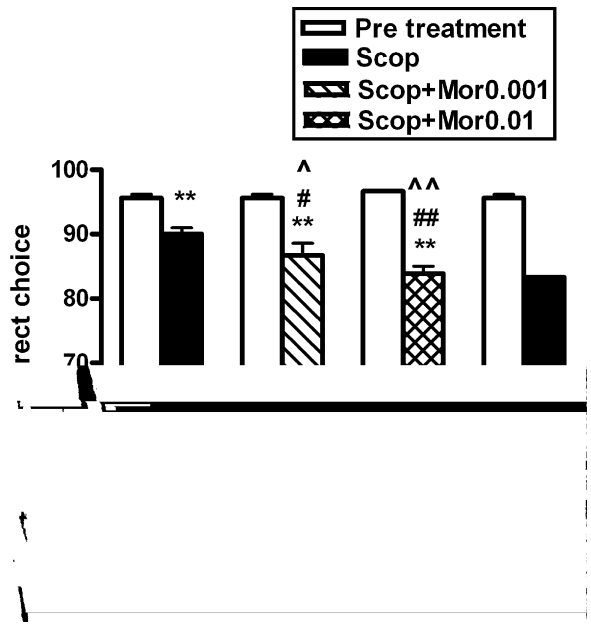

Fig. 2. [illegible] ( ) [illegible] + [illegible]
[illegible] (** $P < 0.01$). [illegible] ($^{\#\#}P < 0.01$, $^{\#}P < 0.05$) [illegible]
($P < 0.01$, $P < 0.05$). [illegible] 30 [illegible]
0.02 [illegible].

[illegible] 801 (0.02 [illegible]). A [illegible]
801 0.04 [illegible]
801 (0.04)+ (0.001)
801 0.04 [illegible]
801 (0.02)+ (0.001)
801 (0.02)+ (0.001) [illegible]
801 (0.02)+ (0.01) [illegible]
0.01 [illegible] 801 0.02 [illegible]
801 (0.04)+ (0.01) [illegible]

3.3. Effects of co-administration of Mor and propranolol (Pro) on spatial working memory in rhesus monkeys

[illegible] ([illegible]
[illegible] $F(1,4) = 36.5$, $P = 0.004$, [illegible] : $F(12,48) = 3.6$, $P = 0.001$, [illegible] × [illegible] $F(12,48) = 4.1$, $P < 0.001$).
[illegible] (0.01, 0.05 [illegible]
0.1 [illegible]
(0.005 [illegible] [illegible] (0.5 [illegible]). [illegible] (. 4).
[illegible]
[illegible]

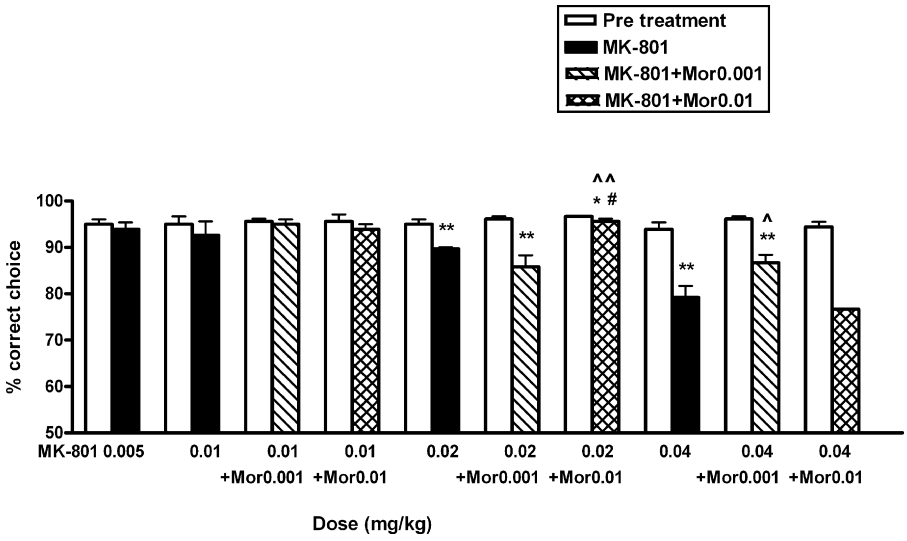

Fig. 3. 801 + 801 (**P < 0.01, *P < 0.05). (#P < 0.05) 801 (P < 0.01, P < 0.05).

(0.01, 0.05)+ (0.001) (0.005, 0.01)+ (0.01) (0.01, 0.05)+ (0.01) . A (0.05)+ (0.01)

4. Discussion

801 + 801/ + 801/

B AC 8 . A 27 . AC 13 . AC AC C 24 .

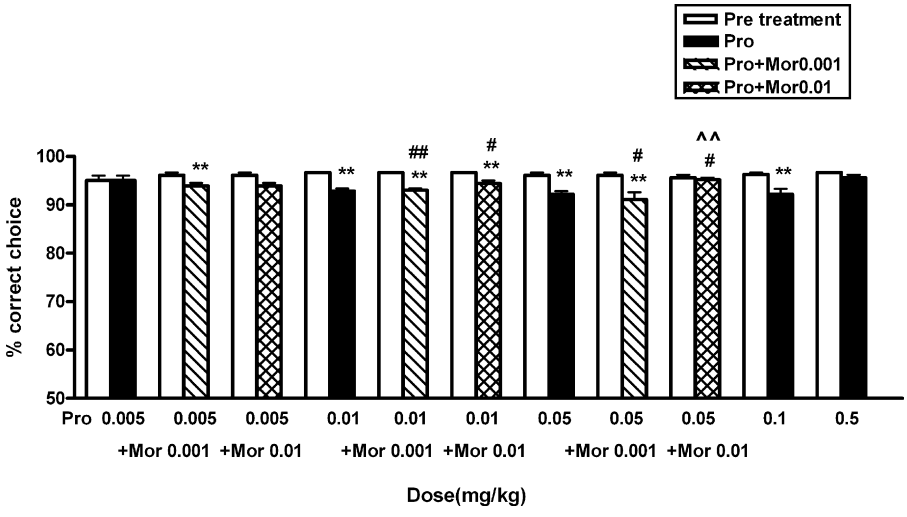

Fig. 4. (**P < 0.01). (0.01, 0.05)+ (0.001) (##P < 0.01, #P < 0.05). (0.01, 0.05)+ (0.01) (#P < 0.05). (0.05)+ (0.01) (P < 0.01).

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[10].
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C [12]. C,
[6].
[17].
A
(0.001)
[29]. C
(0.01) (0.05)
[2].
(C),
C
C
[9].
C
0.01
(0.05),
A

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973 (2011CB707800), C (31070963 31070965), C 2 23.

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7 A. & B 94

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