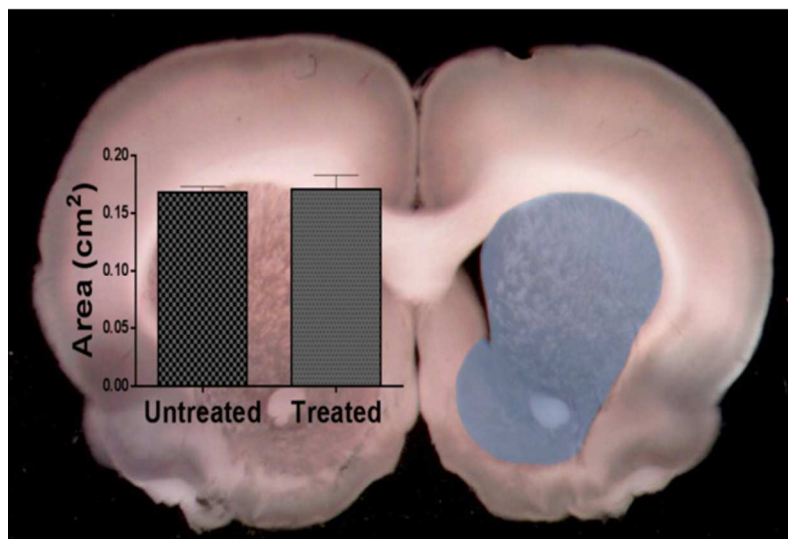


Supplementary Information



Supplementary Figure 1. Striatal area was unaffected in rats treated with carboplatin. (unpaired t-test, $p > 0.05$, $n = 6$ control rats and $n = 5$ rats treated with 20 mg/kg carboplatin)

Supplementary Table 1. 2-way ANOVA Table for $[DA]_{\max}$

Two-way ANOVA	Ordinary				
Alpha	0.05				
Source of Variation	% of total variation	P value	P value summary	Significant?	
Interaction	2.421	0.9409	ns	No	
Treatment	25.76	0.0004	***	Yes	
Region	4.025	0.424	ns	No	
ANOVA table	SS	DF	MS	F (DFn, DFd)	P value
Interaction	2.252	6	0.3754	F (6, 48) = 0.2857	P = 0.9409
Treatment	23.96	2	11.98	F (2, 48) = 9.120	P = 0.0004
Region	3.744	3	1.248	F (3, 48) = 0.9501	P = 0.4240
Residual	63.06	48	1.314		

Supplementary Table 2 . 1-way ANOVA Table for $[DA]_{\max}$ for combined brain regions.

ANOVA summary	
F	9.889
P value	0.0002
P value summary	***
Are differences among means statistically significant? ($P < 0.05$)	Yes

R square			0.2576	
Dunnett's multiple comparisons test	Mean Diff.	95% CI of diff.	Significant?	Summary
0 vs. 5	0.7425	-0.04702 to 1.532	No	ns
0 vs. 20	1.548	0.7580 to 2.337	Yes	****

Supplementary Table 3. 2 way ANOVA Table for [DA]_p

Two-way ANOVA	Ordinary				
Alpha	0.05				
Source of Variation	% of total variation	P value	P value summary	Significant?	
Interaction	2.676	0.9297	ns	No	
Dose	22.7	0.0011	**	Yes	
Position	5.151	0.3249	ns	No	
ANOVA table	SS	DF	MS	F (DFn, DFd)	P value
Interaction	2.422	6	0.4037	F (6, 48) = 0.3081	P = 0.9297
Dose	20.54	2	10.27	F (2, 48) = 7.842	P = 0.0011
Position	4.662	3	1.554	F (3, 48) = 1.186	P = 0.3249
Residual	62.88	48	1.31		

Supplementary Table 4 . 1-way ANOVA Table for [DA]_p for combined brain regions.

ANOVA summary				
F		7.345		
P value		0.0011		
P value summary		**		
Are differences among means statistically significant? (P < 0.05)		Yes		
R square		0.1292		
Dunnett's multiple comparisons test	Mean Diff.	95% CI of diff.	Significant?	Summary
0 vs. 5	0.8320	0.03738 to 1.627	Yes	*
0 vs. 20	1.427	0.6321 to 2.221	Yes	***

Supplementary Table 5. 2 way ANOVA Table for V_{max}

Two-way ANOVA	Ordinary				
Alpha	0.05				

Source of Variation	% of total variation	P value	P value summary	Significant?		
Interaction	2.702	0.9156	ns	No		
Dose	26.92	0.0002	***	Yes		
Position	5.688	0.2523	ns	No		
ANOVA table	SS	DF	MS	F (DFn, DFd)	P value	
Interaction	15.92	6	2.654	F (6, 48) = 0.3341	P = 0.9156	
Dose	158.6	2	79.32	F (2, 48) = 9.985	P = 0.0002	
Position	33.53	3	11.18	F (3, 48) = 1.407	P = 0.2523	
Residual	381.3	48	7.944			

Supplementary Table 6 . 1-way ANOVA Table for V_{max} for combined brain regions.

ANOVA summary				
F			10.50	
P value			0.0001	
P value summary			***	
Are differences among means statistically significant? (P < 0.05)			Yes	
R square			0.2692	
Dunnett's multiple comparisons test	Mean Diff.	95% CI of diff.	Significant?	Summary
0 vs. 5	3.519	1.547 to 5.491	Yes	***
0 vs. 20	3.376	1.404 to 5.347	Yes	***

Supplementary Table 7. Non-linear fit of spatial learning paradigm data

Comparison of Fits			
Null hypothesis			2 parameters same for all data sets
Alternative hypothesis			2 parameters different for each data set
P value			0.0171
Conclusion (alpha = 0.05)			Reject null hypothesis
Preferred model			2 parameters different for each data set
F (DFn, DFd)			4.339 (2,64)
2 parameters different for each data set			
Best-fit values			
Amplitude	1.001	1.000	

Mean	3.023	3.028	
SD	0.5243	0.5857	
Std. Error			
Amplitude	0.01723	0.02774	
Mean	0.02055	0.02878	
SD	0.01112	0.01785	
95% Confidence Intervals			
Amplitude	0.9657 to 1.036	0.9438 to 1.057	
Mean	2.981 to 3.065	2.969 to 3.087	
SD	0.5016 to 0.5469	0.5493 to 0.6220	
Goodness of Fit			
Degrees of Freedom	32	32	
R square	0.9862	0.9623	
Absolute Sum of Squares	0.06577	0.1710	
Sy.x	0.04533	0.07310	
Constraints			
SD	SD > 0.0	SD > 0.0	
2 parameters same for all data sets			
Best-fit values			
Amplitude	0.9878	1.013	
Mean	3.025	3.025	3.025
SD	0.5553	0.5553	0.5553
Std. Error			
Amplitude	0.02373	0.02376	
Mean	0.01882	0.01882	0.01882
SD	0.01092	0.01092	0.01092
95% Confidence Intervals			
Amplitude	0.9404 to 1.035	0.9659 to 1.061	
Mean	2.988 to 3.063	2.988 to 3.063	2.988 to 3.063
SD	0.5335 to 0.5771	0.5335 to 0.5771	0.5335 to 0.5771
Goodness of Fit			
Degrees of Freedom			66
R square	0.9828	0.9588	0.9712
Absolute Sum of Squares	0.08212	0.1868	0.2689
Sy.x			0.06383
Constraints			
Mean	Mean is shared	Mean is shared	

SD	SD > 0.0 and shared	SD > 0.0 and shared	
Number of points			
Analyzed	35	35	

Supplementary Table 8. 1-way repeated measures ANOVA Table for the 20mg/kg group over the 4 week treatment period.

Repeated measures ANOVA summary	
Assume sphericity?	No
F	116.0
P value	0.0059
P value summary	**
Statistically significant (P < 0.05)?	Yes
Geisser-Greenhouse's epsilon	0.3693
R square	0.9831