

Table 1: Effect of Antia on the phosphorylated STAT and JAK protein expression in the hippocampi of ICV-STZ injected mice

Groups \ Parameters	p-STAT protein expression (arbitrary unit)	p-JAK protein expression (arbitrary unit)
Normal (Control)	1.03±0.011	1.024±0.018
STZ model (3 mg/kg, i.c.v)	4.5*±0.026	3.81*±0.034
STZ+ Antia (25 mg/kg)	2.3@±0.038	2.063@±0.031
STZ+ Antia (50 mg/kg)	1.8@±0.046	1.51@± 0.042
STZ+ Antia (100 mg/kg)	2.07@#±0.018	1.92@±0.028

A single intracerebroventricular injection of streptozotocin (STZ) (3mg/kg) was used for induction of sporadic alzheimer's disease (SAD) in mice. Antia is injected in 3 doses (25, 50 and 100 mg/kg/day, i.p.) for 21 days. Neurobehavioural tests were carried out within 24h after the last day of injection. Afterwards, mice were sacrificed by cervical dislocation and decapitation. The hippocampi were rapidly excised on ice/salt mixture, washed with ice-cold saline, weighted and then homogenized to be used for estimation of biochemical parameters.

Statistical analysis was carried out by one-way ANOVA followed by Tukey's multiple comparison test.

Each value represents the mean of 12 mice ± S.E.

* Significantly different from normal group at p<0.05

@ Significantly different from ICV-STZ group at p<0.05

Significantly different from Antia (25 mg/kg) at p<0.05

\$ Significantly different from Antia (50 mg/kg) at p<0.05

Table 2: Effect of Antia on the phosphorylated GSK3 β and IKB α protein expression in the hippocampi of ICV-STZ injected mice

Groups	Parameters	p-GSK3β protein expression (arbitrary unit)	p-IBKα protein expression (arbitrary unit)
Normal (Control)		1.032\pm0.011	1.025\pm0.035
STZ model (3 mg/kg, i.c.v)		7.06*\pm0.026	6.5*\pm0.013
STZ+ Antia (25 mg/kg)		3.05@\pm0.038	2.8@\pm0.022
STZ+ Antia (50 mg/kg)		2.4@\pm0.046	2.3@\pm0.042
STZ+ Antia (100 mg/kg)		2.7@#\pm0.018	2.9@#\pm0.027

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Statistical analysis was carried out by one-way ANOVA followed by Tukey's multiple comparison test.

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@ Significantly different from ICV-STZ group at $p < 0.05$

Significantly different from Antia (25 mg/kg) at $p < 0.05$

\$ Significantly different from Antia (50 mg/kg) at $p < 0.05$

Table 3: Effect of Antia on the mTOR and p-AKT protein expression in the hippocampi of ICV-STZ injected mice

Groups	Parameters	mTOR protein expression (arbitrary unit)	p-AKT protein expression (arbitrary unit)
Normal (Control)		1.025±0.041	1.038±0.035
STZ model (3 mg/kg, i.c.v)		0.51*±0.012	0.47*±0.023
STZ+ Antia (25 mg/kg)		0.82@±0.037	0.69@±0.032
STZ+ Antia (50 mg/kg)		0.89@±0.045	0.83@±0.0425
STZ+ Antia (100 mg/kg)		0.74@#±0.038	0.61@#±0.029

A single intracerebroventricular injection of streptozotocin (STZ) (3mg/kg) was used for induction of sporadic alzheimer's disease (SAD) in mice. Antia is injected in 3 doses (25, 50 and 100 mg/kg/day, i.p.) for 21 days. Neurobehavioural tests were carried out within 24h after the last day of injection. Afterwards, mice were sacrificed by cervical dislocation and decapitation. The hippocampi were rapidly excised on ice/salt mixture, washed with ice-cold saline, weighted and then homogenized to be used for estimation of biochemical parameters.

Statistical analysis was carried out by one-way ANOVA followed by Tukey's multiple comparison test.

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@ Significantly different from ICV-STZ group at p<0.05

Significantly different from Antia (25 mg/kg) at p<0.05

\$ Significantly different from Antia (50 mg/kg) at p<0.05

Table 4: Effect of Antia on the COX-2 protein expression in the hippocampi of ICV-STZ injected mice

Groups	Parameters	COX-2 protein expression (arbitrary unit)
Normal (Control)		1.025±0.051
STZ model (3 mg/kg,i.c.v)		6.2*±0.235
STZ+ Antia (25 mg/kg)		3.05@±0.152
STZ+ Antia (50 mg/kg)		1.7@±0.082
STZ+ Antia (100 mg/kg)		2.4@#±0.097

A single intracerebroventricular injection of streptozotocin (STZ) (3mg/kg) was used for induction of sporadic alzheimer's disease (SAD) in mice. Antia is injected in 3 doses (25, 50 and 100 mg/kg/day, i.p.) for 21 days. Neurobehavioural tests were carried out within 24h after the last day of injection. Afterwards, mice were sacrificed by cervical dislocation and decapitation. The hippocampi were rapidly excised on ice/salt mixture, washed with ice-cold saline, weighted and then homogenized to be used for estimation of biochemical parameters.

Statistical analysis was carried out by one-way ANOVA followed by Tukey's multiple comparison test.

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Significantly different from Antia (25 mg/kg) at p<0.05

\$ Significantly different from Antia (50 mg/kg) at p<0.05