

RESEARCH PAPER

Shatavari: A nature's gift for autism

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Autism is a serious developmental disorder seen in early childhood that impairs the ability to communicate and interact socially. It is also characterized by a tendency to engage in repetitive behaviours, apathy and cognitive decline. Early prenatal or post natal exposure to neuro-toxicants such as valproic acid (VPA), thalidomide and ethanol induce behavioral alterations similar to autistic symptoms. *Asparagus racemosus* commonly known as *Shatavari* has been found to possess neuro-protective, nootropic, antidepressant, and anti-anxiety activities. Therefore, the present study was undertaken to investigate the effect of the root extract of *Asparagus racemosus* on valproic-acid induced autism in rat pups. A single intraperitoneal injection of sodium valproate (500 mg/kg) was given on 13th day of gestation to pregnant Wistar female rats for inducing autism in rat pups. *Asparagus racemosus* root extract (100 and 200 mg/kg, p.o.) administered alone significantly reversed valproic acid induced hyperlocomotion, anxiety, memory impairment, increased sensitivity to pain and depression-like behaviour in pups. Shatavari restored valproic acid-induced behavioural deficits of rat pups in the present study probably via its anti-anxiety, anti-depressant, nootropic, anti-nociceptive and neuro-protective properties.

Key words : Autism, *Asparagus racemosus*, Sodium valproate, Rat pups

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