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## Poster Presentation

### The Synergistic Effects of Mixture Extract *Portulaca Olerace*, *Urtica Dioica*, *Boswellia Serrate* on Multiple Sclerosis in Rats

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#### **Abstract**

Multiple Sclerosis (MS) is an inflammatory disease in CNS. One of prevalent symptoms in MS is memory disorders. Main hippocampus function in brain are memory. Nowadays tendency of herbal therapy is increase because of drug's side effects. This study's purpose is review of synergistic effects of mixture extract *Portulaca olerace*, *Urtica dioica*, *Boswellia serrate* on multiple sclerosis in rats. This study did on 30 head of male rats with 3 month age and 250-300 weight that randomly divided into five groups (n=6) including control group, sham group (salin injection), (MS+salin) group, (MS+mixture extract (dose 200 mg/kg)), (MS+mixture extract (dose 400 mg/kg)). MS model was induced by intra hippocampal injection of ethidium bromide (stereotaxic surgery) into single dose (0.01% ethidium bromide solution in 0.9% salin) and in 3 microlitre volume with 1 microlitre in minute rate intraperitoneally and mixture extract injected as the treatment for 21 days. The shuttle box test did for memory study and from histopathology and dissector methods used for study on neural amelioration. mixture extract causes neurogenesis and memory's amelioration in two treatment groups in comparison with (MS+salin) group, also neural density in treatment group neared to control group after mixture extract injection. mixture extract because of neurogenesis and amelioration effect can effective in memory recovery and neural necrosis in MS disease.

**Keywords:** Multiple Sclerosis, Hippocampus, Neurogenesis

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