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## Effect of *Oxalis corniculata* extracts on Pentobarbital-induced sleeping time in carbon tetrachloride-induced hepatotoxic rats

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*Oxalis corniculata* Linn. (Family: Oxalidaceae) is a medicinal plant which is used traditionally to cure various diseases in India. The present investigation was undertaken to evaluate effect of *Oxalis corniculata* extracts on pentobarbital-induced sleeping time in carbon tetrachloride-induced hepatotoxicity in male wistar rats. The petroleum ether (PEOC), chloroform (CFOC), ethyl acetate (EAO), methanol (MEO) extracts were prepared and evaluated at doses of 100, 200 and 400 mg/kg for effect on pentobarbital-induced sleeping time in hepatotoxic rats. Silymarin (100 mg/kg) was used as reference standard drug. Group-I was normal control and received feed and drinking water ad libitum throughout the experimental period. Group-II served as a hepatotoxic control and received carbon tetrachloride treatment. Group-III was reference standard drug treated group and received silymarin (100 mg/kg). The rats of Group-IV to VI were extracted treated groups and received PEOC, CFOC, EAO and MEO at a dose of 100, 200 and 400 mg/kg. Standard drug and plant extracts were given once daily for six days. On the sixth day, all the animals were challenged with sodium pentobarbital (50 mg/kg, IP) 30 minutes after extract and carbon tetrachloride administration. Sleeping time in the different groups of animals was recorded as the time between the loss and gain of the righting reflex. The carbon tetrachloride-induced liver injury was delaying the metabolism of barbiturates, thereby, slowing their excretion rate and leading to an increase in the duration of barbiturate induced hypnosis, from  $145 \pm 14$  min in normal control to  $229 \pm 38$  min in carbon tetrachloride-induced hepatotoxicity group. Treatment of animals with EAO and MEO stimulated the effect of carbon tetrachloride and shortened the sleeping time close to the normal control.

### Biography:

Dighe Santosh B has completed his PhD from Jawaharlal Nehru Technological University, Hyderabad. He is currently working as the Head, Department of Pharmacology and IAC In-Charge in Pravara Rural College of Pharmacy, India. He has published more than 30 papers in reputed journals. He is also serving in the field of animal welfare division as a CPCSEA Nominee, Ministry of Environment and Forest, Government of India, New Delhi from last 04 years.

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