

Influence of long term treatment of zincovit oral drops on lipid profile in healthy wistar rats

Bairy K L and Satyam S M
Manipal University, India

Background: Zincovit oral drops, an advanced formulation of high concentration of vitamins, minerals, lysine and flaxseed oil is prescribed to children to boost immunity and supplement other nutrients. However, its effect on lipid profile is not known.

Aim: To evaluate the influence of Zincovit oral drops on lipid profile in healthy Wistar rats.

Methodology: In the experiment, a total of 24 Wistar rats (young, nulliparous and non-pregnant Female, pathogen free, 6-8 weeks old) were used. The rats were divided into 4 groups of 6 rats each. All the healthy rats were treated with Zincovit oral drops (25 mg/kg/day, 100 mg/kg/day and 400 mg/kg/day) for 90 days except the normal control (untreated) group. On 91st day, triglyceride, total cholesterol, very low-density lipoprotein cholesterol, low-density lipoprotein cholesterol and high-density lipoprotein cholesterol were assessed in the serum of the experimental animals.

Results: There was no significant difference in the serum triglyceride, total cholesterol, very low-density lipoprotein cholesterol and high-density lipoprotein cholesterol level among the Zincovit drop treated groups in comparison with the control group. Serum low-density lipoprotein cholesterol level was significantly decreased in the group of rats treated with 25 mg/kg/day ($p=0.012$) and 100 mg/kg/day ($p=0.001$) when compared with the normal control (untreated) group.

Conclusion: Zincovit drops did not alter any lipid parameters except low density lipoprotein cholesterol and it is safe on chronic use.

Biography

Bairy Laxmianarayna. K is Professor of Pharmacology, Kasturba Medical College, Manipal and director in the department of Manipal Centre of Clinical Research, Manipal University, Manipal, Karnataka India. After acquiring his MBBS degree from Medical College Bellary, Karnataka University, he did his MD (Pharmacology) from Kasturba Medical College, Manipal, Mangalore University and joined as faculty in the same department in the year 1985. He earned his PhD in Pharmacology in the year 1991. He has guided 15 MD postgraduate students and ten candidates for their doctoral program. He has presented about 50 research papers in various national and international conferences. He has delivered several invited talks at various National and International Conferences. Bairy has published about 210 research articles in various national and international peer reviewed journals. He is the recipient of Practitioner's gold medal for standing first in physiology in the Karnataka University Examination held in December, 1976 and Dr. T. M. A. .Pai Gold medal for excellence in Medical Research for the year 1987 in Kasturba Medical College, India and best Audio Visual Teaching Material-2014 as Second Prize .

kl.bairy@manipal.edu

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