Intensive Study of Catharanthus Roseus as Herbal Medicine for the Purpose of Treatment and Reduce Complications of Acute Leukemia

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Abstract

Theoretical: Medicinal plants are considered as important source of medicines and drugs manufacturer because they contain active compounds that had medical biological activity, so it has adopted in the preparation and the preparation of a lot of drugs because of their "speed in the therapeutic effect and the lack appearance of negative side effects which caused by medications which chemically manufactured, where underwent a lot of scientific studies and extensive research to uncover some important plants, which have had a significant positive impact on public health and the impact in many diseases, including cancer.

Aim of the study: The present study aimed to use raw Catharanthus Roseus as a herbal medicinal plant for the purpose of its use in the medical and pharmaceutical fields and alternative medicine, or the so-called herbs medicine, for the purpose of reducing or eliminating the leukemia and complications of this disease.

Methodology: The present study included (60) Albino male mice divided into four groups with count (15) mice for each. Group (A) was the control group, group (B) was Mice with oral feeding of C. Roseus plant, group (C) was induced leukemia mice by subcutaneous injection of (300mg/kg B.W benzene), while group (D) was Induced leukemia mice treated by oral feeding C. Roseus plant. "SHIMADZU" HPLC was used for vincristine estimation in plant and vitamin D in mice serum. ELISA technique was used for serum ferritin determination. UV-VIS Spectrophotometer has been used for estimation of GSH-Px and GST activities using special kits, while AAS technique was used for essential trace elements determination. There were Hb and WBC examinations and histopathology study for liver, kidney, spleen, and bone marrow were done.

Conclusion: This study concluded that C.Roseus is one of the most important plants had medicinal purposes which produce many important molecules that enhance and had direct impact on biological system included alkaloid VCR, which used to treat leukemia that causes decrease in cancer cells, reduce tumor burden, significantly improve the efficiency of treatment for AL and extend survival in mice, and have antioxidant activity in biological system.

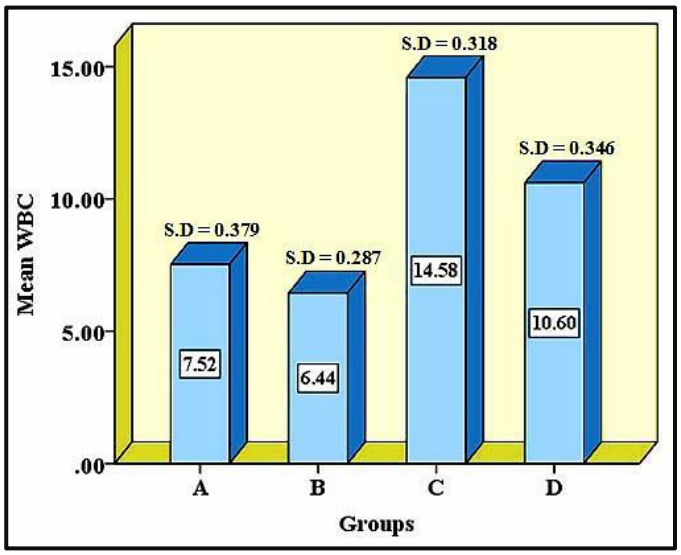


Figure (1): Mean ± S.D Comparison of WBC Count in Mice

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Biography: Mufeed J. Ewadh has his expertise in many fields of biochemistry research in his institute dealing with health problem, herbal extraction, alternative medicine .He participated in many international and local conferences and workshops which deal with improvement of biochemical research to increase people awareness about its role .He participated in post doctorate course in Marburg University (Germany) on 2005 ,and he participated in electrophoresis workshop in japan for two weeks as well as in biochemical workshop in Leipzig (Germany) / 2016.His postgraduate supervision deals with many graduate students (M.Sc. and Ph.D.) which focus on publishing more than 134 papers in different local and international journals. His interest in publishing research paper made his institute to nominate him as the best professor for two years (2003),(2009) .He is chief in editor of most famous journal in Iraq (Medical Journal of Babylon) and he got many rewards during his scientific life.

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