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PROTECTIVE EFFECT OF HYDROALCOHOLIC EXTRACT OF *AEGLE MARMELOS* FRUIT IN CYCLOPHOSPHAMIDE INDUCED TOXICITY IN RATS

Dhruv Patel * and Divya Patel

Department of Pharmacology, Parul Institute of Pharmacy, Limda, Vadodara - 391760, Gujarat, India.

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Correspondence to Author:
Dhruv Patel

B. Pharm,
Department of Pharmacology,
Parul Institute of Pharmacy, Limda,
Vadodara - 391760, Gujarat, India.

E-mail: pateldhruv086@gmail.com

ABSTRACT: *Aegle marmelos* commonly known as Bael has been widely used traditionally due to its various medicinal properties. Cyclophosphamide is an alkylating agent used in the treatment of various types of cancer by slowing or stopping the growth of cancer cells but also affecting the normal cells leading to immunosuppressant effect. The present study has been aimed to see the protective effect of hydroalcoholic extract of *Aegle marmelos* fruit (AME) in normal and immunosuppressed rats. Different doses of AME *i.e.* 100, 250 and 500 mg/kg were administered orally for 14 days. On 15th day cyclophosphamide was given at a dose of 180 mg/kg subcutaneously. On the 18th day, hematological parameters like red blood cells (RBC), white blood cells (WBC), platelets, and neutrophil adhesion assay were carried out. AME showed a significant increase in white blood cell count, neutrophil count, eosinophil count, lymphocytes count and Neutrophil adhesion assay in cyclophosphamide treated rats. The results indicate the potential protective effect of AME in cyclophosphamide induced bone marrow suppression in rats.