Immunomodulatory effect of Moringa oleifera Lam. extract on cyclophosphamide induced toxicity in mice.

Gupta A, Gautam MK, Singh RK, Kumar MV, Rao ChV, Goel RK, Anupurba S.

Abstract

Immunomodulatory effect of ethanolic extract (50%) of M. oleifera leaves (MOE) has been studied in normal and immunosuppressed mice models. Different doses of MOE i.e. 125, 250 and 500 mg/kg body weight of mice were administered orally for 15 days. Cyclophosphamide at a dose of 30 mg/kg body weight was administered orally for the next 3 days. On day 16 and 19, hematological parameters like white blood cell (WBC) count, red blood cell (RBC) count, haemoglobin level (Hb), percent neutrophils and organ weight were recorded. Effect of MOE on phagocytic activity of mice macrophages was determined by carbon clearance test. MOE showed significant dose dependent increase in WBC, percent neutrophils, weight of thymus and spleen along with phagocytic index in normal and immunosuppressed mice. The results indicate that MOE significantly reduced cyclophosphamide induced immunosuppression by stimulating both cellular and humoral immunity.

PMID:

21117458

[PubMed - indexed for MEDLINE]