

Effects of *Morinda citrifolia* on early stage of leukaemia in rats

ABSTRACT

We have studied the effects of *Morinda citrifolia* on haemogram parameters in rats with early stage of leukaemia. A total of 32 male Sprague Dawley rats were divided into four groups (n=8) namely control, *Morinda citrifolia* (MC), N-methyl-N-nitrosourea (MNU) and MC+MNU group. Leukaemia induced rats were provided with dried *M. citrifolia* fruits incorporated into rat diet at a dose of 3000 mg/kg body weight were given daily to the MC and MC+MNU groups. Results showed there were no significant differences in the leukon and erythron parameters in all groups. Although lymphocytosis was not observed in the MNU and MC+MNU groups, examination of the blood morphology showed a typical morphology of leukaemic cell. Seventy-five and sixty percent of rats in the MNU and MC+MNU groups, respectively, had leukaemia. Our results indicate that examination of blood smear provides an important tool for diagnosis of early stage of leukaemia and daily supplementation of *M. citrifolia* at the dose of 3000 mg/kg reduced the incidence of early stage of leukaemia in rats.

Keyword: Leukaemia; Rats; *Morinda citrifolia*