Avelós. Efeitos anticâncer da Euphorbia tirucalli

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No camundongo com tumor o avelós diminui a produção de prostaglandinas E2 (PG2) abole a mielosupressão aumentando a geração de granulócitos e macrofagos e diminui o tamanho do tumor. Em seres humanos diminui a imunidade celular e faz recrudescer o vírus Epstein-Barr, implicado no aparecimento do linfoma de Burkitti.

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Euphorbia tirucalli L. modulates myelopoiesis and enhances the resistance of tumour-bearing mice.


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Abstract

Myelosuppression concomitant with increased numbers of spleen CFU-GM was observed in tumour-bearing mice. Treatment of these animals with Euphorbia tirucalli L. (ET) (125, 250 and 500 mg/kg) stimulated marrow myelopoiesis and reduced spleen colony formation, with no differences observed between the effects of the three doses. The changes produced by the tumour in total and differential marrow cell counts were restored by the treatment with ET. Prostaglandin E2 (PGE2) levels, which were dramatically increased in tumour bearers, was also abrogated by the treatment with the plant extract. Euphorbia tirucalli L. significantly enhanced survival and concurrently reduced tumour growth in the peritoneal cavity. We propose that the modulatory effect of Euphorbia tirucalli L. on myelopoietic response and on the levels of PGE2 may be related to its antitumour activity as a possible mechanism for the regulation of granulocyte and macrophage production and expression of functional activities.

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Epstein-Barr virus-enhancing plant promoters in east Africa.


Abstract

The extracts of a certain African plant species, Euphorbia tirucalli, were found to have markedly enhancing effects on the activation of latent Epstein-Barr virus (EBV) genomes in the EBV carrying lymphoblastoid cells and also on EBV-induced transformation of human lymphocytes. The Euphorbia tirucalli was especially noticeable in highly endemic areas of Burkitt's lymphoma (BL), an EBV-associated malignancy, in Kenya and Tanzania. The activation of the latent EBV genome and the EBV-induced transformation enhancement were also observed with the soil and drinking water taken around the plants, strongly indicating that the people living in BL endemic areas are frequently exposed to such an EBV-enhancing plant promoter substance.

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