Abstract

The effect of aqueous extract of Echinacea purpurea roots on the murine antibody response to Bothrops asper snake venom in vivo was studied. Three groups were used. Group #1, baseline control, was treated with snake venom plus PBS. Group #2 was treated with snake venom plus sodium alginate as adjuvant (routine method used at Instituto Clodomiro Picado), and group #3 or experimental group, was treated with snake venom plus aqueous extract of E. purpurea root as adjuvant. In all groups, the first inoculation was done with Freunds complete adjuvant (FCA). By the time of the second bleeding, mice in group #3 showed a remarkable increment in the level of anti-venom antibodies compared with those in groups #1 or #2. In vitro immune cell proliferation as a response to aqueous extract of E. purpurea root was studied using human lymphocytes activated with different lectins (Con A, PHA and PWM). In all cases, increase in percentage of lymphoproliferation was greater when E. purpurea root extract was used in addition to individual lectins. Rev. Biol. Trop. 55 (1): 113-119. Epub 2007 March. 31.

Keywords

Echinacea purpurea, immunostimulatory properties, adjuvant, plant extract, in vitro lymphoproliferation, murine antivenom antibodies.