In vivo antitumoral effect of Plantago major L. extract on Balb/C mouse with Ehrlich ascites tumor.


Source

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Abstract

The aim of this study is to investigate the antitumor activity of Plantago major L. extract in Ehrlich ascites tumor (EAT) bearing Balb/C mice in vivo. Thirty male Balb/C mice were divided into 5 groups: 3 treatment groups and 2 control groups (6 per group). Treatment groups and the negative control group were injected with EAT (1 x 10^6 cells) intraperitoneally to develop ascites tumor. P. major L. extract (1%, 2% and 3% concentration extracts, 0.1 ml/day/mouse) were given p.o. for 10 alternate days. The control group was treated with 0.9% NaCl solution (0.1 ml/day/mouse). The changes of body weight in animals were recorded. On the 11th day, all of the mice were sacrificed and their tissues were stained with haematoxylen and eosin for pathological studies. Body weights of in 3 treatment groups and the negative control group were elevated because of tumor burden. The maximal weight gain was recorded in the negative control group and the minimal weight gain was recorded in Group I. Pathological studies showed that P. major L. extract (especially 1% concentration) has inhibitive effect on EAT. P. major has an inhibitory effect on EAT in a dose dependent manner.

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