

HN10103540291

Anti tumor activity of a fraction of hydatid cyst fluid on colon cancer growth tumor in animal model

Rostamirad Sh¹, Yousofi Darani H²

¹ Department of Medicine, Najafabad Branch, Islamic Azad University, Najafabad, Iran.

^{1,2}Department of Parasitology and Mycology, Isfahan University of Medical sciences, Isfahan, Iran.

¹srostamirad@yahoo.com

Background: Hydatid cyst is the larval stage of the tape worm *Echinococcus granulosus* which is located in human and livestock viscera. Cancer is the main cause of death in developed countries. There are some scientific evidences indicating that parasitic infections induce antitumor activity against certain types of cancers. In this study, the effects of a fraction of hydatid cyst fluid on colon cancer tumor in BALB/c mice were investigated.

Materials and methods: In this experimental work three groups of mice were challenged with mouse colon cancer cells. Two weeks later group one was injected with a fraction of hydatid cyst fluid absorbed on alum as adjuvant. The second group was injected with alum alone and the third group left intact. The tumor size in all mice were measured.

Result: In mice injected with a fraction of hydatid cyst fluid tumor size was smaller than the two control groups and the difference was statistically significant.

Conclusion: The results of this study showed that injection of a fraction of hydatid cyst fluid significantly inhibits the growth colon cancer growth.