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Abstract
The rank of the death in Taiwan on lung cancer and liver cancer is the first and the second one, respectively. In this study we set up the mice animal model for therapy of lung cancer and liver cancer. The cultures of Antrodia camphorata and Cordyceps sp. were inoculated on the solid state of Chinese herbal substrates. The mycelia were harvested and extracted with 95 % alcohol. In lung cancer model: the extract of Cordyceps sp. mycelia (CS-J190) was applied to the NOD-SCID mice （non-obese diabetic-severe combined immunodeficiency） after treating with lung adenocarcinoma cell of human (A549) for 49 days and lung cancer carcinoma in situ for 60 days by feeding 200 mg/day of extract. The result indicates that adenocarcinoma subcutaneous tumour volume is decreased (P =0.0383) and number of lung metastatic tumor colonies the treatment was lower than control group (P =0.0386). In the in situ model： the lung tumor colonies the treatment was lower than control group (P =0.0001). In the ascites model, ascites of treatment group was improved on days 14 (from volume 1.68ml dropped to 0.54ml). In liver cancer model, the extract of A. camphorata mycelia (AC-J20) was applied to the NOD SCID mice after inoculating hepatoma cell (HepG2) by feeding with 400 mg/day (200 mg/time, twice a day). The result on days 14 shown that the tumor size was obviously decreased (P=0.0441), and the survival rate prolonged up to 70%. The mechanism to reduce tumor volume results from immunochemistry staining has shown the extract of A. camphorata can inhibit the proliferation of HepG2 (Anti-proliferation). The results demonstrate that the extract of A. camphorata mycelia growing in Chinese herbal substrate can effectively suppress the proliferation of liver cancer, while the extract of Cordyceps sp. substrate can suppress the lung cancer effectively. Both increases the mice's survival rate may be help of the clinical trial in future.
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