

Key words: Biejiajian Pill, H22 , JAK/STAT signaling pathway, Survivin

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STUDIES ON THE INHIBITORY EFFECTS OF N - CINNAMOYLPIITRESCINE IN VISCUMCOLORATUMNAKAI ON HT-29 COLON CANCER CELL

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Abstract: To study the inhibitory effects of N-cinnamoylpitrescine on the growth of HT-29 colon cancer cells. In vitro cultured HT-29 colon cancer cells were inoculated in 96 well plates. Adding N- cinnamoylpitrescine after the cells grew well. N-cinnamoylpitrescine was divided into control group: 0.8mg/mL group, 0.4mg/mL group, 0.2mg/mL group, 0.1mg/mL group, 0.05mg/mL group. After the intervention of 48h, the inhibitory effects of N-cinnamoylpitrescine on HT-29 colon cancer cells were observed by MTT assay. And calculate the cell inhibition rate. The absorbance of each experimental group with the increase of concentration decreased, tumor inhibition rate increased gradually. The IC50 value of N- cinnamoylpitrescine was 0.499mg/mL.

Key Words : N-cinnamoylpitrescine ; HT-29 Colon cancer ; Inhibition

Colon cancer is a common digestive system malignancy that threatens human's health and life. In 2010, the American Cancer Society released a statistical report showing that the incidence and mortality rates of colon cancer in both men and women in the United States, ranking second and third, respectively. Mistletoe, as a natural anticancer drug, has been widely used in the treatment of cancer. Adjuvant chemotherapy with mistletoe extract can significantly improve quality of life and reduce recurrence in cancer patients, and has been shown to significantly inhibit metastasis and recurrence of cancer. In Germany, people who choose the treatment for cancer are increasing at a rate of 20% one year. Experts predict mistletoe is also expected to be a plant source of anticancer drugs after taxol.

Materials

1.1 Cell line Human

colon cancer cell line HT-29 was purchased at the Cancer Research Institute of the Provincial Cancer Hospital.

1.2 Reagents

RPMI medium, fetal bovine serum, penicillin and streptomycin trypsin, MTT, DMSO.

1.3 Instruments

HF90 CO2 incubator, automatic enzyme-linked, Olympus CKX41 inverted microscopic, tissue culture flasks, 96 well plates.

Methods

2.1 Cell incubation

Human colon cancer cell lines HT-29 were cultured under standard cell

culture conditions (37°C, 100% relative humidity, 5% CO2) in RPMI medium, supplemented with 10% heat-inactivated fetal bovine serum, 100 U/ml penicillin streptomycin. Digest it every 2-3 days with trypsin, After 3-4 days of passage, logarithmic growth phase cells were used for experiments.

Configuration drug

RPMI medium was used to dilute the drug. According to the preliminary test results, N-cinnamoylpitrescine was divided into five concentrations: 0.8mg/ml, 0.4mg/ml, 0.2mg/ml, 0.1mg/ml and 0.05mg/ml. And set a control group of 0mg/ml.

MTT assay

100 µl of cell suspension of density 1×10^5 cells/well was placed

into each well of 96-well plates and incubated for 24 h. Then, the medium was removed and added the N-cinnamoylpitrescine to cultured cells in 96 well plates and incubated for 48 h. Added 100 µL of the tetrazolium dye (MTT) solution to each well of 96 well plates and incubated for 4 h at 37°C. MTT reagent was discarded and added 150 µL of DMSO. The plate was placed in a plate shaker for 10 min. Then absorbance value (A) was read on an automatic enzyme-linked at 490 nm. Inhibition rate (%) = $(\text{The average absorbance value of the control group} - \text{The average absorbance value of the experimental group}) / \text{The average absorbance value of the control group} \times 100\%$.

Statistical analysis Spss22.0 statistical analysis software is used to process data, the

T test was used in the comparison between the experimental group and the control group, $P < 0.05$ was the significant difference, The IC50 value was calculated according to regression equation.

Results The absorbance of each experimental group with the increase of concentration decreased, tumor inhibition rate increased gradually. The inhibitory rates of N-cinnamoylpitrescine on colon cancer HT-29 cells were 10.71%、13.25%、18.36%、38.16%、71.06%, IC50 value was 0.499mg/ml.

Conclusion The anticancer activity was measured by the MTT methods. The results showed that N-cinnamoylpitrescine had anticancer activity. But the mechanism of N-cinnamoylpitrescine treatment is not clear, which will affect the large-scale use and development of the drug. Therefore, the mechanism of N-cinnamoylpitrescine on colon cancer needs to be studied.

FIRE NEEDLE THORN AROUND THE SUPERFICIAL PARTS OF THE BODY IN THE CLINICAL APPLICATION OF THE TREATMENT OF MALIGNANT TUMORS

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[Abstract]: This paper introduces our experience with fire needle acupuncture in the treatment of peri human malignant tumor, this method can make the part of the mass disappear, replacing the surgical treatment, and reducing the patient's financial and spiritual burden.

[Keywords]: Fire needle; Fire needle thorn around; malignant tumor; Superficial malignant tumor of the body

Cancer is one of the major diseases that are serious threats to human survival and social development and cancer control has become a health priority for governments around the world. From the national cancer registry of the "2012 China tumor registration report" issued, according to six people are diagnosed with cancer every minute. Located in a shallow body tumors, such as breast cancer, soft tissue tumor, thyroid cancer, these are the superficial parts malignant tumor. Such tumors, if no distant metastasis, the preferred surgical treatment. Surgical treatment not only to the patient to a heavy financial burden, but also to suffer organ damage. (Surgical treatment will not only be a heavy financial burden to the patient, but also bring damage to the organ.) In the treatment of such diseases, in addition to the use of traditional Chinese medicine dialysis medication, at the same time, the application of fire needle acupuncture treatment, can make some tumors shrink or even disappear, replace the surgical treatment, reliable, no side effects.

Method of operation: The patient to take the sitting position or lying position, first determine the tumor surface position, do a good job marking, conventional acupuncture parts of skin disinfection, followed by a hand holding alcohol lamp, one hand holding the needle, the needle placed in the fire outside the flame, When quickly penetrate around the lesion, the lesion and normal tissue at the junction of the need for needle. Perimeter method used for the needle with a special fire needle, each needle is about 1cm interval is appropriate, acupuncture depth of the depth of the lesion depending on the depth of the deep needle acupuncture deep lesions shallow needle shallow. Daily or every other day or twice a week.

Example: Liu xx, male, 80 years old, married, December 27, 2016 due to the right lower limb thigh back mass, hard, treatment in Beijing Tongzhou District West Health Center, ultrasound show: Right thigh soft tissue occupancy, consider the possibility of malignant, the size of about 40 * 64 * 111mm, biopsy pathology: right thigh spindle cell tumor, morphological and immunological enzyme tend to malignant or low degree of malignant. Consider the patient frail, no surgery and radiotherapy and chemotherapy. On the 4th of February in our department of traditional Chinese medicine syndrome plus fire needle acupuncture treatment for 14 days, because patients live in the field, home rest to March 7 line of the second fire needle treatment, March 16 local mass disappeared, with Hand touch the lumps, check the color Doppler: right side of the dorsal medial sulcus see 85 * 28 * 70mm hypoechoic, the border is still clear, composition leaves, echo uneven, visible arterial blood flow signal, right thigh dorsal Muscle muscle solid place.