“deaf” waits an ear disease-like in shape, not difficult calculate an ear of the occurrence of the disease with this two dirty also have a certain connection.Again 《Su Wen·Yu Ji Zhen Zang Theory》”emperor Yue:The man son speech Pi is dirty for Gu, central soil with infuse four alongside, it too with cannot compare with, its disease all how?Qi Bo Yue:The too another arms and legs doesn’t raise, it cannot compares with to then make people’s nine Qiao impassabilities, the Yue is heavy strong”.The Pi is the day after tomorrow of originally, viscera, arms and legs 100 Hai etc. of the Ru keep to all rely on the luck of Pi to turn, the function of Pi is lowly, will influence the normal function of the machine body internal organs, veins and arteries, and officer Qiao...etc., certainly belong to the ear of nine one of the Qiaoses no exception, past emergence”impassability” or”deaf or buzzing in the ears”.

2. Ear relationship with internal organs veins and arteries, “ear disease falsely then the heart kidney of responsibility two dirty, actually then take of liver and gall two through”.Foot the sun urine bladder through because of top expert body head, it pays vein also with ear connect with each other, like 《Ling Shu · blood vessels 》 said,”The vein of urine bladder foot the sun is risen to Zi inside the eyes, the last sum hands over Dian;It pays and goes to Cape of ear from the Dian”, past urine bladder through pathological changes can also to ear disease.And the Jin vein of foot Yangming stomach also follow before being gone to an ear.《Ling Shu · blood vessels 》 said”The Jin of foot Yangming,.....It of, from the cheek before being knotted to an ear.”Being past should be subjected to through the Jin evil, equally can also to ear disease of occurrence.Hand little sun three burnt through follow to go the ear and its surroundings, should experience evil will appear a homologous ear to the disease disease-like in shape, “is the ear Hun that moves then a disease Hun.....After the ear, shoulder nao , the elbow arm outside is all painful”.Hand the sun small intestines through also follow a line at the ear department, like 《Ling Shu · blood vessels 》 said”The vein of small intestines hand the sun,.....It of, hear in;Keep, on the ear, descend knot at the Han, up belong to Zi outside the eyes.”Past its veins and arteries, through Jin sick, can appear “deaf”, and”blare a pain to lead Han in the ear”...etc..Ear disease also with hand Yangming large intestine through relevant allied, 《Su Wen · Miu Ci Theory》 “the evil guest is at the net of hand Yangming, make people’s deaf, don’t smell a sound”.And treatment deaf can also from the large intestine through begin, 《Ling Shu · miscellaneous disease 》 contains “is deaf but pain, ear hand Yangming” and explain hand Yangming large intestine through is the in common use acupuncture that cures a deaf certificate to take the place of cave.

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AN EXPERIMENTAL STUDY OF THE EFFECT OF BIEJIAJIAN PILL ON H22 TUMOR BEARING MICE

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BiejiajianPillisclassicsprescription.Inthepreviousstudy,wefoundBiejiajianPillinhibitproliferationofmalignanttumorcells; however,themechanisminvolvedinthisprocessremainsunclear.TheJanuskinase(JAK)/signalingtransducerandactivatoroftranscription(STAT)signalingpathwaysareimportantsignalingpathwaysinvolvedinapoptosis,proliferationandinflammation.Intherecentexperiments,thefindingsrelatedtoJAK/STATsignlingpathway.Thepossiblemechanismwillbediscussed.

Objective The experiments explored Biejiajian Pill how to play the antitumor role. H22 liver cancer solid tumor was the research object. To measure the morphology and proteins of the cells treated with the drug, the mechanism in vivo of the antitumor drug was analyzed.

Materials and methods Materials.Biejiajian Pill (Zhonglian Company, Wuhan) dissoved in distilled water. Cyclophosphamide (Shanghai Regal Biology Technology Company, Shanghai) is positive control group. Antibody of STAT3 and Survivin were both purchased by Boster Company.

Methods. Murine hepatocarcinoma cells injected into ICR mice and then different doses of Biejiajian Pill (0.411, 1.233, 3.699 g·kg-1) were given. The dose of cyclophosphamide was 0.03 g·kg-1. Tumor growth inhibition rate and spleen index were measured. The changes of cell morphology were observed by lighting microscopy and transmission electron microscopy (TEM). The effects of STAT3 and Survivin gene expression were detected by immunohistochemical method.

Results and discussion The tumor growth was inhibited by different doses of Biejiajian Pill and tumor growth inhibition rates were 30.24%, 36.72% and 46.74%. Moreover, the index of spleen increased. The growth rate of cyclophosphamide group was 50.04%, but spleen index didn’t significantly increase. Observing by lighting microscopy, drugs caused cell lineage sparse and lots of vacuoles produced in tissue. Cell apoptosis, nucleus pycnosis, and mitochondrion structure disruption were observed by TEM. STAT3 protein of Biejiajian Pill groups down-regulated significantly, compared with control groups. Biejiajian Pill has antitumor effect in vivo, which is probably related to enhance the body’s immune function and induce cell apoptosis by inhibiting JAK/STAT signaling pathways. Survivin gene is a JAK2/STAT3 downsteam gene, which plays an important role in cell cycle and apoptosis, especially mitochondrion pathway of apoptosis. Lots of paper reported that Survivin gene expression was low in the normal cell, but high in the tumor cell. In the experiment, Survivin protein of Biejiajian Pill and cyclophosphamide groups were both down-regulated compared with control groups. It declared Biejiajian Pill inhibits hepatical carcinoma cell in vivo via JAK2/STAT3 signalling pathway.

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

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STUDIES ON THE INHIBITORY EFFECTS OF N - CINNAMOYLPITRESCINE 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. AddingN- cinnamoylpitrescineafter the cells grew well.N-cinnamoylpitrescinewas 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.Theabsorbanceof each experimental group with the increase of concentration decreased, tumor inhibition rate increased gradually.The IC50value of N- cinnamoylpitrescinewas 0.499mg/mL.

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

Colon cancer is a common digestive system malignancy that threatens human’s healthandlife.In 2010,theAmerican 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 extractcan 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 increasingat a rate of 20% one year.Experts predict mistletoe is also expected to be a plant source of anticancer drugs after taxol.

Materials

1.1Cell line Human

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

1.2Reagents

RPMI medium, fetalbovineserum, penicillin and streptomycin trypsin, MTT, DMSO.

1.3Instruments

HF90 CO2incubator,automaticenzyme-linked, Olympus CKX41 inverted microscopic,tissue culture flasks, 96 well plates.

Methods

2.1Cell incubation

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

cultureconditions (37◦C, 100% relative humidity, 5% CO2)in RPMI medium, supplementedwith 10% heat-inactivated fetal bovine serum, 100 U/mlpenicillin 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