

time, the volume of thymus, spleen and liver were increased, and the color of spleen and liver was deepened. There was no obvious growth of new organisms in the other groups, and no tumor like changes were observed under the microscope.

Discussion To establish an ideal experimental model is to study the biological characteristics and molecular regulation mechanism of the growth and metastasis of gastric cancer[2]. But in the Chinese herbal medicine in cancer research, not only the direct antitumor effect, which indirectly enhance immunity has attracted more and more attention, which makes the model can not fully meet the needs of experimental mice, should be established to explore other perfect immune function mice model.

Through this experiment we can find that people can not inoculated in BGC-823 gastric cancer cell lines have better immune function in mice, establishment of immune rejection which cannot be directly applied in mouse model of gastric cancer, can be used as the selection of cell lines in vitro study. According to the principle of immune system, mouse MFC cells were inoculated into mice. ICR mice with normal immune system, naturally occurring state closer to the disease, but also because of this, the model of the low success rate, the formation of tumor is not increased and decreased with the time, does not apply to establish mouse model of gastric carcinoma, but it also indicates the influence and the progress of the immune system of tumor formation. Inbred BALC mice, with good effect, as the tumor formed in 1 weeks time, and with the time increased, may be related to immune rejection than ICR mice on low, as preserving the basic immune organs of mice, can meet the research for changes of immune system in the experiment to a certain extent, the basic guarantee the requirement of the experiment, with good reproducibility, can be used as the effective means of modeling.

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EFFECT OF PINGCHUAN GRANULE ON THE EXPRESSION OF FOXC1 AND FOXC2 IN DLL4/NOTCH PATHWAY IN CHRONIC ASTHMATIC RATS

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Objective: This experiment is to approach the mechanisms of Pingchuan Granule to adjust Notch pathway and its treatment of asthma, by observing on the level of FOXC1, FOXC2 western blotting in DLL4/Notch pathway on Chronic asthmatic rats. **Method:** 60 chosen healthy rats were divided into four groups randomly: Blank group (A), model group (B), Dexamethasone injection group (C), Pingchuan Granule group (D), 15 in each group. Replicated Chronic asthmatic rats models by Ovalbumin sensitization. Then detected the level of FOXC1, FOXC2 protein expression by Western blotting. **Result:** The level of FOXC1, FOXC2 protein expression of model groups was much higher than that of blank group ($p < 0.05$), the level of FOXC1, FOXC2 protein expression of Dexamethasone injection group and Pingchuan Granule group both had positive expression, which weren't strong as model group ($p < 0.05$); These two groups were equivalent ($p > 0.05$); **Conclusion:** Pingchuan Granule can inhibit the expression of FOXC1 and FOXC2 in rat models of chronic asthma, and may inhibit angiogenesis / vascular remodeling through the action of DLL4/Notch pathway.

Keywords: Pingchuan Granule; chronic asthmatic rat model; DLL4/Notch pathway; FOXC1; FOXC2;

Chronic persistent asthma patients can have different frequency and (or) different degrees of symptoms (wheezing, shortness of breath, cough, chest tightness, etc.) per week. Because of association Notch pathway with angiogenesis / vascular remodeling, assumed that the DLL4/Notch pathway may participate in airway remodeling by joining airway's angiogenesis / vascular remodeling, then affect the pathogenesis of bronchial asthma[1][2].

1. Experimental methods

Grouping: 60 rats were divided into blank group (A), model group (B), Dexamethasone injection group (C), Pingchuan Granule group (D), 15 in each group.

A group without any intervention; B, C, D group were chronic asthma rat model sensitized by injection of OVA sensitized solution which lasted for six weeks. A group received no treatment; B group received normal saline by gavage; group C was gavaged with dexamethasone; group D fed by Pingchuan Granule. Each group were killed at 24 hours after the last stimulation.

Aimed to determine the level of FoxC1, FoxC2 expression in lung tissue by Western blot.

2. Data statistics

The experimental results were processed by statistical software SPSS 16.0, the mean and standard deviation for each

set of data said that the comparison between groups using t test, $p < 0.05$ was statistically significant.

Experiment results

Results of FOXC1 and FOXC2 protein expression in lung tissue ($\pm S$)

Group	Grayvalue of FOXC1 (/GAPDH)	Grayvalue of FOXC2 (/GAPDH)
Blank group	0.258 \pm 0.013	0.094 \pm 0.008
Model group	0.544 \pm 0.030*	0.184 \pm 0.010*
Dexamethasone group	0.444 \pm 0.021*#	0.118 \pm 0.004*#
Pingchuan Granule group	0.453 \pm 0.024*#☆	0.123 \pm 0.006*#☆

Note: Compared with the blank group * $p < 0.05$; compared with the model group # $p < 0.05$; and compared with the dexamethasone group ☆ $P > 0.05$.

4. Discussion The experimental results showed that the Pingchuan Granule might affect inhibition of the DLL4/Notch signaling pathway upstream factor expression and regulation of DLL4/Notch signaling pathway to improve angiogenesis / vascular remodeling and pathological changes of the airway to treat of asthma.

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COMPARATIVE STUDY ON ANTI-TUMOR OF HEDYOTIS DIFFUSA HERBA, SCUTELLARIAE BARBATAE HERBA COMPATIBILITY ANGELICAESINENSIS DECOCTION FOR SUPPLEMENTING BLOOD

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Objects: Study on the molecular mechanism of hedyotis diffusa herba (HDH) & scutellariae barbatae herba (SBH) with heat-clearing and detoxifying "elimination method" anti-tumor, and angelicae sinensis decoction for supplementing blood (ASDSB) with fuzheng guben "supplementation method" anti-tumor, and two together with "elimination and supplementation method" anti-tumor, provide relevant experimental study for using drugs to form a prescription on clinic, and to lay the foundation for research and development of new clinical preparation.

Materials and methods: Based on animal models, got tumor-bearing mice serum and tumor tissue as materials to carry out the experiment: (1) Determined the cytokines levels of IL-2, TNF- α and INF- γ in serum by double-antibody enzyme-linked immunosorbent assay (ELISA) to analysis anti-tumor immunological mechanisms of HDH-SBH, ASDSB, and the two together; (2) Used the HE staining to observe the morphological changes of tumor tissue; (3) Used western blotting to observe the expression of Jak2, STAT1 in tumor tissue, to look for the anti-tumor mechanism of signal transduction.

Results and discussion:

1. The tumor inhibition rate of HDH-SBH was as high as 50.82%; The tumor inhibition

rate of ASDSB was 41.28%; The tumor inhibition rate of two together group (four in one) was 43.12%.

2. The effects of different Chinese medicine groups on the immune organs of S180 tumor bearing mice could promote the activation of immune cells and the secretion of cytokines.

3. The HDH-SBH group could increase the content of TNF- α , INF- γ , IL-2, the ASDSB group could increase the content of IL-2, and the two together group (four in one) could increase the content of IL-2, TNF- α in serum of tumor bearing mice ($P < 0.05$).

4. Three groups of traditional Chinese medicine on EGF receptor mediated signal transduction pathway with different degrees of inhibition have been accomplished by reducing phosphorylation levels of Jak2, Stat1 in tumor tissue.

References: