1.1 Instruments GM260 Reiter blood glucose tester, Benazepril hydrochloride tablets, Hitachi 7600 automatic biochemical tester, KDC-160HR high-speed refrigerated centrifuge, metabolic cage, JA2003 precision electronic balance, XMTD-204 water bath, SB-5200DT Ultrasonic cleaning machine, streptozotocin STZ.

1.2 Methods

Fifty-five rats were randomly selected from the group consisting of S group and 15 rats (group B),15 as N group,and 15 as group Y. After fasting for 12 h, the rats in group M, group N and group Y were treated with 10% chloral hydrate (3.5 mL · kg-1) for right renal excision. After two weeks of feeding, the body weight was recorded, fasting for 12 h, group M, group N and group Y withSTZ [2].The rats in group Y were treated with benazepril hydrochloride daily. During the period, the body weight and urine volume were measured every week. The blood glucose and urine sugar were measured every 2 weeks. Before the end of the experiment, fasting and collecting 24 h urine and urine were collected. Rats, the abdominal aorta blood, then take the kidney to do pathological examination.

2 Results

2.1 Survival and Modulus Rate

All the survivors of group S were killed in 1 group, and the excretion rate of 24 h urinary microprotein was> 30 mg / (kg .d). The blood glucose of 16 rats was less than 16.7 mmol·L-1, Mold to be removed, the molding rate of 73%. N group 1 rats were injected with STZ injection, 1 blood glucose <16.7 mmol·L-1, 2 cases were not modeled, the rate was 87%. Y group 1 died of a nephrectomy, a total of 1 non-mode to be removed into the mold rate was 93%.

2.2 Weight, Blood Sugar, Urine Changes

Weight was shown that the weight of the rats in the M, N and Y groups was significantly lower than that in the S group at 2 to 8 weeks (P <0.01). Blood glucose was shown that there was no significant difference in blood glucose level between 6.1 and 9.5 mmol·L-1 in S, M, N and Y 4 groups at week 2 (P> 0.05) (P <0.01). The urine volume is shown that second weeks, M, N, Y, S 4 groups of rats urine output remained at about 13 mL, there was no significant difference (P > 0.05), 4-8 M, N, Y 3 week group were higher than S group, the difference was significant (P < 0.01).

2.3 Kidney Morphological Changes

Sham operation group: a certain number of glomeruli can be observed under the microscope, clearly visible small cysts, and glomerular size, basement membrane and mesangial stromal structure is normal, renal tubular epithelial cells arranged clear, small lumen Rules.Model N group: compared with the model M group, with significant glomerular hypertrophy, glomerular basement membrane thickening and mesangial matrix increased significantly, the number of glomerular reduction, renal tubular expansion, and accompanied by interstitial light Degree of fibroblast proliferation.Positive control group: Compared with model N group, histopathological changes were significantly improved.

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ADVANCEON SINOMENINE IN TREATMENT OF CHRONIC NEPHRITIS

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Chronic nephritis is one of the most common medical diseases,early to improve renal blood flow, control of hypertension, diuretic swelling and reduce proteinuria as the main treatment.Modern prescriptions regard sinomenine as an important rheumatoid drug,was used commonly as the treatment of rheumatic diseases in the folk for hundreds of years. The study found that sinomenine has a significant immune regulation function, as well as mild sedation, analgesic, anti-inflammatory effect. This article mainly reports the development in treatment of chronic nephritis with sinomenine.

Chronic nephritis that is the chronic glomerulonephritis, clinical proteinuria, hematuria,high blood pressure, edema as the main performance,slow disease progression, and ultimately the development of chronic renal failure can be a group of immune diseases. In China, chronic nephritis is the leading cause of end-stage renal disease, the incidence of more than 48%.Sinomenine is a kind of bioactive constituents extracted from roots and stems of Han menispermaceae, and the application of sinomenine in kidney disease, treatment mechanism and related research progress are discussed.

Sinomenine is categorized as wind medicine, there removing wind and dampness,clearing and activating the channels and collaterals,inducing diuresis to reduce edema. “People’s Republic of China Pharmacopoeia”contained its efficacy as: “expelling wind-damp, through channels and collaterals, diuresis.”Modern pharmacological studies and clinical trials have found that sinomenine has a significant reduction in proteinuria, hematuria, improve renal function, inhibition of renal fibrosis, and has a mild side effects. Hereby describes the new mechanism research status

of the traditional Chinese medicine Qingfeng rattan alkaloid extractive sinomenine in treatment of chronic nephritis

1.Inhibit the expression of ICAM-1

Inthenormalphysiologicalstate,intercellularadhesionmoleculeICAM-1isalmostnoexpression,butwhentherenalinflammatorydiseaseoravarietyofimmunereactionsleadtothebodyproducesvariouskindsofkidneydisease,ICAM-1expressed significantly in renal tubular epithelial cells, globular mesangial cells, renal tubular peripheral vascular endothelial cells.

2.Down-regulated TNF-α expression TNF-α is a small molecule protein mainly secreted by mononuclear - macrophages, the study found that excessive TNF-αexpression, will stimulate mononuclear cells and T lymphocyte to secrete hormones, promote proliferation of glomerular mesangial cell, increase sclerosis of glomerular. TNF-αcan also affect the function of glomerular mesangial cells, induced by the formation of a large number of platelet-activating factor (PAF), stimulate mesangial cell proliferation, division. The sinomenine can reduce the expression of TNF-α and TNF-αmRNA, improve the pathological changes of chronic nephritis, delay glomerular sclerosis.

3.Immunosuppressive effects Lymphocytes are an important component of the immune response of the body, in which the main constitute of lymphocytes T lymphocytes, can directly kill the target cells, auxiliary and inhibition of B cell antibodies and so on. The new member Th17 of T cell subgroup can promote the production of IL-17 factor, it can also stimulate the body to produce inflammatory response, leading to related autoimmune diseases.Studies have shown that, sinomenine novel derivatives 1032 can selectively inhibit the differentiation of Th17 cell, thereby reducing the inflammatory response of autoimmune encephalitis.

Conclusion In recent years, domestic and foreign scholars have shown that sinomenine has anti-inflammatory,immunosuppressive,anti-tumor and other biological activity through a large number of animal experiments and clinical observation studies , for the treatment of chronic nephritis provides a theoretical and practical basis. However, the current market common sinomenine formulations are more single. The scope of application is also concentrated in the rheumatoid joint disease, while the sinomenine itself has the easy decomposition, short biological half-life characteristics, resulting in the use of dose is too large, seriously affecting the convenience of clinical application of sinomenine. We hope that with the drug mechanism research of the sinomenine in-depth progress, the preparation process can be significantly improved, on the occasion the application of sinomenine-related agents in the treatment of chronic nephritis will have a broader prospect.

RESEARCH ON THE EFFECTIVE FRACTION OF SHAOFUZHUYU DECOCTION THROUGH HUMAN PRIMARY END OMETRIOSIS CELLS

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Abstract Endometrial primary cells as in vitro cells can better respond to endometrial physiological activity, the research of uterine-related diseases is of great significance.The endometrial cells were digested by enzymatic digestion, and the endometrial stromal cells and epithelial cells were separated by differential centrifugation and sieve method. Study on the active fraction activity of Shaofuzhuyu Decoction.

Key words: ShaofuZhuyu Decoction, Endometriosis, Primary cell culture.

Objective Cultured human primary endometrial cells were used to observe the efficacy of different administrationfractions of ShaofuZhuyu Decoction.

Materials and methods No phenol red DMEM/F12 medium, Fetal bovine serum, Type IV collagenase, PBS,Penicillin-streptomycin solution,MTT,DMSO, the whole formula of Shaofuzhuyu Decoction,the alcohol sink fraction of shaofuzhuyu Decoction,Shaofuzhuyu Decoction 20% alcohol wash fraction,Shaofuzhuyu Decoction 40% alcohol wash fraction,Shaofuzhuyu Decoction 60% alcohol wash fraction.

Patients from the Second Affiliated Hospital of Heilongjiang University of Traditional Chinese Medicine were treated with strict sterile conditions for the removal of ectopic endometrial tissue. Tissue was immediately placed in 10mL of 1% green-streptomycin-free phenol red DMEM/F12 medium and delivered to the laboratory within two hours.The tissue was retrieved with a Pasteur tube to wash the tissue twice and wash away the remaining blood clots. Cut the tissue into 1mm3 pieces with ophthalmic tweezers and add 10mL of type IV collagenase digestion solution to the carbon dioxide incubator for 1hour and 20minutes. The digested tissue was pipetted into a 15mL centrifuge tube and centrifuged at 3minutes (500rpm). Supernatant mostly is endometrial stromal cells, precipitation mostly is endometrial epithelial cells. The upper fluid was aspirated into a 50mL centrifuge tube by a 40um cell sieve. The filtrate was endometrial stromal cells and the endometrial epithelium was on the filter.Spray 3mL of culture solution with a pipette to rinse the epithelial cells on the filter to a new 50 mL centrifuge tube.The initial centrifugation was suspended in 2mL of cell culture medium and the suspension was again filtered through a 40um cell.Stromal cells and epithelial cells collected in a 50mL centrifuge tube were transferred to a 15mL centrifuge tube, respectively. Endometrial stromal cells were centrifuged at 5min (1200rpm) and endometrial epithelial cells were centrifuged at 5min (1000rpm). Take the original endometrial stromal cells and epithelial cells according to cell count, diluted to 104-105, mixed cells to 200μL per hole in 96-well plate.After 48hours the replacement fluid removed the unattached tissue cells.72hours later, the five drugs