on shoulder joint was 72.0% (18/25), which was superior to that of 40.0% (10/25) in control group.The observation group showed tendency to be more effective than the control group.2. Comparing the two groups subjective feeling of pain rating index (PRI-A) showed statistically significant decreasing intervention curve among the two groups (F=127.196 P<0.001). The observation group expressed after treatment a larger decline than the control group.3. Comparing the total score of pain sensation according to emotional items (PRI-B) between the two groups. Results showed that there was a statistical difference (F=9.776P=0.003) between the two groups, comparing the decline of their respective curve on this issue. The observation group decline more than the control group.4. Comparison between the two groups of the total assessed pain rating index score (PRI, subjective pain feeling item + emotion item). Results after comparing the two groups, showed that there was a statistical difference (F=116.812P<0.001) between the two groups, comparing the decline of their respective curves on this issue. The observation group decline more than the control group.5. Comparison between the two groups according to the rated Visual Analog Scale (VAS) assessed data. Results showed that there was a statistical difference (F=416.263P<0.001) between the two groups, comparing the decline of their respective curve on this issue. The observation group decline more than the control group.6. A comparison of the"Present Pain Index (PPI) between the two groups. Results showed that in the two groups, the decreased curve of PPI-score after the intervention expressed statistical significance(F=5.119P=0.028). The observation group showed a better decline curve than the control group.

Conclusion : From the results of the clinical and experimental researeh, we consider that kinetic acupuncture on distal points of the affected meridians improve the symptom of scapulohumeral periarthritis, but the kinetic acupuncture on distal points of the affected meridians is superior than the shoulder three-needle therapy group. The treatment that giving kinetic acupuncture on distal points of the affected meridians can relieve the pain, improve the function of the shoulder. It has the advantage of low complications, economic and convenience, so the treatment is easily accepted by the patients.

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EFFECTS OF TIMOSAPONINS ON DIABETIC ENCEPHALOPATHYRATS INDUCED BY STREPTOZOTOCIN

XiaLei *, HaiyanLiu g, XiaolinSu,Yuan Li ,

Hei Long Jiang University of Traditional Chinese Medicine,No.39 Guang Hua Street Qiang Jin District Jia Mu Si 154100 P.R.China

E-mail address: leixia2006@163.com(Xia Lei); haiyangliu2015@163.com(Haiyang Liu); 1550706973@qq.com(Xiaolin Su); 1521058991@qq.com(Yuan Li)∗Corresponding Author. Tel.:+8618045454111; Fax:0454-8782701

BACKGROUND:Many synthesized drugs used for diabetic encephalopathy (DE) treatment with clinical severe side effects. Therefore, it is urgent and necessary to identify natural and safe agents to remedy DE. Total timosaponin(TT) isone kindof major constituent in Anemarrhena asphodeloides Bunge which is widely used in traditional Chinese medicine[1, 2]. Timosaponinexhibits various activities, including anti-inflammatory[3, 4], hypoglycemic[5]and therapeutic effect on cognitive and behavioral impairment[6], calcium mobilization in vascular endothelial and smooth muscle cells[7], anticancer[8, 9],antiplatelet and antithrombotic[10]. However, the anti-DE effects and potential mechanism(s) of TT have not been previously reported.

OBJECTIVE:To observe the changes of hippocampal NF-κB pathway in streptozotocin (STZ)-induced diabetic mice treated with TT, and explore the relationship between hypoglycemic and therapeutic effect of behavioral impairment, and weather has relationship with anti-oxidative and anti-apoptosis. To investigate the treatment mechanism of TT against DE is to provide experimental basis for treating complication of diabetes in clinical.

METHODS: TT was isolated from A. asphodeloides Bunge using macroporous adsorption resin and preparative high-performance liquid chromatography. Balb/C mice was intraperitoneal injection with STZ 60, 80, 100mg·kg-1in three consecutive days respectively. The mice which was selected fasting blood glucose higher 16.67mmol·L-1received TT 100mg·kg-1 by gavage after 35 days The effect of TT on behavior changes was evaluated using morris water maze 90 days later. Blood glucose level was measured by rapid blood sugar device, colorimetric methodwas used to measure malondialdehyde (MDA) and dehydrogenase (LDH), ultraviolet spectroscopywas used to measure superoxide dismutase (SOD) and Griess to measure nitric oxide (NO)level. An ELISA assay kit was used to measure inflammatory cytokines interleukin-6(IL-6) and tumor necrosis factor-alpha(TNF-α) and hematoxylin and eosin(HE)dye to observe brain histopathological change. The expression of Bax, Bcl-2and nuclear transcription factor-kappaB (NF-κB) protein was also measured using Western blot analysis.

RESULTS:Morris water maze behavioral test showing TT protective effects on learning and memory abilities injury. Compared to model group,TT reduced the escape latency time in the training trial and increased the swimming time in the target quadrant in the probe trial. TT significantly decreased the blood glucose levels and ameliorated hippocampus histopathological injury byHE method. TT treatment notably decreasedMDA which are key biomarkers of brain oxidative stress and attenuated the reduction ofLDH. lactate levels, and enhancedSODavtivity and NO level.

TT significantly inhibited TNF-α, IL-6 and NF-κB in the cerebral cortex and hippocampus of mice. In addition, compared to model group, TT significantly downregulated the expression of Bcl-2, and upregulated the expression of Bax.

CONCLUSION:The results revealed that TT exhibited a prominently ameliorative effect on learning and memory ability may have relationship with TT plays an important role in anti-oxidative and anti-apoptosison STZ-induced DE mice via NF-κB signaling pathways.

Key Words: Diabetic encephalopathy, Total timosaponin, Oxidative, Apoptosis

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CLINICAL STUDY ON THE EFFECT OF ACUPUNCTURE ON SERUM PAPP-A IN 102 ACUTE CEREBRAL INFARCTION PATIENTS

Xiaowei Sun1, Mengtong Leng2, Yanqiu Li1, Hao Liu2, Hongtao Li

(1.The First Affiliated Hospital of Heilongjiang University Of Chinese Medicine, Harbin, 150040; 2.Heilongjiang University Of Chinese Medicine, Harbin, 150040)

Objective In this study, acute cerebral infarction patients with carotid atherosclerotic plaque as research object, on the basis of routine therapy combined with scalp and body acupuncture, by ultrasound technique to measured the carotid plaque, and combined with the changes of biochemical parameters of serum PAPP-A, compared with the difference of cerebral infarction area between the two groups after treatment and changes in activities of daily living of patients, to explore the possible mechanism of acupuncture against atherosclerosis and cerebral infarction, aim to provide scientific evidence for clinical acupuncture treatment of carotid atherosclerotic cerebral infarction.

Methods According to the selected conditions[1-2] to select the first onset, 102 cases of acute cerebral infarction with carotid atherosclerotic plaques by Carotid artery ultrasonography and Cranial CT, the patients were randomly(Random number table method) divided into acupuncture group (n = 51) and control group (n = 51). The baseline data of the two groups were consistent, and no significant difference($P > 0.05$). At the same time, 20 outpatients of physical examination from the First Affiliated Hospital of Heilongjiang University Of Chinese Medicine were selected as normal controls.

Conventional control group: Give the routine drug therapy of acute carotid atherosclerotic cerebral infarction. Defibrin 10BU, 5BU, 5BU, regular rest, totally 3 times; Ozagrel sodium 80mg, twice a day, treatment for 1 week; Shuxuening 20ml, once a day, after 2 weeks of treatment use Mai Xue Kang Capsule instead(Chongqing dopter pharmaceutical Limited by Share Ltd), 4 grains / times, three times a day oral, continue treatment for 2 weeks. Acupuncture group: On the basis of the above treatment,acupuncture treatment about Scalp and body acupuncture once a day[3], for 4 weeks. Normal control group: Only collecte the elbow vein blood to detect the serum PAPP-A without any treatment.

Using Enzyme linked immunosorbent assay(ELISA) before treatment, 3d, 7d, 14d, 28d after treatment, batch inspection the serum PAPP-A concentration in 102 cases, and compared with normal control group(Operation according to the kit instructions). Cranial CT scan was used to detect the changes in the size of cerebral infarction in 102 patients before