the TRP proteins was found in the UniProt database in http://www.uniprot.org/ and compared their sequences and 3-D structures using the RCSB PDB using the Analyze Option Sequence and Structure Alignment option (http://www.rcsb.org/pdb/home/home.do. Modeling of 3D structures of TRP proteins was carried out on the SWIS-MODEl server on homology with template proteins. As of July 2016g. The UniProt database includes 1922 descriptions when requesting a transient receptor potential cation. Of this number, 122 refer to human proteins. In the NCBI Protein database, respectively, 10730 and 424 descriptions are identified with a similar query. TRP proteins contain from 700 to 2,000 amino acid residues: TRPM8-1104, TRPA1-1119 and TRPV1-839. The specific specificity of TRP proteins decreases in the direction of TRPA1> TRPV1> TRPM8. In the databases of 3D protein structures - PDB and PDB Europe, there are only single descriptions of 3D structures of TRP proteins established by X-ray crystallography, NMR spectroscopy and cryoelectron microscopy - 30 (9) and 43 (13), respectively. When carrying out structural alignment, it is established that the similarity of 3D structures is more pronounced within a single family than between representatives of different families. In particular, 3D structures TRPV1 and TRPV2 are identical by 36% and are similar to 52%, and TRPA1 and TRPV1 are only 11% and 25%, respectively. Due to the fact that the description of the 3D structure of TRPM8 in the bases of 3D structures of proteins is missing, we generated the 3D structure of its monomer, using TRPV2 as template (ID 5hi9.1.A). The identity of the TRPM8 sequences and the template was 18%, and the similarity was 28%. The model is generated for section 429-1055 AMK, coverage rate is 43%. The establishment of 3D structures of TRP proteins is extremely important for the creation, using computer design, targeted drugs intended to affect these proteins. A special TRP protein base (TRIP) has been created that contains comprehensive information on protein-protein interactions in TRP channels by categories of screening, evaluation, characterization and functional consequences [7].

REFERENCES

1. Eugene A. Borodin, Anna G. Prikhodko, Mikhail A. Shtarberg, Leonid G. Nahamchen, Evgeniya Yu. Afanasyeva, Victor P. Kolosov and Juliy M. Perelman Dynamics of lipid peroxidation in the exhaled breath condensate in healthy people during hypo- and hyperosmolar bronchial provocation tests Eugene A. Borodin, Anna G. // Der Pharma Chemica. 2016. Vol. 8, №14. P.169-173.

2. Perelman J., Prikhodko A., Nakhamchen L., Borodin E., Kolosov V., Shtarberg M. Dynamics of lipid peroxidation products in exhaled breath condensate in asthmatics in response to dosed physical exercise // Eur. Respir. J. 2016. Vol. 48: Suppl. 60, PA2213.

3. Perelman J.M., Prihodko A.G., Borodin E.A., Shtarberg M.A. Dynamics of lipid hydroperoxides, vitamin E and ceruloplasmin in the blood serum of patients with asthma in response to inhalation of distilled water // Respirology. 2016. Vol. 21, Suppl. 3. P. 170-170.

4. Pirogov A.B., Prikhodko A.G., Perelman Ju.M., Borodin E.A., Naumov D.E., Zinovyev S.V. Shtarberg M.A. Pecularities of airway inflammation and lipid peroxidation in the development of hyperosmic airway hyperresponsiveness in patients with asthma // International Journal of Biomedicine. 2016. T. 6. №4. C. 259-264.

5. Prikhodko A.G., Borodin E.A., Shtarberg M.A., Perelman J.M.,Ulyanychev N.V., Naumov D.E. Interdual variability of lipid peroxidation in the condensate of exhaled air in patients with bronchial asthma // Clinical laboratory diagnostics (Moscow). 2016. Vol. 61, No. 9. P. 547-547. DOI: 10.18821 / 0869-2084-2016-61-9. Denis Naumov, Juliy Perelman, Anna Prikhodko, Victor Kolosov, Elizaveta Sheludko Role of TRPV1 and TRPV2 gene polymorphisms in the development of airway hyperresponsiveness to osmotic stimuli in patients with asthma// European Respiratory Journal 2016 48: PA1197; DOI: 10.1183/13993003

6. http://www.trpchannel.org/

DOI 10.22448/AMJ.2017.3.19-20

THE MECHANISM OF ELECTROACUPUNCTURE IN IMPROVING MEMORY DYSFUNCTION IN OVARIECTOMIZED RATS

BoZhang

Institute of Chinese Medicine, Heilongjiang University of Chinese Medicine. E-mail: hljzyyzb@sina.cn

Objective:The model of memory dysfunction induced by ovariectomy resulted in estrogen deficiency was established in this research in order to observe the improvement effect of electroacupuncture on Baihui, Shenshu, Housanli by tonifying kidney. And the mechanism of electroacupuncture on improving memory dysfunction induced by ovariectomy was explored to demonstrate the mechanism of the electroacupuncture by tonifying kidney and to provide the strategy for treatment of memory impairment caused by low estrogen level.

Methods:The rats were randomly divided into 5 groups, sham group, model group, electroacupuncture (EA) group, non-acupoint group and E2 group. Ratswere all ovariectomized except sham group. EA group refers to acupuncture onBaihui, Shenshu, Housanli, and non-acupoint group was treated with acupuncture on 1/3 of rat root of tail. Besides, the E2 group was given intragastric estradiol valerate till the end of behavioral test. Then the blood was collected and brain was separated, for serum E2 assay and detection of the expression of protein in the CA1 area of the hippocampus, respectively. The serum E2 level was determined by ELISA. And the expression of ERα, BDNF and TrkB in hippocampus CA1 region was detected by immunohistoch-emical assay and western blot.

Results:Morris water maze experiment results showed that the avoidance latency time of rats in model group was longer and the number of crossing platforms was decreased, and in the EA and E2group, the avoidance latency was shortened and the number of crossing platforms was increased. The serum E2 level of rats in model group was significantly reduced and that of EA and E2group

was elevated.Immunohistochemical staining results showed thatthe ERα content of hippocampal CA1 area in model

group was decreased, but it was increased in EA andE2group. The BDNF protein in hippocampal CA1 area of rats in model group was decreased in both immunohistoc- hemical staining and western blot assay, which showed increasedBDNF expression in EA group. Interestingly, TrkB expression was unchanged in EA group in immunohistochemical staining, but it was found increased expression in western blot assay, while it showed decreased expression in model group.

Conclusions:Ovarian removal inhibited the expression of ERα, BDNFandTrkB protein in hippocampus CA1 region and decreased the learning and memory ability of rats. Acupuncture can improve the learning and memory ability of ovariectomized rats by up-regulating the BDNF/TrkBpathway expression in the hippocampal CA1 region, which is one of the mechanisms of acupunc- ture on improving the memory dysfunction in ovariectomized rats.

DOI 10.22448/AMJ.2017.3.20-21

EFFECT OF SHIWEI-WENDAN DECOCTION ON 5- HYDROXY TRYPTOPHAN SYNDROM MICE MODEL INDUCED BY 5-HYDROXY TRYPTOPHAN

Chai Jianbo，**Qu Miao**，**Guan Zihe**

Heilongjiang university of Chinese medicine haerbin Addresses: No. 24 Heping road, Harbin, heilongjiang province
Email:cjb777@126.com

Abstract Objective：To observe the effect of Shiwei-Wendan decoction on 5 hydroxy tryptophan syndrom mice model induced by 5 hydroxy tryptophan,To discuss the role of related to 5 - HT receptor of Shiwei-Wendan decoction.Methods：P-argyline hydrochloride subcutaneous injection combined 5 - hydroxy tryptophan abdominal cavity injection method to establish 5 - HT syndrome model in mice,to observe the shaking the head times after Shiwei-Wendan decoction interfere,and comparing with haloperidol.Result and Couclusion：Shiwei-Wendan decoction can obviously reduce the times of Schizophrenia 5-HT syndrome model mice'shaking head reduced by 5-HTP and improve the 5-HT symptoms of schizophrenia.

Key words：Shiwei-Wendan decoction；Schizophrenia ；5-HTP；5-HT syndrome

This study aims to through the establishment of schizophrenia 5-HT syndrome model caused by 5-HTP, study the effect of Shiwei-Wendan decoction on related behavior of schizophrenia model and provide the basis and the reference for related studies.

1 Experiment Materials

1.1 Drug and preparation

1.1.1 Building medicine Pargyline hydrochloride provided by SIGMA, batch number： 20140511；5 - hydroxy tryptophan (5-HTP) provided by Merck, batch number： 20140511.

1.1.2 Control drug Haloperidol provided by the Aladdin reagent factory, 2 mg/piece, batch number：20141102. Haloperidol group clinical adult dose (2 mg/70kg), equivalent dose of 0.26 mg/（kg.d) converted into mice.Haloperidol tablets at the end of the research into distilled water mixture concentration is 0.013 mg/ml suspension,the bottle seal 4℃ temperature refrigerator to the next time.

1.1.3 Subjects drugs Shiwei-Wendan decoction(pinellia 15g,acid -insoluble ash 10 g ,dried tangerine or orange peel 15g, tuckahoe 15g, liquorice 10 g,semen ziziphi spinosae 15 g, polygala 10 g, ginseng 15g,rehmannia glutinosa 15g,-fructus schisandrae 15 g) .

1.2 Experiment animal kunming species mice,clean level,male,the weight of 25 to 30 g, heilongjiang university of Chinese medicine SCXK (black),batch number:2013-004.

2 Experimental Method

2.1 Grouping and drug delivery 30 male KM mice were randomly divided into model group, Shiwei-Wendan decoction group and haloperidol group,each 10,In addition to the model group was given distilled water, the rest of the group are to fill the stomach subjects drugs of the same volume,0.4ml/20g,2 times/d,continuous dosing.

2.2 Building dosing and measure before the experiment ,Groups of mice can eat food but not drink water about 12 hours,before and after lavage 3、10 d ,Pargyline hydrochloride subcutaneous injection of 75 mg/kg,after 1 hour to lavage above every medicine (before drug delivery to determine but not to fill medicine ,others the same),Again after an hour the intraperitoneal injection of 5-hydroxy tryptophan about 20 mg/kg, groups of parallel operation,The mice'shaking the head behavior is observed after 25 min,To glance shaking the header record 5 minutes.

2.3 Data processing All the data using SPSS 17.0 statistical analysis software .

3 Results