24/10/2012 - Effects of acupuncture at “Zusanli” (ST 36) on eosinophil apoptosis and related gene expression in rats with asthma

OBJECTIVE:

To observed efficacy differences of acupuncture at “Zusanli” (ST 36) in rats with asthma and asthma with spleen-deficiency, so as to investigate the therapeutic mechanism.
METHODS:

Sixty SD rats were randomly divided into 5 groups according to their weight, named as an asthma with spleen-deficiency group (group A), an acupuncture on asthma with spleen-deficiency group (group B), an asthma group (group C), an acupuncture on asthma group (group D) and a control group. The rat models with spleen-deficiency in the first two groups were set up by TCM, then the rats of asthma model in the first four groups were induced by egg albumin, but the control group was treated by the same dose of saline. The group B and the group D were both treated with acupuncture at “Zusanli” (ST 36), once each day for 8 days, and the other groups remained untreated. The mRNA expressions of Fas and Bcl-2 in the lung tissues were detected by hybridization in situ and apoptosis was detected by TUNEL (terminal deoxynucleotidyl transferase-mediated dUTP nick end labeling).

RESULTS:

Compared with the control group, in both the group A and the group C, the expression of Fas mRNA significantly decreased, but the expression of Bcl-2 mRNA significantly increased (all P < 0.01), and eosinophils (EOS) counts significantly decreased, but EOS apoptosis rate significantly increased (all P < 0.01). There were no significant differences in the expressions of Fas mRNA and Bcl-2 mRNA between the two acupuncture groups (both P > 0.05), but compared with group B, in the group D, EOS counts significantly decreased and EOS apoptosis rate significantly increased (both P < 0.01).

CONCLUSION:

Acupuncture at “Zusanli” (ST 36) can regulate the disorders of Fas mRNA and Bcl-2 mRNA expression in the state of both asthma and asthma with spleen-deficiency, promote EOS apoptosis so as to inhibit the development of inflammatory reaction of asthma, showing that acupuncture at “Zusanli” (ST 36) has certain advantages on regulation of related gene of EOS in asthma with spleen-deficiency.

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Upcoming Events

November 16-18 - Indonesia
WFAS International Conference & Workshop on Acupuncture
When: 16 - 18th November 2012
Where: Badung, Indonesia
Contact: http://wfas2012-indonesia.com/

November 29 - Sydney
Kiiko Matsumoto - Fertility Lecture
When: 4:00 pm - 7.00pm, Where: Embassy Conference Centre, 826 George Street
Contact: Qiology on +61 405 044 576 or info@qiology.com.au
This is a multi-day event ending on the 29/11

November 30 - Sydney
Kiiko Matsumoto - Treating the Dan Tien
When: 9.00am - 5.00pm, Where: Embassy Conference Centre, 826 George Street
Contact: Qiology on +61 405 044 576 or info@qiology.com.au
This is a multi-day event ending on the 01/12