Auricular acupuncture in patients with bronchial asthma and anxiety disorders

Şincarenco Irina, State University of Medicine and Pharmacy "Nicolae Testemiţanu", Department of alternative and complementary medicine **Lacusta Victor**, State University of Medicine and Pharmacy "Nicolae Testemiţanu", Department of alternative and complementary medicine **Cereș Victoria**, State University of Medicine and Pharmacy "Nicolae Testemiţanu", Department of alternative and complementary medicine **Gîlea Angela**, State University of Medicine and Pharmacy "Nicolae Testemiţanu", Department of alternative and complementary medicine

Introduction

Anxiety disorders in patients with bronchial asthma have a negative impact on their quality of life and create difficulties in treatment. Currently, for this category of patients, different variations of acupuncture are indicated, along with the application of psychotropic remedies.

Keywords

Bronchial asthma, anxiety, autonomic tonus, acupuncture.

Purpose

The study of auricular acupuncture's anxiolytic effect in patients with bronchial asthma, depending on the predominance of sympathetic / parasympathetic autonomic tonus.

Material and methods

Vein's diagnostic tables (autonomic disorders), Spielberger-Hanin questionnaire (anxiety levels), spectral analysis of cardiac rhythm (autonomic tonus) were applied.



Patients were divided into 2 groups: I – sympathetic (n=24), II – parasympathetic (n=24).

The following acupoints were stimulated: Lung, Sympathetic Nervous System, Shenmen, Zero.

The Student's t-test was applied for coherent selections.

Results

Anxiety levels before treatment: group I – 51,13±2,19 points, group II – 48,8±3,15 points. After applying AA, anxiety levels had significantly dropped (p<0,01) compared to indexes before treatment (group I - Δ 1, group II - Δ 2), at all stages of the investigation: after the first procedure Δ 1 = -8,58, Δ 2 = -6,0; after a 10-day treatment Δ 1 = -15,5, Δ 2 = -18,17; over 30 days after completing the treatment Δ 1 = -15,25, Δ 2 = -18,42. The autonomic equilibrium indexes (LF/HF) at each phases of investigation had pronounced tendencies of normalization at the end of the treatment (10 days), being statistically significant (p<0,05).

Table 1. Manifestation of anxiety indices (in points) in patients with bronchial asthma under the influence of auricular acupuncture

Group	Before treatment	After the first procedure		After a 10-day treatment		Over 30 days after completing the treatment	
	M±m	M±m	Δ	M±m	Δ	M±m	Δ
Ì	51,13±2,19	41,75±3,33	-6,00**	32,25±3,38	-15,50***	32,50±2,40	-15,25***
II	48,8±3,15	43,67±2,33	-8,58***	34,08±1,91	-18,17***	33,83±1,73	-18,42***

Note. Δ - the difference from the initial data before the treatment; * - the authenticity of the distinctions compared to the initial data before the treatment according to the T-Student criterion for coherent selections (* - p <0.05, ** - p <0.01, *** - p <0.001).

Conclusions

In patients with bronchial asthma, AA had a moderate effect on autonomic system and a pronounced anxiolytic effect indifferent of the predominance of the autonomic tonus (sympathetic / parasympathetic). The obtained effects were maintained in the following 3-4 weeks.