

PW01-218 - APOPTOSIS OF LYMPHOCYTES IN ALCOHOLIC PATIENTS DURING WITHDRAWAL SYNDROME THERAPY

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Objective: Aim of this investigation was to study processes of apoptosis in lymphocytes in alcoholic patients during withdrawal syndrome with method of microwave resonance therapy (MRT).

Methods: 30 men 31-57 years old with alcoholism (average course of disease was 15 years) were examined along with 30 healthy age-matched men. Examination of alcoholics was carried out in dynamics: at admission of patients with severe withdrawal syndrome (point 1) and after 2 week treatment (point 2). Expression of FAS receptors on lymphocytes was assessed using an indirect immunofluorescence microscopy with monoclonal antibodies to CD95 antigen. The proportion of cells with signs of apoptosis was evaluated by light microscopy of blood smears in terms of morphological changes typical of apoptosis in lymphocytes.

Results: The relative content of bloodstream lymphocytes expressing receptors of readiness to Fas-dependent apoptosis (CD95) in alcoholics with severe withdrawal syndrome and after their treatment (16, 32±1,39% and 15,43±5,12% respectively) exceeds analogous index in healthy men (12,00±0,77%, $p < 0,05$). Percentage content of apoptotic lymphocytes in alcoholic patients was 2,68±0,46% before treatment and 2,15±1,93% after treatment (0,97±0,35% in controls, $p < 0,05$). It has been found that index of apoptosis realization was significantly decreased in alcoholic patients after the treatment in comparison with those before treatment (13,44% and 21,03% respectively).

Conclusion: According to obtained results it may be assumed that alcohol increases readiness of lymphocytes to apoptosis but activation of mechanisms controlling and limiting the processes of programmed cell death during the therapy results in decrease of apoptosis realization index in alcoholic patients.