

## **EFFICACY OF LASER THERAPY IN PATIENTS WITH BRONCHIAL ASTHMA: BIOAMINE RESPONSE**

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This study examined bioamines in peripheral blood cells of 334 patients with bronchial asthma. Laser therapy alone was used in 110 patients, laser therapy in combination with conventional drug therapy (CDT) in 100, drug therapy alone in 65 and specific hyposensitization in 65 patients.

Bioamines were examined in finger blood smears. Catecholamine (CA) levels were measured using a Krochina modification of the Falk and Hillarp test and histamine (H) levels using the method of Gros, Ewen and Rost.

Pretreatment examination of patients with bronchial asthma revealed significantly increased histamine levels and sensitization in all peripheral blood cells, especially prominent in basophils, eosinophils, platelets, monocytes and lymphocytes; CA levels in these cells were lower than in normal controls. Laser therapy decreased histamine and increased CA levels in neutrophils. Normalisation of CA levels in patients with atopic asthma was faster as compared to patients with bacterial asthma. Specific hyposensitization regimens were also associated with a decrease in histamine and increase in catecholamine levels in these cells. Bioamine levels in cells of patients who received conventional drug treatment alone returned to normal 10-15 days later as compared to other groups.

This study suggests that inclusion of laser therapy in management of patients with bronchial asthma helps normalisation of bioamine levels in peripheral blood cells.