

INCREASE OF BETA-ENDORPHIN PLASMA LEVEL AS A POTENTIAL MARKER OF POSITIVE RESPONSE TO TREATMENT OF DEPRESSION

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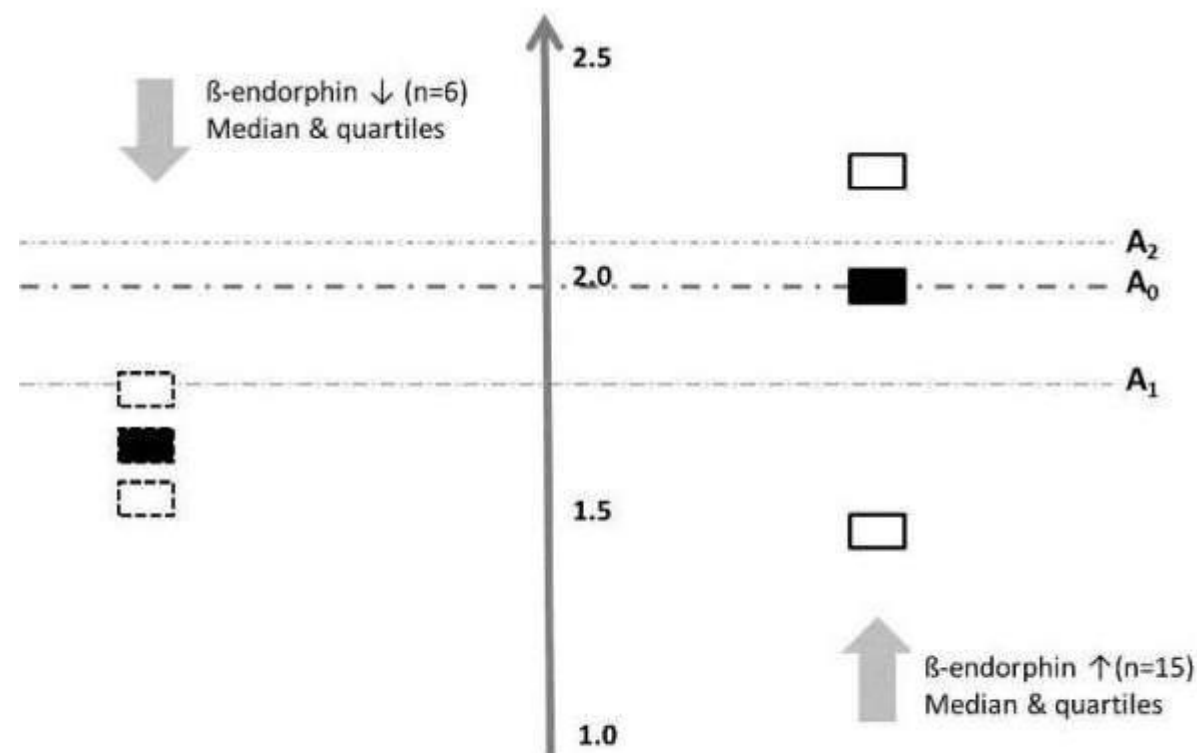
Introduction: There are new materials in looking for objective tools of mental conditions of depression patients. Grant of Russian humanitarian scientific fund: 11-06-00869.

Objectives: 21 patient (7 male; 14 female; mean age - 38.2 years).

Aims: Assessment of beta-endorphin concentration in peripheral blood in patients with mild and moderate unipolar depression. Implementation of this parameter as a marker of treatment efficacy.

Methods: Ethically approved prospective study; HDRS; ELISA; statistical analysis

Results: Changes in beta-endorphin level appeared to be more significant marker than peptides` absolute level. Degree of beta-endorphin changes and degree of HDRS score changes were significantly correlated ($p=0.009$; Spearman correlation coefficient $\rho = -0.6$). Individual change was calculated as ratio of previous value divided by subsequent value. Therefore, higher increase of beta-endorphin concentration was associated with higher decrease in HDRS score. Figure.



Extent of decrease in expressiveness of a depression by HDRS

[Figure]

A₀ - mean HDRS sample score (n=21); A₁ - mean HDRS score in patients with beta-endorphin decrease (n=6); A₂ - mean HDRS score in patients with beta-endorphin increase (n=15).

Conclusion: Preliminary data show that increase in beta-endorphin plasma level in patients with non-psychotic unipolar depression after 2 weeks of treatment is associated with positive response to treatment.