Venlafaxine and mirtazapine treatment lowers serum concentrations of dehydroepiandrosterone-sulfate in depressed patients remitting during the course of treatment.

Abstract:

OBJECTIVES: The adrenal androgen dehydroepiandrosterone-sulfate (DHEA-S) seems to be involved in the pathophysiology of depression, although its precise role in the etiology and remission of depression remains unclear. In the present study we intended to examine possible differential effects of venlafaxine and mirtazapine in a randomised open trial with regard to DHEA-S serum concentrations in patients suffering from major depressive episode compared to healthy controls.

METHODS: We assessed DHEA-S concentrations both at baseline and after a 4-week treatment period in 70 depressed patients (n=33 for venlafaxine and n=37 for mirtazapine) and 33 matched healthy controls.

RESULTS: We describe the decrease of DHEA-S levels in depressive patients who remitted after treatment with both venlafaxine or mirtazapine. Patients without remission of depression did not show a significant decline in DHEA-S concentrations.

CONCLUSIONS: Our results suggest an effect of treatment outcome upon DHEA-S concentrations rather thana direct drug effect. The change of plasma DHEA-S levels as a marker of treatment-response of depression warrant further investigation.