

Depressive symptoms are associated with higher morning plasma cortisol in primary care subjects

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Abstract

BACKGROUND:

Cortisol dysregulation has a potential role in depression.

AIM AND METHODS:

We evaluated depressive symptoms using the Hamilton Rating Scale for Depression in 48 primary care subjects without history of previous or current depression and its association with cortisol dysregulation (morning plasma cortisol, 24-hour urinary free cortisol and cortisol metabolites). Presence of metabolic syndrome and inflammatory parameters were also assessed.

RESULTS:

Hamilton Rating Scale for Depression correlated significantly with morning cortisol, but not with urinary free cortisol or metabolites. A significant increase in morning cortisol by Hamilton groups (asymptomatic ≤ 8 ; mild to moderate: 9-18; moderate to severe: ≥ 19) was observed even when adjusted by age/gender. We observed no association of depressive symptoms with metabolic or inflammatory parameters.

CONCLUSION:

Depressive symptoms in primary care subjects not consulting for their mood are associated with higher morning plasma cortisol, but not urinary cortisol or its metabolites. These observations suggest that systemic hypercortisolism and related metabolic disorders are not observed in mild/initial states of depressive disorders.