

## DEPRESSION IN THE PERIPARTUM PERIOD IN ASSOCIATION WITH SALIVARY CORTISOL LEVELS

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**Introduction:** The Hypothalamic-Pituitary-Adrenal Axis (HPA axis) has been implicated in the pathogenesis of many affective disorders. Peripartum depression is a condition that includes depressive episodes occurring during pregnancy and the postpartum period. During uncomplicated pregnancy, mean cortisol levels rise substantially, mostly due to high levels of corticotropin releasing hormone produced by the placenta (p-CRH). The latter also suppresses hypothalamic CRH, leading to hypo-cortisolemia after partus. Cortisol concentration is usually normalised within two weeks after delivery. Failure of the above process results in continuing hypo-cortisolemia, which might increase susceptibility to PPD.

**Objectives/aims:** The current study aims to investigate the relationship between evening salivary cortisol levels and depression during the peripartum period.

**Methods:** Three hundred and forty six pregnant women were asked to participate in the study. They completed the Edinburgh Postnatal Depression Scale (EPDS) and the Spielberger State-Trait Anxiety Inventory-State version (STAI-S) at the 36<sup>th</sup> week of pregnancy and the 6<sup>th</sup> week after delivery. At both times, study subjects were also asked to collect evening salivary samples by using a mail-delivered kit. Moreover, they were interviewed at the 36<sup>th</sup> week of pregnancy using the Mini International Neuropsychiatric Interview (MINI).

**Results:** Preliminary results indicate significantly higher evening salivary cortisol levels in depressed women during late pregnancy compared to healthy controls. No difference in cortisol levels was found between women with postpartum depression and healthy controls.

**Conclusions:** Our study results support the hypothesis that depression during pregnancy resembles melancholic depression characterized by hyperactivity of the HPA-axis and hyper-cortisolemia.