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DIURNAL PATTERN OF CORTISOL AND AMYLASE OUTPUT IN POSTNATAL DEPRESSION

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Objective: This study investigated the diurnal output of saliva cortisol and saliva amylase in women with symptoms of depression postnatally.

Method: Twenty one depressed and 30 non depressed women at 7.5 weeks postpartum, and 21 non perinatal controls, collected saliva at waking, 30 minutes, and three and twelve hours post waking.

Results: Women who were not depressed postnatally showed a pattern of cortisol secretion over the day similar to non perinatal controls. There was a significant difference in diurnal pattern between postnatally depressed and postnatally non depressed women, due to a difference in the first two time points (waking and +30 mins): compared to the other two groups who each had a significant increase in cortisol levels from waking to +30 minutes, the depressed women had significantly higher cortisol levels at waking and no increase at +30 minutes. Analyses of amylase are underway and will be presented.

Conclusion: The lack of a morning rise in the depressed women is similar to that reported for Post-traumatic Stress Disorder and chronic fatigue syndrome and may reflect a response, in vulnerable women, to the marked cortisol withdrawal that occurs after delivery. Alternatively it could be a trait marker for women at risk of developing postnatal depression.