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HORMONES IN THE IMMEDIATE POSTPARTUM PERIOD AS A RISK FACTOR FOR POSTNATAL DEPRESSION, AT TWO MONTHS POSTPARTUM

A.A. Leonardou<sup>1</sup>, F. Boufidou<sup>1</sup>, I. Zervas<sup>1</sup>, C. Nikolaou<sup>1</sup>, I. Lambrinou<sup>2</sup>, C. Papageorgiou<sup>1</sup>, G. Christodoulou<sup>1</sup>, G. Papadimitriou<sup>1</sup>

<sup>1</sup>1st Department of Psychiatry, Athens University Medical School, Eginition Hospital, <sup>2</sup>2nd Department of Obstetrics and Gynecology, Athens University Medical School, Areteion Hospital, Athens, Greece

**Introduction:** Postnatal depression is a serious disorder affecting 10-20% of postpartum women. It has a negative impact on the whole family system and on the child's development.

**Objectives:** It is important to identify possible risk factors for PND, due to its frequency and severity. It has been hypothesized that the hormonal fluctuations of the immediate postpartum period could be a risk factor for the appearance of PND.

**Aims:** This study aimed at inquiring the possible correlation of hormonal parameters in the 1<sup>st</sup> week postpartum with the appearance of PND.

**Methods:** 95 postpartum women were recruited, in the process of validating the Greek EPDS. Of them, 40 consented to give blood on the second postpartum day, so that the plasma levels of TSH, T4, T3, FSH, LH, Progesterone, Estradiol, Prolactin and Cortisol were measured. 81/95 women consented to be reassessed at 8 weeks postpartum, and 10/81 were diagnosed with depression, major or minor. Plasma levels of the hormones were correlated with the diagnosis of PND and with the EPDS.

**Results:** Women who suffered from PND did not differ from the non-PND subjects in the levels of all measured hormones. There was a statistically significant negative correlation of the levels of prolactin with the EPDS on the second postpartum day ( $p < 0.001$ , correlation coefficient -0.56).

**Conclusions:** Our study failed to show a definite correlation of the hormonal levels in the immediate postpartum period with PND. In other studies the role of hormones in the appearance of PND remains as well questionable.