

**MATERIŁY
XIII MIĘDZYNARODOWEJ NAUKOWI-
PRAKTYCZNEJ KONFERENCJI**

NAUKA I INOWACJA - 2017

07 -15 października 2017 roku

Volume 5

Przemyśl
Nauka i studia
2017

Adres wydawcy i redacji:
37-700 Przemyśl,
ul. Łukasińskiego 7

Materiały XIII Miedzynarodowej naukowi-praktycznej konferencji „Nauka i innowacja - 2017» , Volume 5 Przemyśl: Nauka i studia -96 s.

Zespół redakcyjny:
dr hab.Jerzy Ciborowski (redaktor prowadzą),
mgr inż Dorota
Michałowska, mgr inż Elzbieta Zawadzki,
Andrzej Smoluk, Mieczysław
Luty, mgr inż Andrzej Leśniak,
Katarzyna Szuszkiewicz.

**Materiały XIII Miedzynarodowej naukowi-praktycznej konferencji
„Nauka i innowacja - 2017» , 07 -15 października 2017 roku po sekcjach:**

e-mail: praha@rusnauka.com

Cena 54,90 zł (w tym VAT 23%)

ISBN 978-966-8736-05-6

© Kolektyw autorów , 2017

© Nauka i studia, 2017

MEDYCYNA
Położnictwo i ginekologia

PhD of Medical Science, A.P., Syusyuka V.G.

State Medical University of Zaporozhye

**LEVEL OF ANDROGENS OF PREGNANT WOMEN WITH
PSYCHOEMOTIONAL STATE DISORDERS STIPULATED BY ANXIETY**

Steroid hormones have every important role in human life. During pregnancy they maintain normal course of gravidarum process: they regulate carrying out of vital functions of women's organism, have influence on growth and fetus formation, development of labor process [2]. It is known that during pregnancy functional activity of the adrenal glands increases and it is connected with secretion of placental adrenocorticotropic hormone (ACTH) and cortisol-like substances [5]. Hormones of adrenal cortex are important in the stress reactions of organism and they are the main component of adaptation system. Levels of the main androgens generated by adrenal cortex significantly change depending on metabolic changes which are observed during pregnancy [4].

Object of the research – assess the level of androgens of pregnant women with regard to their psychoemotional state.

Group of examined women and methods of research

There were examined 86 pregnant women in II and III trimester (28.2 ± 0.64 weeks). The main group comprises 60 pregnant women with medium and high level of state anxiety. The control group comprises 26 Pregnant women with anxiety level of 30 points and less, it stipulates the low level of state anxiety. For estimation of the state anxiety and trait anxiety the scale of Spielberger-Hanin was used [1, 3].

Quantitative assessment of concentration of adrenocorticotropic hormone (ACTH), free testosterone (T), androstenedione (A) and 17- α -OH-progesterone (17-OHP) in blood plasma was determined by method of enzyme immunoassay with SIRIO S device.

Results of the research and their discussion

Comparing concentrations of ACTH and 17-OHP there was not revealed statistically reliable difference ($p > 0.05$) between pregnant women with medium-high and low levels of state anxiety (SA). Comparing level of A and T with regard of SA as in case of ACTH and 17-OHP, there was not revealed statistically reliable difference ($p > 0.05$) between pregnant women with medium-high and low levels of SA (Fig. 1).

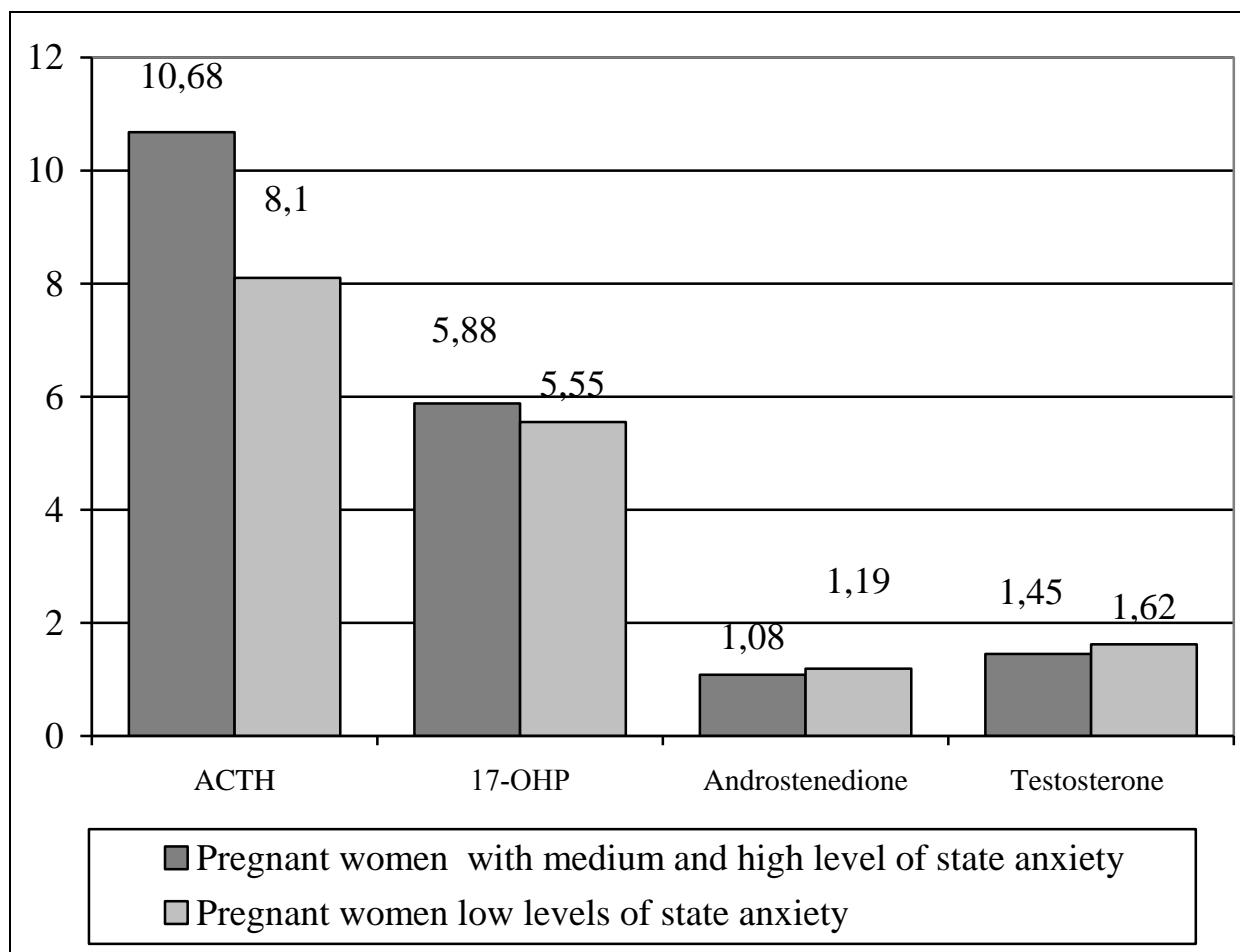


Fig. 1. The level of androgens in pregnant women in study groups

Comparing concentrations of adrenocorticotrophic hormone, 17- α -OH-progesterone, free testosterone, androstenedione, there was not revealed statistically reliable difference ($p > 0.05$) between pregnant women with medium-high and low levels of state anxiety. However availability of correlation between trait anxiety and level of adrenocorticotrophic hormone both in the main group ($r = +0.381$, $p < 0.05$) and control group ($r = +0.603$, $p > 0.05$) can indicate some mutual influences.

Conclusions

Performed research indicates absence of statistically reliable difference ($p > 0.05$) for the level of adrenocorticotrophic hormone, 17- α -OH-progesterone,

androstenedione and free testosterone with regard to anxiety level. However availability of correlation between trait anxiety and level of adrenocorticotropic hormone both in the main group ($r = +0.381$, $p < 0.05$) and control group ($r = +0.603$, $p > 0.05$) can indicate some mutual influences.

Literature

Astahov V.M., Bacyleva O.V., Puz' I.V. (2016). Psihodiagnostika v reproduktivnoj medicine [Psychodiagnostics in reproductive medicine]. Vinnica: OOO «Nilan-LTD» [in Ukrainian].

Dovzhikova I.V. (2010). Fermenty steroidogeneza (obzor literatury) [Steroidogenesis enzymes (review)]. Bulletin physiology and pathology of respiration. 37, 60-64 [in Russian].

Rajgorodskij D.Ja. Practical psychodagnosis (2002). Samara: «Brahah-M» [in Russian].

Sidel'nikova V.M. (2007). Jendokrinologija beremennosti i norme i pri patologii [Endocrinology of pregnancy and norm and in pathology]. Moscow: MEDpress-inform [in Russian].

Sidorova I.S., Makarov I.O. (2009). Techenie i vedenie beremennosti po trimestram [Current and pregnancy by trimesters]. Moscow: OOO MEdicinskoe infirmacionnoe agenstvo [in Russian].