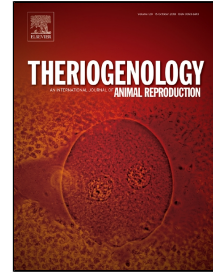


Accepted Manuscript

Testosterone, androstenedione and dehydroepiandrosterone concentrations in pregnant Spanish Purebred mare



Katuska Satué, María Marcilla, Pietro Medica, Adriana Ferlazzo, Esterina Fazio

PII: S0093-691X(18)30849-5
DOI: 10.1016/j.theriogenology.2018.09.025
Reference: THE 14710
To appear in: *Theriogenology*
Received Date: 05 March 2018
Accepted Date: 24 September 2018

Please cite this article as: Katuska Satué, María Marcilla, Pietro Medica, Adriana Ferlazzo, Esterina Fazio, Testosterone, androstenedione and dehydroepiandrosterone concentrations in pregnant Spanish Purebred mare, *Theriogenology* (2018), doi: 10.1016/j.theriogenology.2018.09.025

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

1 **Testosterone, androstenedione and dehydroepiandrosterone concentrations in**
2 **pregnant Spanish Purebred mare**

3

4 Katuska Satué¹, María Marcilla¹, Pietro Medica², Adriana Ferlazzo², Esterina Fazio²

5

6 ¹Department of Animal Medicine and Surgery. Faculty of Veterinary Medicine. CEU-
7 Cardenal Herrera University, Valencia, Spain

8 ²Department of Veterinary Sciences, Veterinary Physiology Unit, Polo Universitario
9 Annunziata, Messina University, Italy

10

11 **ABSTRACT**

12 Androgens modulate maternal ovarian activity, embryo implantation and correct
13 placental development. The objective of this study was to establish reference values for
14 testosterone (T), androstenedione (A₄) and dehydroepiandrosterone (DHEA)
15 concentrations in pregnant mares. A total of 30 healthy Spanish Purebred mares with an
16 age range of 9.33 ± 3.31 years, were studied during the 11 months of gestation. T, A₄
17 and DHEA concentrations were determined using EIA validated specifically for
18 equines. T increased in the 2nd and 3rd month (P < 0.05), showing a plateau between the
19 4th and 6th month, decreased from the 7th to the 9th month (P < 0.05) and increased in the
20 10th month (P < 0.05), reaching the maximum value in the last month of pregnancy (P <
21 0.05). A₄ increased in the 2nd month (P < 0.05), reaching the maximum value in the 3rd
22 month (P < 0.05), decreased in the 4th month, increasing in the 5th and 6th month (P <
23 0.05). From the 7th month the average values decreased until reaching the minimum at
24 the end of gestation. DHEA progressively increased from the 1st to the 5th month, at
25 which time the maximum mean value was reached (P < 0.05), after a decrease in the 6th
26 and 7th month occurred (P < 0.05), reaching the minimum value in the last month of
27 gestation. T, A₄ and DHEA were positive and significantly correlated (P < 0.05). The
28 androgens analyzed in this study can be used as predictive markers of pregnancy in the
29 mare.

30

31 **Keywords:** androstenedione; dehydroepiandrosterone; pregnant mare; testosterone

Download English Version:

<https://daneshyari.com/en/article/11025949>

Download Persian Version:

<https://daneshyari.com/article/11025949>

[Daneshyari.com](https://daneshyari.com)