

# Accepted Manuscript

Influence of maternal age and parity on placental structure and foal characteristics from birth up to two years of age

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PII: S0737-0806(16)30697-9

DOI: [10.1016/j.jevs.2017.03.226](https://doi.org/10.1016/j.jevs.2017.03.226)

Reference: YJEVS 2311

To appear in: *Journal of Equine Veterinary Science*

Received Date: 14 December 2016

Revised Date: 27 March 2017

Accepted Date: 28 March 2017

Please cite this article as: Meirelles MG, Veras MM, Alonso MA, de Fátima Guimarães C, Nichi M, Fernandes CB, Influence of maternal age and parity on placental structure and foal characteristics from birth up to two years of age, *Journal of Equine Veterinary Science* (2017), doi: 10.1016/j.jevs.2017.03.226.

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1 **Influence of maternal age and parity on placental structure and foal**  
2 **characteristics from birth up to two years of age**

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19  
20 Abstract

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22 The foal's weight and height at birth are regarded as important  
23 parameters for the equestrian sports industry. Moreover, scientific studies  
24 indicate that maternal environment can influence postnatal genetic potential of  
25 foals. The purpose of this study was to evaluate the influence of maternal age  
26 and parity on placental efficiency and size of the newborn foal using  
27 stereological analysis tools of the term's allantochorion. Furthermore, the  
28 influence of maternal age and parity on weight, height and girth circumference  
29 of the offspring from birth until 2 years of age was investigated. Forty pregnant  
30 mares were categorized according to age: 4-8 years (n=15); 9-12 years (n=15);  
31  $\geq 13$  years (n=10) and parity: nulliparous (n=12), 1 to 3 parities (n=18);  $\geq 4$   
32 parities (n=10). Parturition was monitored and the allantochorion membranes  
33 were collected after delivery. The stereological analysis determined the  
34 volumetric composition of the different compartments of the placenta along with

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