

**ACUTE EXHAUSTED HORSE SYNDROME IN THOROUGHBRED RACEHORSES** Maria Fernanda de M. Costa<sup>1</sup>, Juliana N. de P. Pereira<sup>2</sup>, Juliana B. Vieira<sup>3</sup>, Cristiane C.S. Vaslin<sup>3</sup>, Marcos L. C. Felipe<sup>3</sup> e Gilberto S. Seppa<sup>3</sup> - m.demellocosta@pgrad.unimelb.edu.au

**Introduction:** Exhaustion Syndrome (ES) in endurance horses is a common clinical observation, especially in hot and humid conditions. The main cause of ES in horses undergoing strenuous exercise is inadequate thermoregulation. Insufficient hydration and inadequate training are contributing factors. An acute form of ES was observed in racing Thoroughbreds, immediately after competition. The aim of this study is to describe epidemiologic characteristics of Acute Exhaustion Syndrome (AES) in racehorses.

**Material and Methods:** All animals (n=29) presented with AES after racing at the Brazilian Jockey Club (JCB), Rio de Janeiro, between December 2006 and March 2007 were included in this study. Complete clinical examinations were conducted on site and data from this examinations as well as climate and race characteristics were recorded.

**Results:** Cloudy weather was observed in 48.3% of the days when there were AES occurrences. Temperature varied from 17°C to 33°C and relative air humidity from 49% to 78%. Colts (52%), 3 year olds (41.4%) and horses receiving furosemide before competition (55.2%) were the majority of animals affected by AES. Clinical signs included tachypnea (82.8%), tachycardia (89.7%), restlessness (72.4%), anxiety (69%) and dehydration (65.5%). Two horses collapsed and presented temporary loss of consciousness and 4 presented diaphragmatic flutter.

**Conclusion and Discussion:** The observed clinical signs in Thoroughbred racehorses presented with AES are compatible with those observed in ES in endurance horses.

Hot and humid conditions were prevalent but cloudy days had more cases of AES than sunny days. The fact that colts and 3 year olds were more affected by AES reflects the general characteristics of the Thoroughbred population racing at the JCB. Nevertheless, the use of furosemide before competition appears to predispose to AES, since the majority of animals displaying AES had been medicated with the diuretic, which does not coincide with the general population. A greater degree of dehydration due to the use of furosemide might be responsible for that finding. More studies on AES are required to recommend prophylactic methods.