Effects of a Supplement Containing Cannabidiol on Sedation and Ataxia Scores and Health Parameters

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A supplement containing cannabidiol (CBD) (150 mg, treated once daily) administered for 56 days was palatable, safe, and did not alter mentation or cause ataxia in horses. In addition, blood concentrations were present in 78% of horses, and the supplement did not alter hematologic or plasma biochemical parameters. Authors’ addresses: Equine Health Studies Program, Department of Veterinary Clinical Sciences, School of Veterinary Medicine, Louisiana State University, Baton Rouge, LA 70803 (Andrews, St. Blanc, Chapman, Keowen, Garza); SmartPak, Inc., 40 Grissom Road #500, Plymouth, MA 02360 (Gray); e-mail: mstbla2@lsu.edu. *Corresponding and presenting author. © 2021 AAEP.

1. Introduction
Equine supplements containing cannabidiol (CBD) are commercially available, but data on the effects in horses are lacking. The purpose of this study was to determine if a CBD supplement would alter sedation or ataxia scores and blood parameters in horses.

2. Materials and Methods
Twenty geldings were randomly assigned to either the treatment (150 mg cannabidiol in a pelleted supplement) or control (pelleted supplement without CBD) group. Supplements were fed once daily for 56 days. A complete blood count and serum biochemistry were performed on days 0, 28, and 56. Sedation and ataxia scores were assigned weekly, and CBD concentrations were analyzed on days 0 and 56 in treated horses. A repeated-measures ANOVA with a mixed effects model was used to analyze the continuous variables with treatment, day, and their interactions as the fixed effects and each animal as the random effect. Sedation and ataxia scores were analyzed via Mann-Whitney test. Significance was set at P < 0.05.

3. Results
There were no treatment or treatment by day effects on blood parameters including bilirubin, alkaline phosphatase (ALP), and aspartate aminotransferase (AST). There were no significant differences in ataxia or sedation scores between groups (p > 0.05). Forty
percent of treated horses had detectable plasma CBD concentrations two hours after treatment on day 0, compared to 78% by day 56.

4. Discussion
Treatment was well-tolerated, and the results support further investigation of CBD use in horses.

Acknowledgments

Declaration of Ethics
The Authors have adhered to the Principles of Veterinary Medical Ethics of the AVMA.

Conflict of Interest
The Authors have no conflicts of interest.