POSTER 160

Duodenitis Proximal Jejunitis in horses: a preventive protocol

Lucas Larquet[1], **T.M Agostini Bisiaux**[1], **Teresa Barroso**[1]

[1]*TOXRUN – Toxicology Research Unit, University Institute of Health Sciences, CESPU, CRL, 4585-116 Gandra, Portugal.*

*✉*A30488@alunos.cespu.pt(L.Larquet)/A30499@alunos.cespu.pt (T.M Agostini Bisiaux)*

Doi: https://doi.org/10.51126/revsalus.v4iSup.427

Resumo

Introduction: Duodenitis Proximal Jejunitis (DPJ) is an inflammation of proximal part of small intestine thought to be caused by dysbiosis and overgrowth of commensalism pathogenic commensalistic bacterias in horses microbiota [1]. This sporadic disease leads to severe enteric pain/distention/loss of small intestine motility/ Intestinal fluids accumulation, often grave since horses are unable to vomit. The sporadic occurrence of the disease can lead to high-cost therapy and efficiency of treatments dramatically decrease as time of detection is furthered (often delayed by confusion of symptoms between DPJ and classical intestinal obstruction). Detection methods of the pathology are keys to understanding microbial dysbiosis in order to assess differential diagnosis (with common intestinal obstruction mainly [2]). Although causes of this infection remains uncertain, some microorganism of interest such as *Clostridium spp.: C.Difficile* mostly by production of enterotoxin (proven to cause most of DPJ symptoms in healthy microbiota pos injection of toxins) should be considered as commensal pathogenic organisms for DPJ in horses [3]. **Objectives:** Since the clinical treatment depends nearly entirely on the stage of detection and physiological data of each horse presenting the disease, we decided to focus on global standards of households to prevent dysbiosis in the first place as preventive treatment. **Results:** Among all studies, DPJ seems most likely to result from dysbiosis estate causing pathogenic strains of *C.Difficile* to generate enterotoxicity along with other Perfringens sub-species in horse's proximal small intestine. **Conclusion:** Prior to detection methods and chirurgical treatment and since the main pathogenic microorganism seems to be *C.Difficile*; a good protocole of housing in order to reduce any physiological stress leading to dysbiosis in the first place can be a good preventive technique to reduce DPJ's effect and increase households horses well being in general and avoid potential opportunistic infections due to commensalistic bacterias (such as *C.Difficile*).

Keywords: dysbiosis; DPJ; *C.Difficile* ; horses; prevention

References:

[1] Freeman D. Tutorial article: Duodenitis-proximal jejunitis. Equine Vet Educ. 12:322–332, 2000.

[2] Arroyo, L. G., Gomez, D. E., & Martins, C. Equine duodenitis-proximal jejunitis: A review. The Canadian veterinary journal = La revue vétérinaire canadienne, 59(5), 510–517, 2018.

[3] Arroyo LG, Costa MC, Guest BB, Plattner BL, Lillie BN, Weese JS. Duodenitis-Proximal Jejunitis in Horses After Experimental Administration of Clostridium difficile Toxins. J Vet Intern Med.,31(1):158-163, 2017.

[4] White NA 2nd, Tyler DE, Blackwell RB, Allen D. Hemorrhagic fibrinonecrotic duodenitis-proximal jejunitis in horses: 20 cases (1977-1984). J Am Vet Med Assoc, 1;190(3):311-5. 1987.

[5] Fernandes, W. R., Coelho, C. S., Marques, M. S., Baccarin, R. Y. A., & da Silva, L. C. L. C. A retrospective analysis of duodenitis-proximal jejunitis: 26 horses (1996-2000), 2003.