



Efficacy of intramuscular omeprazole in horses with ESGD and EGGD, with or without IBD, previously treated unsuccessfully with oral omeprazole

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Introduction

Different studies report that long-acting intramuscular omeprazole is far superior in treating both ESGD and EGGD compared with oral omeprazole. However, in those studies most of the horses had not been previously treated with oral omeprazole.

Intramuscular omeprazole is not registered in the EU and therefore may only be used according to the cascade. The aim of this study was to investigate the success rate of intramuscular omeprazole in horses with ESGD and EGGD, with and without concurrent IBD, that had been previously unsuccessfully treated with oral omeprazole.

Materials and methods

Gastrosopic images and patient data of horses with EGUS presented to the Equine University Clinic in Utrecht between 2020 and 2022 were retrieved and reviewed.

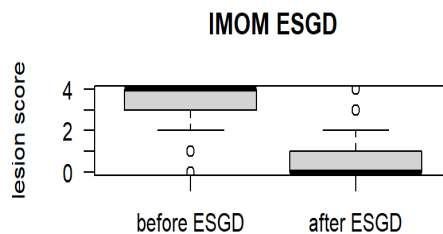
Twenty horses received 20ml long-acting intramuscular omeprazole, four times with seven-day intervals, following unsuccessful treatment during 28 days with oral omeprazole, combined with sucralfate in case of EGGD.

Of the 20 horses four horses were diagnosed with ESGD, 15 horses were diagnosed with both ESGD and EGGD and one horse was diagnosed with EGGD only. In 10 horses a duodenal biopsy was obtained, and a histological diagnosis of IBD was made in nine cases.

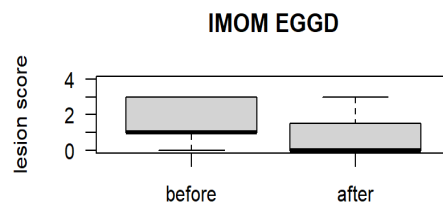
Results

The ESGD lesions improved in 18/19 (94.7%) and healed in 11/19 (57.9%) cases. In case of EGGD 10/16 (62.5%) of the lesions improved and 8/16 (50.0%) of the lesions had resolved.

In horses with ESGD the lesion score after treatment was significantly lower than before treatment, both in horses with IBD ($p=0.022$) and those without IBD ($p=0.005$, Figure1)



For EGGD there was only a significant change in lesion score in the group without IBD ($p=0.018$), but not in the group with IBD ($p=0.345$). In one horse out of nine with IBD the glandular lesions were more severe after the treatment, while none of the lesions deteriorated in the group without IBD (Figure 2).



There were two horses with an injection site reaction and one horse with a swollen leg after the injection. In one case this resulted in the horse not receiving the last dose of the intramuscular omeprazole.



Gastrosopic images from the University Clinic database showing typical ESGD (above) and EGGD (below) lesions

Discussion

This study investigated the effect in horses that received intramuscular omeprazole after an unsuccessful treatment with oral omeprazole, which could indicate that those horses were already harder patients to treat.

Intramuscular omeprazole led to significantly decreased lesion scores for both ESGD and EGGD in horses without concurrent IBD.

In horses with EGGD lesions and concurrent IBD however the lesion scores did not decrease significantly. This could indicate a less important role for acid suppression in the healing of these lesions and/or impaired absorption of omeprazole in the inflamed duodenum.

Conclusion

The efficacy of intramuscular omeprazole is lower than reported in literature when initial oral treatment was not successful.

The concurrent presence of IBD negatively influences the healing of EGGD.

Success rate of improved and healed lesions

	Improved	Healed
ESGD	94.7% (18/19)	57.9% (11/19)
EGGD	62.5% (10/16)	50% (8/16)

References

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