

USE OF A COMMERCIAL HIGH-FIBRE EQUINE LIQUID DIET FOR ENTERAL TUBE FEEDING IN HORSES: CLINICAL EXPERIENCE IN 9 CASES

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Introduction

Enteral tube-feeding of hypophagic/dysphagic horses can be challenging due to the limited availability of liquid diets formulated for the equine species. Human products are expensive and lack fibre, whereas slurries made from pelleted horse feedstuffs are difficult to pass through nasogastric tubes. Enteral recipes for horses combining specific components have been described but they are cumbersome and time-consuming to prepare.

Objective

The aim of this retrospective study is to describe the use of a new commercial equine liquid diet (EquidGel™) containing 85% forage to provide nutritional support to 9 hospitalized adult horses.

Methods

The diet was prepared following the manufacturer's recommendations and administered through a nasogastric tube (16-18mm external diameter) by gravity flow (Figure 2). In cases where EquidGel™ was the only source of nutrition and hydration (i.e. dysphagic horses without IV fluids), the daily recommended amount of dry product was diluted in a larger amount of water to ensure that the daily water requirements of the horse (50ml/kg/day) were met. An oesophagostomy was performed in 2 horses to facilitate long term tube feeding.

Results

Reasons justifying tube-feeding included dysphagia (5/9), oesophageal rupture (1/9), temporo-mandibular fracture (1/9) and hyperlipidemia and weight loss secondary to prolonged fasting (2/9).

Duration of tube-feeding ranged from 36h to 56 days. The volume administered ranged from 3-6L/meal given in 6-12 meals/day.



Figure 2

Administration of the EquidGel™ liquid diet by gravity flow through a large bore nasogastric tube.



Figure 1

Commercial presentation of EquidGel™, real particle size (cm) and nutritional analysis.

Despite an abrupt introduction, the new diet was well tolerated by all horses. The production of faeces was reduced but consistency was normal, and no detrimental behavioural effects were noted. Three horses presented minor complications that were transient and associated to prolonged nasogastric tubing (purulent rhinitis (2/9), pharyngeal ulcers (2/9), gastric reflux and ulcers (1/9)) or non-related to diet.

Conclusion

The commercial liquid diet EquidGel™ is a user-friendly product, well tolerated and easy to administer by gravity flow through large-medium nasogastric tubes, providing a useful alternative for enteral tube-feeding in horses.

Disclaimer: Authors disclose no conflict of interest.