GI STASIS IN RABBITS – the myths vs the reality

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Pet rabbits are often presented for symptoms of anorexia and reduced fecal output, a clinical presentation that is commonly termed “Gastrointestinal (GI) Stasis”. Reduced food intake, suboptimal diet, or dental disease can result in reduced fecal production. True stasis, or ileus, is often secondary to other disease conditions. These disease conditions are often underdiagnosed and reported treatment protocols often focus on supportive treatment to resolve the presenting symptoms without addressing the primary condition.

Knowledge of the rabbit’s GI anatomy and physiology is imperative for proper case understanding and management. Rabbits are true herbivores that require large quantities of fibrous plant material (such as high quality grasses) for their dental hygiene, intestinal motility and nutrition. All of the rabbit’s teeth constantly grow throughout their life and are naturally reduced by the attrition of masticating the rough plant cell-wall fiber. A low fiber diet and reduced mastication movements (too many pellets, vegetables and treats) will result in:

1. Dental overgrowth, dental malocclusion and facial abscessation leading to reduced food intake.
2. Malnutrition as the cecal flora will not get the required substances for fermentation and fatty acid production.
3. Ileus (GI hypomotility) as large fiber particles are needed to trigger large intestine contraction.

Any painful condition present can lead to ileus in rabbits. Common painful conditions in rabbits include dental disease, fractures and urolithiasis. Rabbits are extremely timid in their nature and any stressors in their environment can cause ileus; improper handling, other animals (dogs, cats and people) and small cage confinement being the most common causes. Ileus can also be caused by lead toxicity in rabbits allowed to chew on old paint.

GI obstruction is also included in the so called “GI stasis” condition. This is a rare condition in rabbits as they tend to chew their food into small particles. Rabbits

normally hold large quantities of groomed hair and food in their stomach which leads to the gastric “hair-ball obstruction” misconception in animals presented for “gastric stasis”. In some rare cases, rabbits that cannot properly groom their hind end will ingest small (1-2cm) hair mats that can obstruct the GI tract. These rabbits will present with a full range of clinical presentations and some can be acute to peracute presentations. Cases of GI obstruction will demonstrate a radiographic abnormal GI gas pattern. Feline hair-ball treatments are inadequate and use of prokinetic drugs is contraindicated in these cases. However, most will respond favorably to symptomatic care while carefully monitored for the progression or resolution of the GI obstruction.

Rabbits that are observed for not eating or defecating for just 24 hours should be evaluated as an emergency. The rabbit’s husbandry and diet should be reviewed and thorough physical examination should be performed. Blood tests (CBC and biochemistry profile) will help determine the overall health status of the patient and can help in determining the best treatment strategy. Whole body, two-view (dorsoventral and lateral) radiographs (“rabbit scan”), performed under sedation/anesthesia, are an important basic screening test.

Treatment strategy should ideally address the primary condition while providing supportive care. Hydration (maintenance 80-100ml/kg/d, IV/SC), analgesia (buprenorphine 0.03-0.05mg/kg, IV/IM/SC, BID-TID or meloxicam 0.5-1.0 mg/kg, SC/IV/PO, SID-BID) and assisted feeding (Critical Care formulas or baby vegetarian food, 10-20mls/kg q4hrs until eating normally) will usually resolve the ileus symptoms within 24-48 hours. Prognosis depends on the nature and treatment of the primary cause. Recurrence is common if the underlying conditions are not addressed.

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